IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

MICROSOFT CORPORATION, a Washington corporation, Plaintiff, v. JOHN DOES 1-2, CONTROLLING A COMPUTER NETWORK AND THEREBY INJURING PLAINTIFF AND ITS CUSTOMERS, Defendants.	Civil Action No: 1:21-cv-822 (RDA)

BRIEF IN SUPPORT OF MICROSOFT'S MOTION FOR LIMITED AUTHORITY TO CONDUCT DISCOVERY NECESSARY TO IDENTIFY AND SERVE DOE DEFENDANTS

Plaintiff Microsoft Corp. ("Microsoft") respectfully requests an order authorizing it to conduct discovery necessary to identify and to serve the Doe Defendants.

On July 16, 2021, the Court granted an emergency *ex parte* temporary restraining order ("TRO") tailored to halt the activities and the growth and operation of an Internet-based criminal network that is attacking Microsoft, its Office 365 ("O365") service, and its customers through malicious "homoglyph" domains that unlawfully impersonate legitimate Microsoft customers and their businesses. As set forth in the Court's TRO, the matter involves a criminal network that devised a scheme to gain unauthorized access and compromise O365 accounts create homoglyph imposter domains, and use this malicious infrastructure and surveillance efforts to target compromised account victim's wider network – including customers, vendors, or agents – for fraudulent financial transactions. John Does 1-2 (Defendants") remotely control the domains

that compromise the infected users using infrastructure targeted by the Court's TRO. Dkt. No. 18.

Prior to issuance of the TRO, Defendants were using the compromised network of computers for the purposes of attacking Microsoft's customers through malicious "homoglyph" domains, which rely on elaborate deception that leverages the similarities of character scripts to create imposter domains used to deceive unsuspecting individuals. *See* Declaration of Donal Keating In Support of Microsoft's Motion for Doe Discovery ¶ 3 (Ex. 1). Defendants use malicious homoglyph domains together with stolen customer credentials to unlawfully access customer accounts, monitor customer email traffic, gather intelligence on pending financial transactions, and criminally impersonate O365 customers, all in an attempt to deceive their victims into transferring funds to the cybercriminals. *Id*. This activity has caused extreme and irreparable injury to Microsoft, its customers, and the public. Dkt. No. 18.

At present, Microsoft is in possession of limited, preliminary information regarding Defendants obtained from *inter alia* public sources of information provided by domain registries and registrars and other service providers whose services Defendants used. While much of such information provided in such records appears to be fictitious, Microsoft possesses information regarding an email address associated with Defendants that Microsoft has gathered through its own investigation. The domain names and this email address provide leads to be pursued through discovery tailored to identify Defendants.

In order to identify Defendants from information such as email addresses, domain names and IP addresses, it will be necessary to send subpoenas to third party email service providers, domain registrars, hosting companies and payment providers to obtain account and user information provided by Defendants in association with such email addresses, domain names and

IP addresses. For example, such service providers often maintain billing and account information identifying the purchasers and account holders of such services, and maintain IP address logs associated with Defendants or their access to services, including data flow analyses, server logs, traffic logs, and any other similar information, associated with the IP addresses, reflecting the computers from which Defendants logged into their accounts. Given that the account and user information kept by these third-party internet service providers regarding Defendants is generally non-public, the service providers are not likely to provide it to Microsoft absent a subpoena.

Microsoft, accordingly, requests an order granting authority to serve subpoenas and/or international discovery requests to third party email service providers, domain name registrars, hosting companies and payment providers, to pursue the identities of the Defendants. By the instant motion, Microsoft requests authority to conduct discovery into these sources to identify Defendants. Given the state of the information currently in Microsoft's possession, Microsoft believes that limited discovery will assist Microsoft in its endeavor to identify, name, and serve Defendants.

I. ARGUMENT

Under Federal Rule of Civil Procedure 26(d), discovery may not normally begin "before the parties have conferred as required by Rule 26(f)." Because Doe Defendants in this case are unknown to Microsoft, the conference Rule 26(f) contemplates cannot occur. This limitation on the initiation of discovery, however, can be we waived under Rule 26(d) by Court order.

