

Hiveforce Labs

THREAT ADVISORY

X ATTACK REPORT

Hive0154 Evolves with SnakeDisk and Enhanced Toneshell Backdoor

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Admiralty Code

TA Number

September 16, 2025

A1

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Summary

Attack Discovered: Mid 2025 Targeted Countries: East Asia

Targeted Industries: Government, Defense **Malware:** SnakeDisk, Yokai, Pubload, Toneshell

Actor: Hive0154 (aka Mustang Panda, Bronze President, TEMP.Hex, HoneyMyte, Red

Lich, Earth Preta, Camaro Dragon, PKPLUG, Stately Taurus, Twill Typhoon, G0129)

Attack: A new wave of activity linked to the China-aligned group Hive0154 reveals a rapidly expanding malware arsenal designed for stealth and persistence. Central to this campaign is SnakeDisk, a USB worm that spreads across removable drives in Thailand, planting the Yokai backdoor for covert command execution. Alongside it, advanced Toneshell variants, most notably the elusive Toneshell9, demonstrate heavy obfuscation, proxy abuse, and beaconing techniques that allow them to blend into normal network traffic. The operation also uses weaponized archives disguised as official government documents and delivered through cloud services, adding a convincing social engineering layer.

X Attack Regions



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Attack Details

- In July 2025, a fresh wave of activity tied to the China-aligned threat actor Hive0154, was uncovered, spotlighting a growing and sophisticated malware ecosystem. Among the discoveries were new variants of the long-running Toneshell family, the novel SnakeDisk USB worm, and deployments of the Yokai backdoor. The threat campaign showed clear signs of geographic targeting, with malware samples and weaponized archives surfacing primarily from Singapore and Thailand.
- In one campaign, an archive named CallNotes.zip was identified, disguised as an official document from Myanmar, hosted on Box Cloud Storage. The archive contained loaders for Pubload and Toneshell7, while also deploying an obfuscated Toneshell8 variant designed to frustrate analysis. The discovery of SnakeDisk in August marked an escalation, with its USB worming capability likely aimed at infiltrating air-gapped environments within Thai government and military networks.
- The Toneshell malware line itself showed a steady evolution throughout 2025. Version 8, observed in March, introduced junk code and a custom Linear Congruential Generator (LCG) to obscure operations, while obfuscating response codes sent to its C2 infrastructure. By July, the emergence of Toneshell9 represented a major leap forward: a stealthy sideloaded DLL packed with anti-analysis techniques, proxy enumeration, and a custom beaconing system built to mimic legitimate TLS traffic. This variant proved particularly stealthy, running undetected across scanning platforms and capable of maintaining two reverse shells simultaneously while blending seamlessly into enterprise network traffic.
- SnakeDisk added another layer of danger, spread aggressively via USB devices. It verified execution on Thai machines, ensured only one instance ran at a time, and used low-level storage APIs to identify and infect removable drives. Once active, it hid files on the USB while dropping its own malicious executables under disguised filenames. The worm also embedded payloads that leveraged DLL sideloading to execute under the guise of legitimate software. With these mechanisms, SnakeDisk appeared designed for long-term persistence, silent propagation, and eventual deployment of Yokai, a modular backdoor enabling attackers to run arbitrary commands and maintain covert access.
- Taken together, the findings point to a broad, interlinked malware ecosystem under Hive0154's control. This suggests at least three overlapping subclusters, each anchored by distinct strains like Toneshell, SnakeDisk, or Yokai. While it remains unclear whether these represent separate operational units or a single coordinated effort, the consistent focus on Thailand signals a strategic campaign. Hive0154 has a well-documented history of targeting both public and private sector organizations, and this latest toolkit underscores its intent to refine its arsenal for global operations.

Recommendations

- Harden USB and removable media use: Limit the use of USB drives and other removable devices, especially in sensitive or air-gapped environments. Where possible, disable autorun features, and only allow trusted, scanned devices to be connected. Worms like SnakeDisk thrive on unchecked USB use.
- Monitor unusual network behavior: Set up monitoring for strange or hidden network traffic, such as TLS connections that don't match typical patterns or proxy server lookups from endpoints. Malware like Toneshell9 hides inside "normal-looking" traffic, so spotting the odd behaviors early is key.
- Strengthen email and cloud storage defenses: Phishing lures and weaponized archives were central to this campaign. Use secure email gateways, enable multifactor authentication, and train staff to recognize suspicious attachments or links, even if they appear to come from trusted organizations or cloud platforms.
- 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

TA0001 Initial Access	TA0002 Execution	TA0003 Persistence	TA0005 Defense Evasion
TA0005 Defense Evasion	TA0007 Discovery	TA0011 Command and Control	T1091 Replication Through Removable Media
T1574 Hijack Execution Flow	T1574.001 DLL	T1105 Ingress Tool Transfer	T1027 Obfuscated Files or Information
T1090 Proxy	T1071 Application Layer Protocol	T1059 Command and Scripting Interpreter	T1547 Boot or Logon Autostart Execution

