

THREAT ADVISORY

UNC2596 exploits Microsoft's ProxyShell and ProxyLogon vulnerabilities to distribute Cuba Ransomware

TA2022042

Threat Level

RED

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Threat actor UNC2596 popularly known for their Ecrime business has targeted more than 50 organizations in 11+ countries. The threat actors increased their initial attack vector by exploiting proxyshell and proxylogon vulnerabilities to deploy Cuba ransomware.

The UNC2596 threat actor has used web shells to load the TERMITE in-memory dropper during intrusions, with further activity involving various backdoors and built-in Windows tools. The threat actor has also employed new malware, such as WEDGE CUT to enumerate active hosts, BURNTCIGAR to disable endpoint security, and the BUGHATCH custom downloader, in addition to familiar tools such as Cobalt Strike BEACON and NetSupport. UNC2596 employed a multi-pronged extortion technique in which data was stolen and leaked on the group's shame website, in addition to encrypting with Cuba ransomware.

Organizations can mitigate the risk by following the recommendations:

- Have an effective backup strategy that ensures the backup are inaccessible from the endpoint.
- Keep all operating systems and software up to date.
- Implement a user training program and phishing exercises.

The Mitre TTPs used by **UNC2596** in the current attack are:

TA0001: Initial Access
TA0007: Discovery
TA0040: Impact
TA0009: Collection
TA0005: Defense Evasion
TA0003: Persistence
TA0011: Command and Control
TA0042: Resource Development
TA0002: Execution
TA0008: Lateral Movement
TA0006: Credential Access
T1190: Exploit Public-Facing Application
T1010: Application Window Discovery
T1012: Query Registry
T1016: System Network Configuration Discovery
T1018: Remote System Discovery
T1033: System Owner/User Discovery
T1057: Process Discovery
T1082: System Information Discovery
T1083: File and Directory Discovery
T1087: Account Discovery
T1518: Software Discovery
T1486: Data Encrypted for Impact
T1489: Service Stop
T1056.001: Keylogging
T1021.004: SSH
T1555.003: Credentials from Web Browsers
T1021.001: Remote Desktop Protocol

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- T1112: Modify Registry
- T1134: Access Token Manipulation
- T1134.001: Token Impersonation/Theft
- T1140: Deobfuscate/Decode Files or Information
- T1497.001: System Checks
- T1553.002: Code Signing
- T1564.003: Hidden Window
- T1574.011: Services Registry Permissions Weakness
- T1620: Reflective Code Loading
- T1098: Account Manipulation
- T1136: Create Account
- T1136.001: Local Account
- T1543.003: Windows Service
- T1071.001: Web Protocols
- T1071.004: DNS
- T1095: Non-Application Layer Protocol
- T1105: Ingress Tool Transfer
- T1573.002: Asymmetric Cryptography
- T1583.003: Virtual Private Server
- T1587.003: Digital Certificates
- T1588.003: Code Signing Certificates
- T1608.001: Upload Malware
- T1608.002: Upload Tool
- T1608.003: Install Digital Certificate
- T1608.005: Link Target
- T1053: Scheduled Task/Job
- T1059: Command and Scripting Interpreter
- T1059.001: PowerShell
- T1129: Shared Modules
- T1569.002: Service Execution

Actor Details

Name	Target Locations	Target sectors	Motive
UNC2596	Australia, Belgium, Canada, Germany, India, UK, USA, Austria, Colombia, Jordan, Poland	Construction & Engineering, Education, manufacturing, Oil & Gas, Transportation, Defense, Energy, Financial, Government, Healthcare, High-Tech, IT, Media, Pharmaceutical, Telecommunications and MSPs	Ecrime