Courts recognize that, in certain situations, the identity of the defendant may not be known prior to the filing of a complaint. In such circumstances, courts authorize a plaintiff to undertake discovery to identify the unknown defendants. In *Gordon v. Leeke*, 574 F.2d 1147,

1152 (4th Cir. 1978), the Fourth Circuit explained that, if a plaintiff states a meritorious claim against an unknown defendant, the Court should allow plaintiff to ascertain the identity of the unknown defendant through discovery. Courts in this Circuit have authorized parties to conduct discovery based on computer IP addresses, in order to assist in the identification of Doe defendants. *See Arista Records LLC v. Does 1-14*, 2008 U.S. Dist. LEXIS 102974 (W.D. Va. 2008) (granting discovery to identify John Does based on IP addresses); *Virgin Records America, Inc. v. John Doe*, 2009 U.S. Dist. LEXIS 21701 (E.D.N.C. 2009) (same).

This Court has granted Doe discovery used to identify registrants of Internet domains supporting cybercrime in prior cases. In *Microsoft v. John Does 1-8*, Case No. 1:14-cv-00811-LOG/TCB (E.D. Va. 2014), the court recognized the benefit of such discovery and ordered similar discovery so that Microsoft could investigate the identities of registrants of a number of Internet domains used to perpetuate the harmful "Shylock" Botnet. *See* Dkt. No. 39; *see also* Dkt. No. 26 in *Microsoft Corporation v. John Does 1-2*, Case No. 1:20-cv-730 (O'Grady, J.); Dkt. No. 40 in *Microsoft v. John Does* 1-27, Case No. 1:10-cv-00156 (Anderson, J.); Dkt. No. 30 in *Microsoft v. Piatti et al*., Case No. 1:11-cv-1017 (Cacheris. J.). Likewise, in the instant matter, it is appropriate to grant Microsoft authority to conduct limited discovery to identify Defendants.

Microsoft seek a limited discovery period of 180 days, during which it will move forward diligently with subpoenas to email service providers, domain name registrars, hosting companies and payment providers in an attempt to further identify Defendants and/or to obtain additional contact information through which to effect service of process. The discovery will be narrowly tailored such that it only seeks information that is related to known infrastructure associated with the Defendants. Microsoft's initial discovery will be directed to the third party service providers

NameSilo LLC (domain registrar), Oath Holdings Inc./Oath Inc. (email provider), Google LLC (email provider and hosting provider for some of the subject domain names), 1&1 Internet SE (domain registrar), Namecheap, Inc. (domain registrar), Network Solutions, LLC (domain registrar), and PDR Ltd. d/b/a PublicDomainRegistry.com (domain registrar), which are known to be directly or indirectly associated with Defendants and the infrastructure at issue in this case. *See* Keating Decl., ¶ 4. Once Microsoft undertakes third party discovery of the known email service providers, domain name registrars and hosting companies, associated with Defendants, Microsoft anticipates that there will be additional targets for discovery when new points of contact, IP addresses, email addresses, methods of payment, etc. are identified. For example, after receiving information about email accounts and IP address accounts used by Defendants, there will likely be additional secondary email addresses, login IP addresses, account creation IP addresses and payment information that are identified. All of this information is specifically associated with the Defendants and with the discrete body of infrastructure used by Defendants. Microsoft requests the ability to send further subpoenas to third party providers associated with this information, in their effort to more specifically identify Defendants and to obtain further contact information to provide them notice of the case and to serve the pleadings. Even though the requested discovery is iterative, it will always be related to the original body of infrastructure known to be associated with Defendants.

In pursuing downstream discovery, Microsoft acknowledges the burden that such a sustained effort of requesting relief for each additional target of third party discovery would place on the Court. Plaintiffs therefore propose that if they identify additional third party Internet service providers (ISPs), email service providers, hosting companies, and payment providers from the discovery above, limited to those flowing from the known infrastructure of

Defendants, they shall be permitted to send further subpoena requests without seeking additional relief from this Court.

