

HiveForce Labs

THREAT ADVISORY

ATTACK REPORT

Hidden in Plain Sight: The Abuse of Nezha and the Ghost RAT That Followed

Date of Publication

October 10, 2025

Admiralty Code

A1

TA Number

TA2025312

Summary

Attack Discovered: August 2025

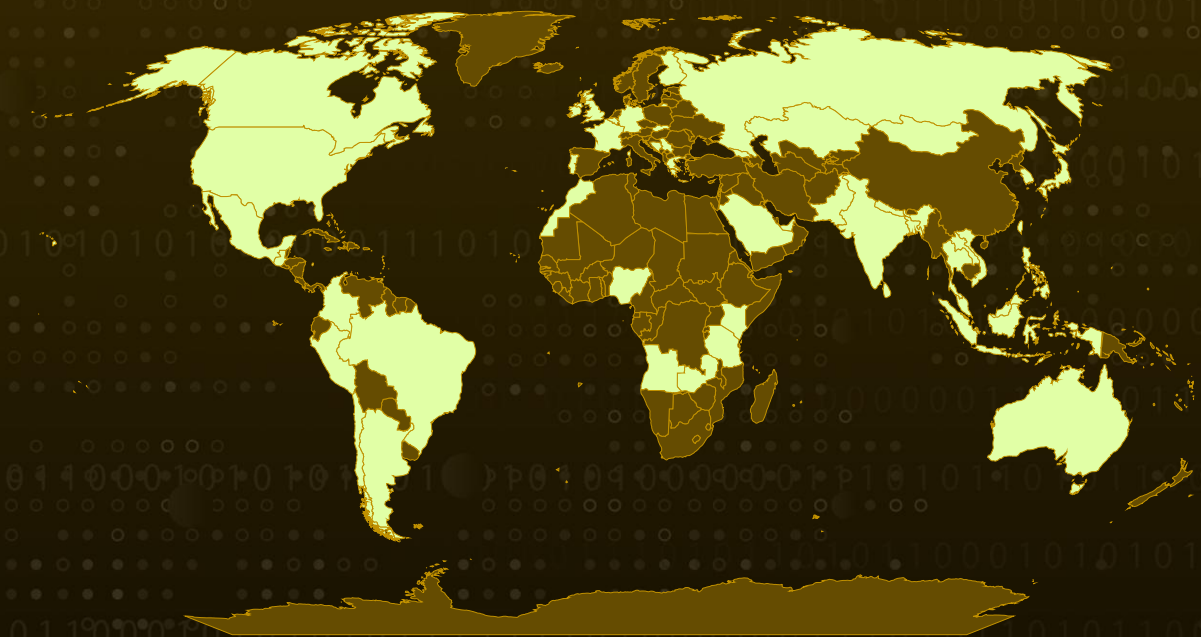
Targeted Countries: Taiwan, Japan, South Korea, Hong Kong, Singapore, Malaysia, India, United Kingdom, United States of America, Colombia, Laos, Thailand, Australia, Indonesia, France, Canada, Argentina, Sri Lanka, Philippines, Ireland, Kenya, Macao, Mainland China, Russia, Saudi Arabia, Nepal, Mongolia, Finland, Tanzania, Zambia, Angola, Nigeria, Morocco, Portugal, Greece, Serbia, Bosnia and Herzegovina, Slovakia, Mexico, Peru, Brazil, Vietnam, Pakistan, Trinidad and Tobago, Chile, Guatemala, Kazakhstan, Germany, Georgia, Bangladesh, Belgium, United Arab Emirates

Affected Platform: Windows

Malware: Ghost RAT

Attack: A stealthy cyberattack that began with a simple phpMyAdmin misconfiguration quickly escalated into a full-scale operation. The attacker cleverly used log poisoning to plant a hidden web shell, then repurposed the legitimate Nezha monitoring tool to control systems and deploy Ghost RAT malware secretly. By turning everyday admin tools into weapons, the attacker managed to infiltrate over a hundred machines across Taiwan, Japan, South Korea, and Hong Kong. The campaign highlights how easily overlooked configurations and trusted open-source utilities can be exploited to create powerful intrusion tools.

