

HiveForce Labs

THREAT ADVISORY

**ATTACK REPORT**

In-Depth Analysis of NoEscape Ransomware

Date of Publication

November 16, 2023

Admiralty Code

A1

TA Number

TA2023463

Summary

First Appearance: March 2023

Attack Region: United States, Sweden, Australia, France, Canada, United Kingdom, Switzerland, Poland, Puerto Rico, Italy, Netherlands, South Korea, United Arab Emirates, Mexico, Belgium, Germany, Spain, Hungary, Japan, Austria, China, Malaysia, India, Brazil, Republic of Korea, Taiwan, Lithuania, Jordan, Mauritius, Colombia

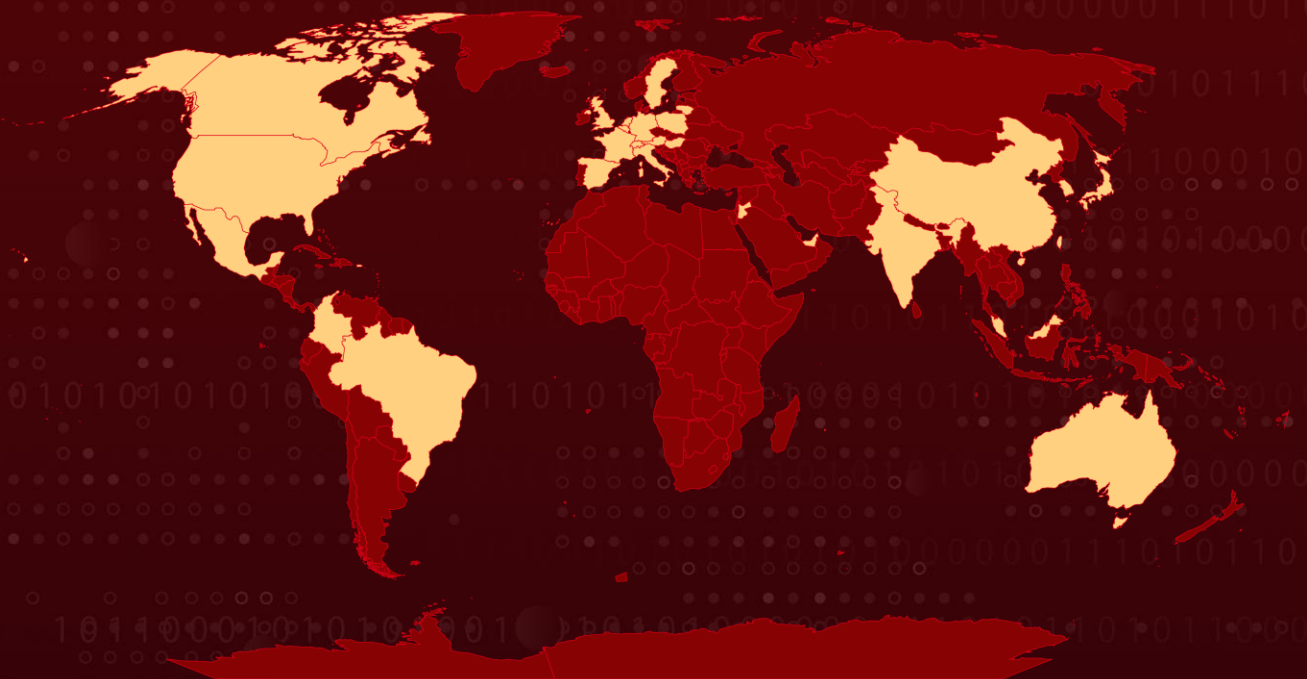
Affected Platform: Windows, Linux, and ESXi

Malware: NoEscape Ransomware

Targeted Industries: Business Services, Manufacturing, Retail, Education, Construction, Healthcare, Government, Law Firms & Legal Services, Financial services, Hospitality

Attack: The NoEscape ransomware, suspected to be a rebrand of Avaddon, targets enterprises globally through multi-extortion attacks. Operating as Ransomware-as-a-Service, it encrypts files, changes wallpapers, and demands ransom, emphasizing financial motives via a TOR negotiation site.

Attack Regions



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Attack Details

#1

The NoEscape ransomware, which emerged in May 2023 and is suspected to be a rebrand of Avaddon, operates as Ransomware-as-a-Service and targets enterprises through multi-extortion attacks. It steals data and encrypts files on Windows, Linux, and VMware ESXi servers, affecting various industries globally, with the United States as a primary target.