T1547.001 Registry Run Keys / Startup Folder	T1656 Impersonation	T1566 Phishing	T1070 Indicator Removal
T1053 Scheduled Task/Job	T1204 User Execution	T1036 Masquerading	T1140 Deobfuscate/Decode Files or Information
T1082 System Information Discovery	T1012 Query Registry	1101011000	00111010110

X Indicators of Compromise (IOCs)

ТҮРЕ	VALUE
SHA256	f8b28cae687bd55a148d363d58f13a797486f12221f0e0d080ffb53611d5 4231, 8132beeb25ce7baed0b561922d264b2a9852957df7b6a3daacfbb3a9694 85c79, d1466dca25e28f0b7fae71d5c2abc07b397037a9e674f38602690e96cc5b 2bd4, 1272a0853651069ed4dc505007e8525f99e1454f9e033bcc2e58d60fdafa 4f02, b8c31b8d8af9e6eae15f30019e39c52b1a53aa1c8b0c93c8d075254ed10 d8dfc, 7087e84f69c47910fd39c3869a706e55324783af8d03465a9e7bfde52fe4 d1d6, 38fcd10100f1bfd75f8dc0883b0c2cb48321ef1c57906798a422f2a2de17d 50c, 69cb87b2d8ee50f46dae791b5a0c5735a7554cc3c21bb1d989baa0f38c4 5085c, 564a03763879aaed4da8a8c1d6067f4112d8e13bb46c2f80e0fcb9ffdd40 384c, e4bb60d899699fd84126f9fa0dff72314610c56fffca3d11f3b6fc93fcb75e0 0, c2d1ff85e9bb8feb14fd015dceee166c2e52e2226c07e23acc348815c0eb 4608, bdbc936ddc9234385317c4ee83bda087e389235c4a182736fc597565042 f7644,

ТҮРЕ	VALUE
SHA256	f0fec3b271b83e23ed7965198f3b00eece45bd836bf10c038e9910675baf efb1, e7b29611c789a6225aebbc9fee3710a57b51537693cb2ec16e2177c2239 2b546, 9ca5b2cbc3677a5967c448d9d21eb56956898ccd08c06b372c6471fb68d 37d7d, 318a1ebc0692d1d012d20d306d6634b196cc387b1f4bc38f97dd437f117 c7e20, 0d632a8f6dd69566ad98db56e53c8f16286a59ea2bea81c2761d43b6ab4 ecafd, 39e7bbcceddd16f6c4f2fc2335a50c534e182669cb5fa90cbe29e49ec6dfd 0df, 05eb6a06b404b6340960d7a6cf6b1293e706ce00d7cba9a8b72b378029 8dc25d, dd694aaf44731da313e4594d6ca34a6b8e0fcce505e39f8273b9242fdf62 20e0, bb5bb82e5caf7d4dbbe878b75b23f793a5f3c5ca6dba70d8be447e8c004 d26ce, 35bec1d8699d29c27b66e5646e58d25ce85ea1e41481d048bcea89ea94f 8fb4b
IPv4	188[.]208[.]141[.]196, 146[.]70[.]29[.]229, 123[.]253[.]34[.]44
Domain	www[.]slickvpn[.]com
URL	hxxp[:]//118[.]174[.]183[.]89/kptinfo/import/index[.]php

References

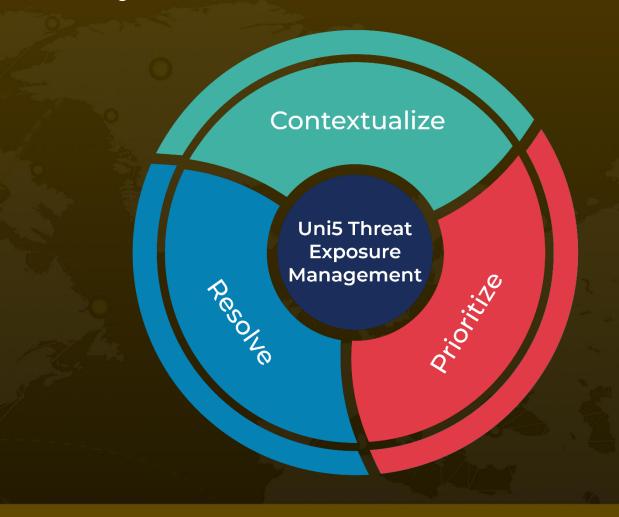
https://www.ibm.com/think/x-force/hive0154-drops-updated-toneshell-backdoor

https://hivepro.com/threat-advisory/chinese-apt-earth-preta-runs-spearphishing-campaigns/

What Next?

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