Attack Regions



Attack Details

#1

In August 2025, a well-coordinated web intrusion began with the planting of a simple web shell on a compromised web server. The attacker used a tool called AntSword to gain remote control and later deployed Nezha, a legitimate server monitoring program that was repurposed for malicious use, to install Ghost RAT, a remote access trojan. The campaign affected more than a hundred systems, mostly in Taiwan, Japan, South Korea, and Hong Kong.

#2

The attack started when a phpMyAdmin panel, used for managing databases, was accidentally left open to the internet after a DNS misconfiguration disabled authentication. Logs from the Apache server revealed that the attacker accessed the panel from an AWS IP address in Hong Kong and quickly changed the interface language to Simplified Chinese. Within seconds, they executed several SQL commands, proving they had strong technical skills. By taking advantage of a misconfigured logging feature and a directory traversal flaw, the attacker managed to inject a PHP web shell directly into the MariaDB logs. This clever technique, known as log poisoning, allowed them to execute PHP code remotely and establish a hidden backdoor on the system.

#3

Once the web shell was active, the attacker tested it to confirm access, then switched IP addresses, likely to cover their tracks or pass control to another operator. Further investigation revealed that the server had exposed Windows management services to the internet, which allowed its information to appear on reconnaissance tools like Shodan. The attacker's infrastructure was linked to MoeDove LLC, a small hosting provider connected to suspicious domains and past malicious activity. Though seemingly small, this provider's recurring presence across multiple malicious domains hinted at a well-organized operation rather than random hacking attempts.

#4

Telemetry from the infected systems showed that the attacker downloaded and installed the Nezha agent using an executable named live.exe hosted on Cloudflare. While Nezha is typically used for legitimate remote monitoring, it was configured here to connect to a command server hosted in Dublin under HostPapa. The Nezha dashboard used by the attacker was set to Russian and lacked authentication, exposing system data without restriction.

#5

The final stage involved deploying Ghost RAT, which gave the attacker full remote control over the infected systems. The malware used multiple stages, a loader, a dropper, and the main payload, each designed to hide its activity and resist analysis. It maintained persistence by disguising itself as a Windows service named "SQLite" and operated under system folders. Ghost RAT communicated with domains tied to MoeDove LLC, and its infrastructure was traced back to Chinese operators with a track record of registering fake or malicious domains. The attack's complexity and precision point to a skilled and well-funded actor.

Recommendations



Secure All Admin Panels and Management Interfaces: Always protect tools like phpMyAdmin or remote management consoles with strong passwords and multi-factor authentication. Never leave them exposed to the internet without proper access controls.



Keep Your Software Updated: Regularly patch web servers, database tools, and any third-party software to close known vulnerabilities that attackers can exploit.



Separate Service Accounts: Avoid running web and database services under the same user account. Using separate accounts with minimal privileges reduces the damage attackers can cause if one service is breached.



Limit Access to Monitoring Tools: If you use legitimate remote monitoring or management software like Nezha, make sure it's configured securely with proper authentication and encryption.



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

<u>TA0001</u> Initial Access	<u>TA0002</u> Execution	<u>TA0003</u> Persistence	<u>TA0004</u> Privilege Escalation
<u>TA0005</u> Defense Evasion	<u>TA0007</u> Discovery	<u>TA0011</u> Command and Control	<u>T1190</u> Exploit Public-Facing Application
<u>T1505</u> Server Software Component	<u>T1505.003</u> Web Shell	<u>T1059</u> Command and Scripting Interpreter	<u>T1071</u> Application Layer Protocol
<u>T1071.001</u> Web Protocols	<u>T1543</u> Create or Modify System Process	<u>T1036</u> Masquerading	<u>T1036.004</u> Masquerade Task or Service

T1078 Valid Accounts	T1046 Network Service Discovery	T1105 Ingress Tool Transfer	T1082 System Information Discovery
T1574 Hijack Execution Flow	T1574.001 DLL	T1027 Obfuscated Files or Information	T1033 System Owner/User Discovery
T1547 Boot or Logon Autostart Execution	T1547.001 Registry Run Keys / Startup Folder		