#2

The infection mechanism involves executing commands to delete Windows Shadow Volume Copies, local backup catalogs, and disabling Windows automatic repair. The ransomware terminates various processes, including those related to security software, backup applications, web, and database servers.

#3

It also stops relevant Windows services to unlock files for encryption. NoEscape and Avaddon encryptors are nearly identical, with the former using the Salsa20 algorithm instead of AES. Encrypted files have a unique 10-character extension, and the ransomware changes the Windows wallpaper to display recovery instructions.

#4

The NoEscape ransomware encrypts and exfiltrates victims' files, demanding a ransom for decryption. It appends a unique extension to encrypted files and avoids certain file types and directories. Victims receive a ransom note guiding them to a TOR site for negotiations, emphasizing the group's financial motives.

Recommendations



Conduct Regular Data Backups: Implement a robust data backup strategy that includes regular backups of critical data and systems, ad hoc and periodic backup restoration test. In the event of a ransomware attack, having up-to-date backups will allow organizations to restore their systems and data without paying the ransom. Ensure backups are adequately protected, employ 3-2-1-1 back up principle and Deploy specialized tools to ensure backup protection.



Regularly Update and Patch Systems: Ensure that all operating systems, software, and applications are up to date with the latest security patches. Regularly update and patch Windows, Linux, and VMware ESXi servers to address vulnerabilities that ransomware may exploit.



Enhance Endpoint Security: Utilize advanced endpoint protection solutions, such as antivirus and endpoint detection and response (EDR) tools, to detect and prevent ransomware infections. Ensure that security software is regularly updated and configured to provide optimal protection.



Network Segmentation: Implement network segmentation to contain and isolate potential infections. Restrict communication between network segments to prevent the lateral movement of the ransomware within the organization's network.

Potential MITRE ATT&CK TTPs

| | | | |
|---|--|--|---|
| <u>TA0001</u> Initial Access | <u>TA0002</u> Execution | <u>TA0040</u> Impact | <u>TA0043</u> Reconnaissance |
| <u>TA0010</u> Exfiltration | <u>TA0005</u> Defense Evasion | <u>TA0009</u> Collection | <u>TA0011</u> Command and Control |
| <u>TA0003</u> Persistence | <u>TA0004</u> Privilege Escalation | <u>TA0007</u> Discovery | <u>T1547.009</u> Shortcut Modification |
| <u>T1133</u> External Remote Services | <u>T1078</u> Valid Accounts | <u>T1204.002</u> Malicious File | <u>T1204</u> User Execution |
| <u>T1053.005</u> Scheduled Task | <u>T1053</u> Scheduled Task/Job | <u>T1547.001</u> Registry Run Keys / Startup Folder | <u>T1547</u> Boot or Logon Autostart Execution |
| <u>T1562.001</u> Disable or Modify Tools | <u>T1562</u> Impair Defenses | <u>T1027.002</u> Software Packing | <u>T1027</u> Obfuscated Files or Information |
| <u>T1055</u> Process Injection | <u>T1070.004</u> File Deletion | <u>T1070</u> Indicator Removal | <u>T1112</u> Modify Registry |
| <u>T1140</u> Deobfuscate/Decode Files or Information | <u>T1497.001</u> System Checks | <u>T1003</u> OS Credential Dumping | <u>T1497</u> Virtualization/Sandbox Evasion |

| | | | |
|--|--|--|--|
| <u>T1087</u> Account Discovery | <u>T1482</u> Domain Trust Discovery | <u>T1069</u> Permission Groups Discovery | <u>T1021</u> Remote Services |
| <u>T1021.001</u> Remote Desktop Protocol | <u>T1560.001</u> Archive via Utility | <u>T1071.001</u> Web Protocols | <u>T1567.002</u> Exfiltration to Cloud Storage |
| <u>T1567</u> Exfiltration Over Web Service | <u>T1560</u> Archive Collected Data | <u>T1071</u> Application Layer Protocol | <u>T1486</u> Data Encrypted for Impact |
| <u>T1485</u> Data Destruction | <u>T1543.003</u> Windows Service | <u>T1543</u> Create or Modify System Process | <u>T1490</u> Inhibit System Recovery |
| <u>T1119</u> Automated Collection | | | |