II. CONCLUSION

For the reasons set forth herein, Microsoft respectfully requests permission under Rule 26(d) to conduct such discovery for a period of 180 days, as may be necessary, to further identify and serve Defendants.

Dated: July 26, 2021

Respectfully submitted,

/s/ Julia R. Milewski

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CERTIFICATE OF SERVICE

I hereby certify that on July 26, 2021, I will electronically file the foregoing with the Clerk of Court using the CM/ECF system.

Copies of the foregoing were also served on the defendants listed below by electronic mail:-

John Does 1-2

c/o

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/s/ Julia R. Milewski

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Attorneys for Plaintiff Microsoft Corp.

Exhibit 1

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DECLARATION OF DONAL KEATING IN SUPPORT OF MICROSOFT'S MOTION FOR DOE DISCOVERY

I, Donal Keating, declare as follows:

1. I am the Director of Innovation and Research for Microsoft Corporation's Digital Crimes Unit ("DCU") within the company's Corporate, External, and Legal Affairs ("CELA") department. I make this declaration in support of motion for Doe discovery. I make this declaration of my own personal knowledge or on information and belief where indicated and based on my review of records Microsoft maintains in the ordinary course of business. If called as a witness, I could and would testify competently to the truth of the matters set forth herein.

2. In my role at Microsoft, I personally oversee, coordinate and participate in investigations and mitigation efforts regarding activity that jeopardizes the integrity of Microsoft's systems and the safety of customer data. Before joining Microsoft, I spent over a decade working in the software supply chain where I gained depth of experience which enabled me to work with Microsoft on combating software piracy and the illegal reproduction of

Microsoft products including counterfeit identification and anti-piracy technology. I have been employed by Microsoft since 1998 where I have focused on protecting against illegal copying and distribution of intellectual property, conducting forensic investigations of cybercrime and protecting Microsoft customers from cybercrime.

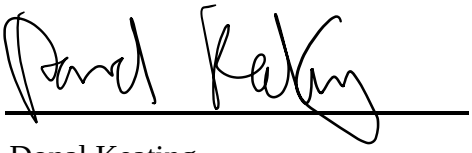
3. Through various investigative techniques, including those summarized in my declaration made in support of Microsoft's application for an *ex parte* temporary restraining order and order to show cause regarding preliminary injunction (Dkt.9), Microsoft recently uncovered a very serious body of cybercrime infrastructure that is being used by a group of cybercriminals to target Microsoft's Office 365 ("O365") customers and services (and in turn their networks, vendors, contractors, and agents). In particular, Microsoft has discovered a sophisticated online criminal network that is attacking Microsoft, O365, and its customers through malicious "homoglyph" domains that unlawfully impersonate legitimate Microsoft O365 customers and their businesses. Defendants create malicious domains that are "homoglyphs" of legitimate domain names. Homoglyphs are a technique by which attackers abuse similarities of character scripts to create deceptively similar domains. For example, a homoglyph domain may utilize characters with shapes that appear identical or very similar to the characters of a legitimate domain. Defendants use malicious homoglyph domains together with stolen customer credentials to unlawfully access customer accounts, monitor customer email traffic, gather intelligence on pending financial transactions, and criminally impersonate O365 customers, all in an attempt to deceive their victims into transferring funds to the cybercriminals. I participated in the investigation of Defendants' conduct and am personally familiar with the details of Microsoft's investigation in this case.

4. Based on my investigation to date, including the homoglyph domains identified in

my declaration made in support of Microsoft's application for an *ex parte* temporary restraining order and order to show cause regarding preliminary injunction (Dkt.9), I have determined that the following services providers are directly or indirectly associated with Defendants and their infrastructure, either currently or historically: NameSilo LLC (domain registrar), Oath Holdings Inc./Oath Inc. (email provider), Google LLC (email provider and hosting provider for some of the subject domain names), 1&1 Internet SE (domain registrar), Namecheap, Inc. (domain registrar), Network Solutions, LLC (domain registrar), and PDR Ltd. d/b/a PublicDomainRegistry.com (domain registrar).

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

Executed this 26th day of July 2021.



Donal Keating