Indicators of Compromise (IOCs)

TYPE	VALUE
SHA256	f3570bb6e0f9c695d48f89f043380b43831dd0f6fe79b16eda2a3ffd9fd7ad16, 9f33095a24471bed55ce11803e4ebbed5118bfb5d3861baf1c8214efcd9e7de6, 7b2599ed54b72daec0acfd32744c7a9a77b19e6cf4e1651837175e4606dbc958, 82611e60a2c5de23a1b976bb3b9a32c4427cb60a002e4c27cadfa84031d87999, 35e0b22139fb27d2c9721aedef5770d893423bf029e1f56be92485ff8fce210f3
File Path	C:\xampp\htdocs\123.php, C:\Windows\Cursors\x.exe, C:\Windows\system32\SQLite.exe, C:\Windows\system32\32138546.dll, C:\Windows\Cursors\live.exe
URL	hxxps[:]//rism[.]pages[.]dev/microsoft[.]exe
IPv4	54[.]46[.]50[.]255, 45[.]207[.]220[.]12, 172[.]245[.]52[.]169
Domains	c[.]mid[.]al, gd[.]bj2[.]xyz
Mutex	gd[.]bj2[.]xyz[:]53762[:]SQLite

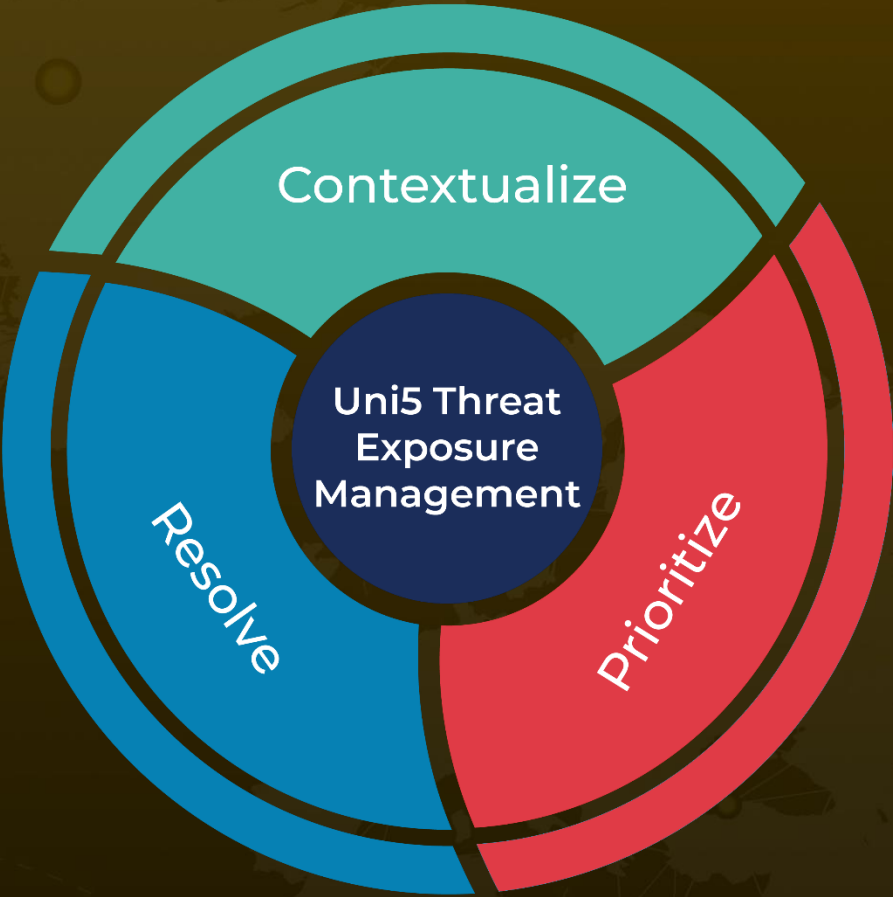
References

<https://www.huntress.com/blog/nezha-china-nexus-threat-actor-tool>

What Next?

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