✂ Indicators of Compromise (IOCs)

| TYPE | VALUE |
|-------------|---|
| MD5 | 204f028c983f654be32b97e849edeaab, 47ae17d89c2d9b6acdc7458f5df1c6f7, 5779cec690b5bbc61687381ae8a8d518, 58b4a4eed74fbfbf104d0ffd92207018, a106c1236357c315722ddb985c5613c, c850f6816459e3364b2a54239642101b |
| SHA1 | ea1f7940271fc80d06b2f222506020b650ad41bc, 30f71a24c15dd81965b12996a79d914acf4f169e, 12dc0a2de3ad30201107bfc679de5acacf31e5c, 30c60f18279ed5fd36e3ac2d3ba5ddbdc5d1f624, 9cbc7417fa5ce2f6d87026337fc7892e4f485819, d38c613020cb4616783c8535380e28404f7eaebf, b17403e7dcb992ba8d2b56dd843406264d3910e5, 317f296131b37a73c9a5d253015821dfdc8b1190, 8770132656d4f3d9b973848b89e96fc95d736179, 994edc8d183a1a7243790539044d12b80b1d5d84, aa8ebc0b00d116cfe46245e0bb4a0b5108aad0f, e128b01745ae1cb0de41c1b1c2e7271a172cf696 |

| TYPE | VALUE |
|--------|---|
| SHA256 | 0073414c5a03b20f6f255f400291de67f2a7268c461f90ea6ff0355c a31af07a, 2020cae5115b6980d6423d59492b99e6aaa945a2230b7379c2f8ae 3f54e1efd5, 21162bbd796ad2bf9954265276bfebea8741596e8fe9d86070245d 9b5f9db6da, 4d7da1654f9047b6c6a9d32564a66684407ed587cbaffa54ec1185f d73293d3e, 53f5c2f70374696ff12adcaaf1bbbe0e5dd1b1995d98f2e876b06718 88b43128, 68bce3a400721d758560273ae024f61603b8a4986440a8ec9e2830 5d7e6d02b0, 73c19eab8d2ae58db3968dd7de0e745db2d7709859305b113b748 bb02494465e, 8dd64ea7f226d3eb1e857b0086c0668542652cb37f8142dc000272 dbd9569e31, 9d346518330eeefbf288aeca7b2b6243bc158415c7fee3f2c19694f0 e5f7d51c, c34c5dd4a58048d7fd164e500c014d16befa956c0bce7cae559081d 57f63a243 |

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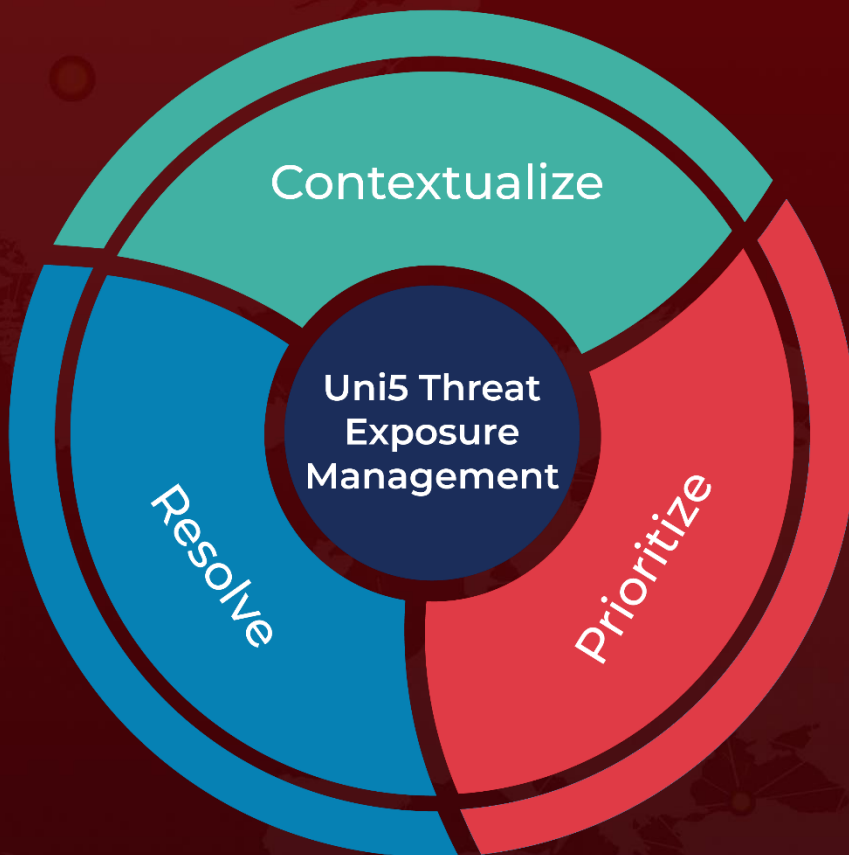
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What Next?

At Hive Pro, it is our mission to detect the most likely threats to your organization and to help you prevent them from happening.

Book a free demo with HivePro Uni5: Threat Exposure Management Platform.



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