Vulnerability Details

CVE ID	Affected Versions	Affected CPE	Vulnerability Name	CWE
CVE-2021-34473	Microsoft Exchange Server 2013 CU23, 2016 CU19, 2016 CU20, 2019 CU8, 2019 CU9	cpe:2.3:a:microsoft:exchange_server:2013_cu23:*.:*:*:*:*	Microsoft Exchange Server Remote Code Execution Vulnerability	CWE-94
CVE-2021-34523		cpe:2.3:a:microsoft:exchange_server:2016_cu19:*.:*:*:*:*	Microsoft Exchange Server Elevation of Privilege Vulnerability	CWE-264
CVE-2021-31207		cpe:2.3:a:microsoft:exchange_server:2016_cu20:*.:*:*:*:*	Microsoft Exchange Server Security Feature Bypass Vulnerability	CWE-254
		cpe:2.3:a:microsoft:exchange_server:2019_cu8:*.:*:*:*:*		
		cpe:2.3:a:microsoft:exchange_server:2019_cu9:*.:*:*:*:*		

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CVE ID	Affected Versions	Affected CPE	Vulnerability Name	CWE
CVE-2021-26855	Microsoft Exchange Server 2013, Microsoft Exchange Server 2016, Microsoft Exchange Server 2019	cpe:2.3:a:microsoft:exchange_server:2013_cu23:*:*:*:*:*:*	SSRF vulnerability in Microsoft Exchange Server	CWE-918
CVE-2021-26857		cpe:2.3:a:microsoft:exchange_server:2016_cu18:*:*:*:*:*:*	An insecure deserialization vulnerability in Microsoft Exchange	CWE-20
CVE-2021-26858		cpe:2.3:a:microsoft:exchange_server:2016_cu19:*:*:*:*:*:*	An arbitrary file write vulnerabilities in Microsoft Exchange	CWE-20
CVE-2021-27065		cpe:2.3:a:microsoft:exchange_server:2019_cu7:*:*:*:*:*:*	An arbitrary file write vulnerabilities in Microsoft Exchange	CWE-20

Indicators of Compromise (IoCs)

Type	Value
IPv4	64.235.39[.]82, 64.52.169[.]174, 144.172.83[.]13, 190.114.254[.]116, 185.153.199[.]164, 45.32.229[.]66, 23.227.197[.]229
MD5	72a60d799ae9e4f0a3443a2f96fb4896, bda33efc53c202c99c1e5afb3a13b30c, e78ed117f74fd7441cad3ea18814b3e, ba83831700a73661f99d38d7505b5646, c47372b368c0039a9085e2ed437ec720, c5e3b725080712c175840c59a37a5daa, c9d3b29e0b7662dafc6a1839ad54a6fb, 9ca2579117916ded7ac8272b7b47bb98, 26c09228e76764a2002ba643afeb9415, 98a2e05f4aa648b02540d2e17946da7e, ddf2e657a89ae38f634c4a271345808b, 95820d16da2d9c4fbb07130639be2143, 896376ce1bbca1ed73a70341896023e0, f51c4b21445a0ece50b1f920648ed726, 7d4307d310ad151359b025fc5a7fca1a, b62eec21d9443f8f66b87dd92ba34e85, df0e5d91d0986fde9bc02db38eef5010, 46b977a0838f4317425df0f2e1076451, 8c4341a4bde2b6faa76405f57e00fc48, d5679f47d22c7c0647038ce6f54352e4, e77af544cc9d163d81e78b3c4da2eee5, 98b2fff45a9474d61c1bd71b7a60712b, 9a0a2f1dc7686983843ee38d3cab448f, fb6da2aa2aca0ce2e0af22b2c3ba2668, 3e96efd37777cc01cabb3401485297aa, 73c0f0904105b4c220c25f64506ea986, 20a04e7fc12259dfd4172f5232ed5ccf, becdcaa3a4d933c13427bb40f9c1cfbb, 48f8cd5e42cdf06d5a520ab66a5ae576

