

Threat Level

Red Red

Hiveforce Labs

THREAT ADVISORY

M ATTACK REPORT

EvilAI Malware Exploits the Trust in Artificial Intelligence

Date of Publication

September 15, 2025

Admiralty Code

A1

TA Number

TA2025281

Summary

Attack Discovered: August 2025

Targeted Regions: Europe, Americas, AMEA

Targeted Industries: Manufacturing, Government, Healthcare, Technology, Retail,

Education, Financial Services, Construction, Non-profit, Utilities

Affected Platform: Windows

Malware: EvilAl

Attack: EvilAI is a new malware that hides behind the mask of legitimate AI tools, luring users with polished interfaces, real functionality, and even stolen code-signing certificates to appear trustworthy. Once installed, it blends into systems by mimicking normal processes, creating disguised scheduled tasks, and using advanced obfuscation to stay hidden. Beyond the surface, it quietly communicates with command-and-control servers over encrypted channels, steals browser data, and prepares systems for further payloads. With infections spreading quickly across Europe, the Americas, and AMEA, and targeting various industries, EvilAI highlights how attackers are now weaponizing AI itself to outsmart defenses, making vigilance and adaptive security more critical than ever.

X Attack Regions



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Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, Overture Maps Fundation, TomTom, Zenrin

Attack Details

- #1 A new strain of malware is exploiting the popularity of artificial intelligence by masquerading as legitimate Al-powered tools. Disguised behind convincing interfaces and realistic functionality, these trojans slip into both personal and enterprise systems before raising any alarms. This malware family is dubbed EvilAl. The campaign highlights the growing difficulty of distinguishing authentic applications from malicious ones in today's Al-driven digital ecosystem.
- EvilAI has already achieved a striking global footprint, with Europe reporting the largest cluster of infections. The malware has not limited itself to one industry but has spread across manufacturing, government, public services, and healthcare sectors. By using clever social engineering and camouflaged code, the attackers have been able to infiltrate critical networks and establish persistent footholds.
- What makes EvilAI especially deceptive is its attention to detail. Malicious installers are distributed via newly registered websites, manipulated search results, online forums, and even paid advertisements. Once downloaded, the applications often function as advertised, be it productivity tools, document handlers, or AI enhancers, convincing users that they've installed legitimate software. The illusion is strengthened further by the misuse of digital signatures and trusted certificates, sometimes even obtained directly by attackers, to make the malware appear "verified" and safe to install.
- The technical underpinnings of EvilAI reveal a layered and resilient design. Its operators employ multiple obfuscation techniques, such as Unicode-encoded strings, hash-based control flow, and evasive process manipulation. Upon execution, the malware establishes encrypted communication channels with its command-and-control servers, enabling attackers to issue instructions, download additional payloads, modify registries, and execute stealthy background processes. By encoding traffic with AES-256-CBC and disguising scheduled tasks as legitimate Windows processes.
- EvilAI is currently being used as a staging platform for secondary payloads, potentially including information stealers, though its full capabilities are still under investigation. This uncertainty adds to the risk, as organizations may remain unaware of the depth of compromise. The rise of Al-generated malware like EvilAI underscores a pivotal shift in the threat landscape: attackers are now using the very tools meant to enhance productivity and innovation to outpace defenders.

Recommendations

- Be cautious with downloads: Only download software and AI tools from trusted, official sources. Avoid clicking on links from ads, forums, or social media posts, no matter how convincing they look.
- Check before you trust: Don't rely on looks alone. Even if an app has a polished interface or a "verified" certificate, it doesn't guarantee safety. Double-check the publisher's legitimacy and reviews before installing.
- Strengthen defenses: Use a reliable security solution that can detect suspicious behavior, not just known malware signatures. Al-powered malware needs modern, adaptive defenses.
- Enhance Endpoint Protection: Deploy next-generation antivirus (NGAV) and endpoint detection & response (EDR) solutions to identify and block malware. Leverage behavioral analysis and machine learning-based detection to spot suspicious activity.

