

Hiveforce Labs

# THREAT ADVISORY

**X** ATTACK REPORT

# Operation Hanoi Thief: When Fake CVs Become Cyber Weapons

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**A1** 

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# Summary

Attack Discovered: November 3, 2025

**Targeted Country: Vietnam** 

Targeted Industries: Information Technology, Recruitment & HR Firms

**Malware:** LOTUSHARVEST

Campaign: Operation Hanoi Thief

Attack: Operation Hanoi Thief is a deceptive spear-phishing campaign that hides behind seemingly harmless resumes to infiltrate Vietnamese IT and recruitment teams. By blending clever misdirection like fake GitHub profiles and resume-themed lures, with pseudo-polyglot payloads and abused Windows tools, the attackers quietly execute a malicious DLL implant called LOTUSHARVEST. Once inside, the implant slips past analysis checks, harvests browser credentials and browsing history, and sends the stolen data back to attacker-controlled servers. With its polished social engineering, stealthy execution chain, the campaign makes it a strong reminder that even the most routine HR workflows can become an entry point for sophisticated cyber espionage.

#### **X** Attack Regions



## **Attack Details**

- Operation Hanoi Thief is an emerging spear-phishing campaign that has begun targeting IT teams and HR recruiters across Vietnam. The attackers rely heavily on fake resumes carefully crafted to appear legitimate while embedding pseudopolyglot payloads designed to camouflage malicious activity. The infection chain begins with a lure-packed ZIP archive delivered through targeted emails. Inside, victims find a convincing resume document and an accompanying LNK shortcut that quietly initiates the intrusion. What follows is the deployment of LOTUSHARVEST, a C++ based DLL implant executed through DLL sideloading.
- The first malicious archive publicly identified surfaced on November 3, 2025. It contained an LNK file disguised as a PDF and a pseudo-polyglot lure. Although the resume portrays an applicant for a software developer role, the file name hints at an information-security background, suggesting the attackers tailored the lure to specific technical targets. To make the applicant appear authentic, the adversaries even included a dormant GitHub profile created years earlier, likely fabricated solely to reinforce credibility. Once the victim opens the shortcut file, it silently triggers a chain of commands that abuses a legitimate Windows binary to run embedded batch instructions in the background.
- The pseudo-polyglot file itself is engineered to confuse both human reviewers and automated scanners. Some tools read it as plain text; others recognize it as a PDF. A closer look shows malicious scripts placed before the PDF headers, enabling execution without raising suspicion. These scripts misuse trusted binaries to conceal command prompts, rename system files, and manipulate the lure so it appears harmless. They then retrieve, decode, and deploy a malicious DLL named MsCtfMonitor.dll into C:\ProgramData, where a copied version of ctfmon.exe loads it through DLL sideloading. This process ultimately launches the LOTUSHARVEST implant.
- Once active, LOTUSHARVEST operates as a stealthy information stealer equipped with multiple layers of anti-analysis safeguards. It checks for virtual environments, debugger presence, and even generates fake exceptions to confuse analysts and disrupt sandboxing. When running on a real machine, the implant collects browser-stored credentials, recently visited URLs, and local system identifiers such as the computer name and username. Using the WinINet API, it exfiltrates this information over HTTPS to attacker-controlled domains, many of them randomly generated subdomains hosted on services like Pipedream and RequestRepo.
- While attribution remains ongoing, the campaign's TTPs echo previous activity linked to likely Chinese threat groups that have historically used fake CVs, niche lure themes, and similar C2 infrastructure. However, the LOTUSHARVEST implant stands out from more familiar Chinese-linked tooling such as PlugX, calling for measured judgment. Operation Hanoi Thief underscores how threat actors continue to exploit everyday workflows like recruiting and resume screening to infiltrate high-value environments with quietly innovative techniques.

### Recommendations

- Treat Unexpected Resumes with Caution: If you receive a CV from an unknown sender, especially in ZIP format, pause before opening it. Verify the sender on LinkedIn or through official company channels. If anything feels off, flag it to your security team.
- Disable Risky File Types For HR and IT Teams: Block or restrict formats like .lnk, .bat, and .exe from reaching inboxes. Most HR teams don't need these file types, and removing them cuts off a major attack path used in this campaign.
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  Use a Safe, Isolated System for Reviewing Attachments: Encourage HR or recruitment teams to open resumes in a protected environment, like a sandbox or a virtual machine, so suspicious files cannot reach the main corporate network.
- Strengthen Browser and Credential Protections: Since LOTUSHARVEST steals browser credentials, encourage employees to avoid storing passwords in browsers. Move to a secure password manager and enable MFA wherever possible.
- 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**

TA0042 Resource Development	TA0001 Initial Access	TA0002 Execution	TA0004 Privilege Escalation
TA0005	TA0006	TA0007	TA0009
Defense Evasion	Credential Access	Discovery	Collection
TA0010 Exfiltration	TA0011 Command and Control	T1587  Develop Capabilities	<b>T1587.001</b> Malware
T1566	T1566.001 Spearphishing Attachment	T1204	T1204.002
Phishing		User Execution	Malicious File

T1218 System Binary Proxy Execution	T1036 Masquerading	T1036.007  Double File Extension	T1140  Deobfuscate/Decode Files or Information
T1574 Hijack Execution Flow	T1574.001 DLL	T1082 System Information Discovery	T1083 File and Directory Discovery
T1217 Browser Information Discovery	T1555 Credentials from Password Stores	T1555.003 Credentials from Web Browsers	T1005 Data from Local System
T1041 Exfiltration Over C2 Channel	T1071 Application Layer Protocol	T1071.001 Web Protocols	T1059 Command and Scripting Interpreter

#### **X** Indicators of Compromise (IOCs)

ТҮРЕ	VALUE
SHA256	1beb8fb1b6283dc7fffedcc2f058836d895d92b2fb2c37d982714af648994 fed, 77373ee9869b492de0db2462efd5d3eff910b227e53d238fae16ad01182 6388a, 693ea9f0837c9e0c0413da6198b6316a6ca6dfd9f4d3db71664d2270a65 bcf38, 48e18db10bf9fa0033affaed849f053bd20c59b32b71855d1cc72f613d0ca c4b

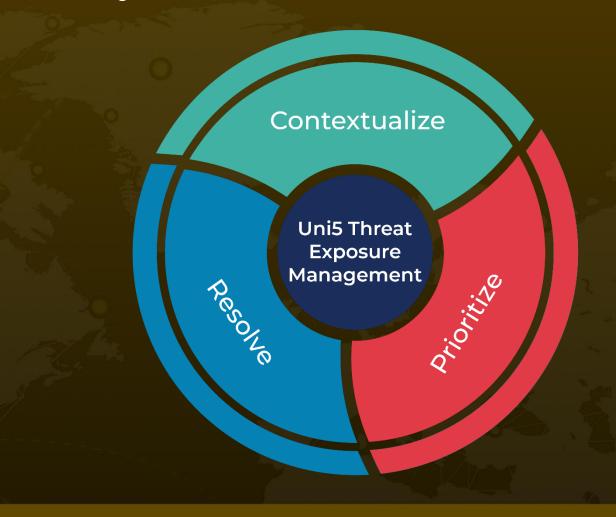
#### **References**

https://www.seqrite.com/blog/9479-2/

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