

THREAT ADVISORY

New Threat Actor Exotic Lily acting as Initial Access Broker for Conti and Diavol ransomware group

TA2022068

Threat Level

RED

Publish Date – Mar 18, 2022

Exotic Lily was first discovered exploiting a zero-day vulnerability in Microsoft MSHTML (CVE-2021-40444), which piqued the curiosity of researchers as a potentially sophisticated threat actor. Following additional analysis, it was revealed that the group is an initial access broker that utilizes large-scale phishing operations to infiltrate specific corporate networks and subsequently sells access to those networks to ransomware groups such as **Conti** and **Diavol** gangs.

The group starts by producing fake social media profiles, including LinkedIn profiles, by exploiting readily available employee data to make the illicit clones look genuine using advanced A.I. imaging technology. When it was originally discovered, the malware was in the form of a document file that attempted to attack the CVE-2021-40444 vulnerability. Subsequently, the threat actor switched to ISO archives having **BazarLoader** DLLs with LNK shortcuts.

Currently, the group continued to utilize ISO files but added a DLL containing a new loader, an enhanced form of the prior first-stage loader. The loader injects a malware strain known as "**Bumblebee**," which uses WMI to capture system information and exfiltrate it to the C2. **Bumblebee** may also receive remote actors such as Conti and Diavol orders and download and perform extra payloads.

The Mitre TTPs used by **Exotic Lily** are:

TA0001 - Initial Access

TA0002 - Execution

TA0004 - Privilege Escalation

TA0010 – Exfiltration

T1566: Phishing

T1566.001: Phishing: Spearphishing Attachment

T1204.002: User Execution: Malicious File

T1047: Windows Management Instrumentation

T1068: Exploitation for Privilege Escalation

T1041: Exfiltration Over C2 Channel

THREAT ADVISORY

Vulnerability Details

CVE ID	Affected Products	Affected CPE	Vulnerability Name	CWE ID
<p>CVE-2021-40444</p>	<p>Microsoft Windows 10. 7. 8.1, Windows Server 2008, 2012, 2016, 2019, 2022</p>	<p>cpe:2.3:o:microsoft:windows_10:-:*:*:*:*:* cpe:2.3:o:microsoft:windows_10:20h2:*:*:*:*:* cpe:2.3:o:microsoft:windows_10:21h1:*:*:*:*:* cpe:2.3:o:microsoft:windows_10:1607:*:*:*:*:* cpe:2.3:o:microsoft:windows_10:1809:*:*:*:*:* cpe:2.3:o:microsoft:windows_10:1909:*:*:*:*:* cpe:2.3:o:microsoft:windows_10:2004:*:*:*:*:* cpe:2.3:o:microsoft:windows_7:-:sp1:*:*:-:*:-* cpe:2.3:o:microsoft:windows_8.1:-:*:*:-:*:-* cpe:2.3:o:microsoft:windows_rt_8.1:-:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2008:-:sp2:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2008:r2:sp1:*:*:*:*:x64:* cpe:2.3:o:microsoft:windows_server_2012:-:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2012:-:r2:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2016:-:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2016:20h2:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2016:2004:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2019:-:*:*:*:*:* cpe:2.3:o:microsoft:windows_server_2022:-:*:*:*:*:*</p>	<p>Windows Print Spooler Remote Code Execution</p>	<p>CWE-94</p>

THREAT ADVISORY

Indicators of Compromise (IoCs)

Type	Value
SHA-256	5ceb28316f29c3912332065eeaaebf59f10d79cd9388ef2a7802b9bb80d797be, 9fdec91231fe3a709c8d4ec39e25ce8c55282167c561b14917b52701494ac269, c896ee848586dd0c61c2a821a03192a5efef1b4b4e03b48aba18eedab1b864f7, 9eacade8174f008c48ea57d43068dbce3d91093603db0511467c18252f60de32, 6214e19836c0c3c4bc94e23d6391c45ad87fdd890f6cbd3ab078650455c31dc8, 201c4d0070552d9dc06b76ee55479fc0a9dfac6dbec6bbec5265e04644eebc9, 1fd5326034792c0f0fb00be77629a10ac9162b2f473f96072397a5d639da45dd, 01cc151149b5bf974449b00de08ce7dbf5eca77f55edd00982a959e48d017225
IPs	23.81.246[.]187
Domain	3conlfex[.]com, avrobio[.]co, elemblo[.]com, phxmfg[.]co, modernmeadow[.]co, lsoplexis[.]com, craneveyor[.]us, faustel[.]us, lagauge[.]us, missionbio[.]us, richlndmetals[.]com, kvnational[.]us, prmflltration[.]com, brightInsight[.]co, belcolnd[.]com, awsblopharma[.]com, amevida[.]us, revergy[.]us, al-ghurair[.]us, opontia[.]us

Patch

<https://msrc.microsoft.com/update-guide/vulnerability/CVE-2021-40444>

References

<https://blog.google/threat-analysis-group/exposing-initial-access-broker-ties-conti/>