♦ Potential MITRE ATT&CK TTPs

© C	TA0042 Resource Development	TA0001 Initial Access	TA0002 Execution	TA0003 Persistence
0	TA0005 Defense Evasion	TA0006 Credential Access	TA0007 Discovery	TA0010 Exfiltration
0 0 0	TA0011 Command and Control	TA0040 Impact	T1588 Obtain Capabilities	T1588.007 Artificial Intelligence
1	T1059 Command and Scripting Interpreter	<u>T1059.007</u> JavaScript	T1053 Scheduled Task/Job	T1547 Boot or Logon Autostart Execution
1	T1547.009 Shortcut Modification	T1547.001 Registry Run Keys / Startup Folder	T1057 Process Discovery	T1518 Software Discovery

T1518.001 Security Software Discovery	T1489 Service Stop	T1555 Credentials from Password Stores	T1036 Masquerading
T1189 Drive-by Compromise	T1588.003 Code Signing Certificates	T1047 Windows Management Instrumentation	T1059.001 PowerShell
T1027 Obfuscated Files or Information	T1070 Indicator Removal	T1071 Application Layer Protocol	T1071.001 Web Protocols
T1041 Exfiltration Over C2 Channel	T1112 Modify Registry		

№ Indicators of Compromise (IOCs)

TYPE	VALUE				
Filenames	justaskjacky.exe, manualshq.exe, PDF Editor.exe, index.js, {GUID}or.js, main.js				
SHA256	8ecd3c8c126be7128bf654456d171284f03e4f212c27e1b33f875b890 7a7bc65, 49a4442e73521ecca8e56eb6dbc33f31eb7cfa5e62a499e552bcd29a 29d79d8a, b0c321d6e2fc5d4e819cb871319c70d253c3bf6f9a9966a5d0f95600a 19c0983, cb15e1ec1a472631c53378d54f2043ba57586e3a28329c9dbf40cb69 d7c10d2c, ad0655b17bbdbd8a7430485a10681452be94f5e6c9c26b8f92e4fcba 291c225a, 95001359fb671d0e6d97f37bd92642cc993e517d2307f373bfa98936 39f1a2bc, 9f369e63b773c06588331846dd247e48c4030183df191bc53d341fcc 3be68851, cf45ab681822d0a4f3916da00abd63774da58eb7e7be756fb6ec99c2c 8cca815, ce834dca38aeac100f853d79e77e3f61c12b9d4da48bb0a949d0a961 bf9c0a27				

ТҮРЕ	VALUE
URLs	hxxps[:]//9mdp5f[.]com, hxxps[:]//5b7crp[.]com, hxxps[:]//mka3e8[.]com, hxxps[:]//y2iax5[.]com, hxxps[:]//abf26u[.]com

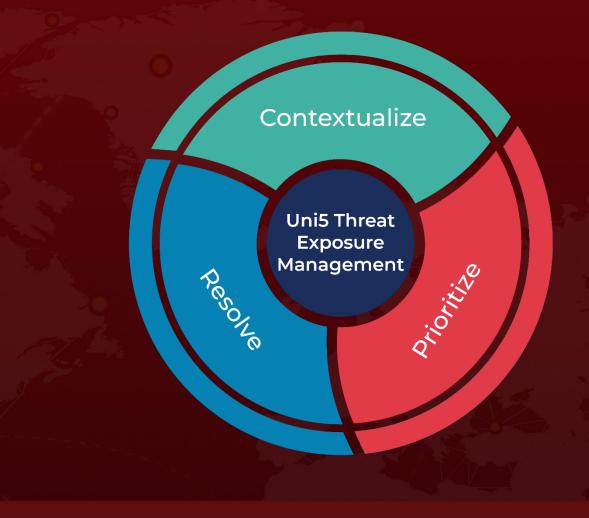
References

https://www.trendmicro.com/en in/research/25/i/evilai.html

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