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Type	Value
SHA-1	6d5ca42906c60caa7d3e0564b011d20b87b175cbd9d44a96673b46a82b07df68, 101b3147d404150b3c0c882ab869a18eb6eeb79e8b7b2df81fb4be1a8b58f1bf, 9ab05651daf9e8bf3c84b14613cd98e8479018bbcf3543521e94458012eba96e, 79d6b1b6b1ecb446b0f49772bf4da63fcec6f6bfc7c2e1f4924cb7acbb3b4f53, c443df1ddf8fd8a47af6fbfd0b597c4eb30d82efd1941692ba9bb9c4d6874e14, f68cea99e6887739cd82865f9b973664117af14c1a25d4917eec25ce4b26a381, 4306c5d152cdd86f3506f91633ef3ae7d8cf0dd25f3e37bec43423c4742f4c42, aeb044d310801d546d10b247164c78afde638a90b6ef2f04e1f40170e54dec03, 6ce206a1e1224e0a9d296d5fabffef7fe5ab45ef00299a21e8df66e8c6ba5a27, 811bb84e1e9f59279f844a040bf68d25ad29a756fbc07cfd7308f8490a15329, d1e14b5f02fb020db4e215cb5c3abc6a7b1589443bccd6f03b77ee124ca72b5c, a722615c2ee101cde88c7f44fb214eccfe2d06752be751db066018a3244bce62, 671e049f3e2f6b7851ca4e8eed28ba5c9bf209eb4ad44aab081a9871b06f2833, ea5de558396f66af8382afd98f2a7118a6bcabf8f9612c7e35b121a8d1f230c, ad12f38308a85c8792f2f7e1e46afc3d9f1a9017edc2cbfbb28ae0191477ab3a, 9cec82bebe1637c50877ff11de5bd4db1db4999d1bd764a772a5620388843c5f, 6cd25067316f8fe013792697f2f5da298318e2047ea4c5da525955799f66726f, 13d333d5e3c1dd6c33dfa8fc76def6109b5187d4ce6bb82a34a8bf311b027d79, df89d3d1f795a77eefc14f0356816d8b40934e40697f8190f76e0f5664f33fd3, 728a2d5dd2bf9c707431ff68e94c0d7a7ace9508241051c02344d9e9c556e015, 7f357ab4ac225e14a6967f89f20926e9e0db15dca5b8fe058c120a365570b783, 7b2144f2b5d722a1a8a0c47a43ecaf029b434bfb34a5cffe651fda2adf401131, 03249bf622c3ae1dbed8b14cfaa8332442a41c4592d325ad93b6a8cb6d4b29f8, 1842ddc55b4bf9c71606451d404a21f7f3da8e54c56318010c80ba4f571bd8f5, bcf0f202db47ca671ed6146040795e3c8315b7fb4f886161c675d4ddf5fdd0c4, e35593fab92606448ac4cac6cd2bd6b4df5d7ab3b733ba4b9472994cf0e3d87d, 482b160ee2e8d94fa6e4749f77e87da89c9658e7567459bc633d697430e3ad9a, 6c4b57fc995a037a0d60166deadfb869a07b4bb382651b9c4ea9e59fb347c3d1, 44a4ce7b5d2e154ec802a67ef14c613298cafc00b1ca3a15b302195f2686a186, 6e66caaa12c3cafd1dc3f8c6305354fcb958ed7f9a4e5e5bf3a2dc2216b5915, d8df1a4d59a0382b367fd6936cce538201e9b93a2850dbc66a4dd575fbeb8c42
Domain	irrislaha[.]com, leptengthinete[.]com, siagevewilin[.]com, surnbuithe[.]com

Recent Breaches

<http://www.get-integrated.com>
<https://www.muntons.com/>
<https://www.cmmcpas.com>

Patch Links

<https://msrc.microsoft.com/update-guide/en-US/vulnerability/CVE-2021-26855>
<https://msrc.microsoft.com/update-guide/en-US/vulnerability/CVE-2021-26857>
<https://msrc.microsoft.com/update-guide/en-US/vulnerability/CVE-2021-26858>
<https://msrc.microsoft.com/update-guide/en-US/vulnerability/CVE-2021-27065>
<https://msrc.microsoft.com/update-guide/en-US/vulnerability/CVE-2021-34473>
<https://msrc.microsoft.com/update-guide/en-US/vulnerability/CVE-2021-34523>
<https://msrc.microsoft.com/update-guide/en-US/vulnerability/CVE-2021-31207>

References

<https://www.mandiant.com/resources/unc2596-cuba-ransomware>