

HiveForce Labs

# THREAT ADVISORY

 **ATTACK REPORT**

## **InnoLoader Malware Stealth Mastery, Unique Instances per Download**

Date of Publication

June 28, 2024

Admiralty Code

A2

TA Number

TA2024249

# Summary

**Attack Began:** June 2024

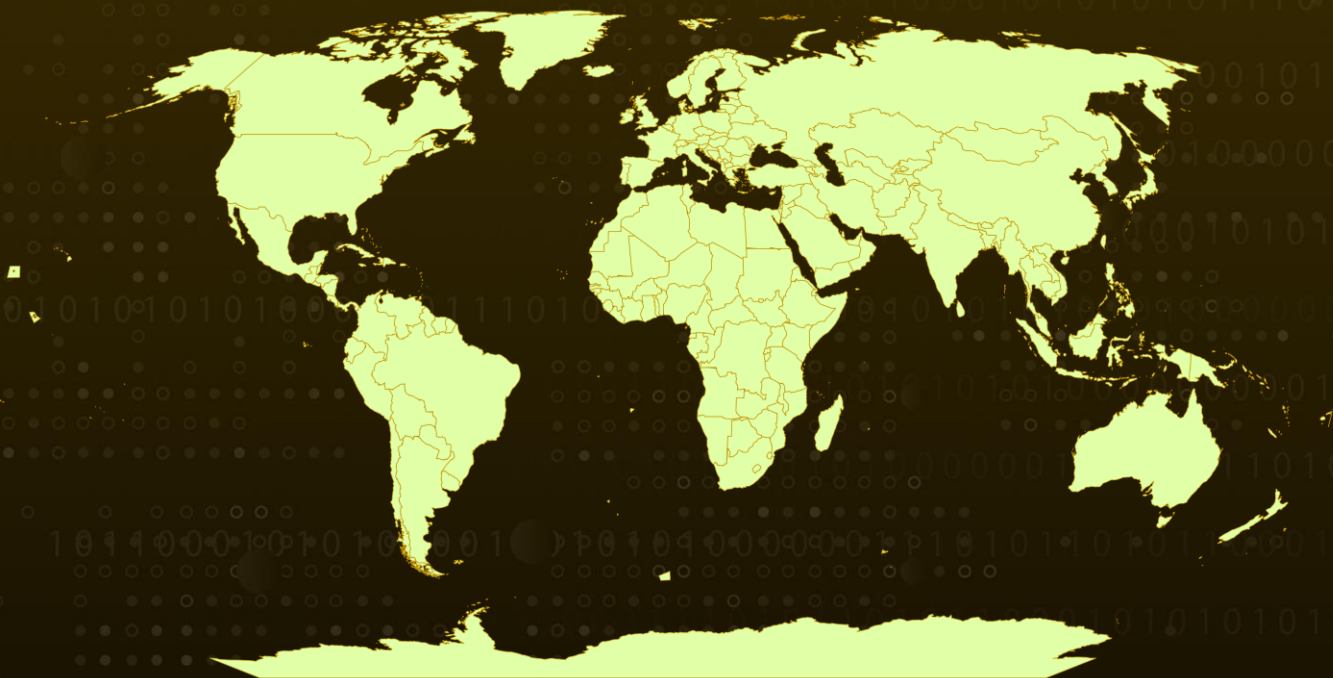
**Targeted Countries:** Worldwide

**Malware:** InnoLoader

**Affected Platform:** Windows

**Attack:** InnoLoader is a new unique malware that generates a distinct version with each download, complicating detection. It disguises itself as an installer, executing malicious actions and downloading additional payloads like StealC Infostealer and Socks5Systemz proxy malware. The malware adapts its behavior based on C2 server instructions to evade detection.

## Attack Regions



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# Attack Details

## #1

A new type of InnoSetup based malware named "InnoLoader," is unique as it creates a distinct version of itself with every download attempt. This technique makes it especially challenging for security solutions to detect and mitigate the threat. The malware is disguised as a legitimate installer and initiates its malicious activities when the user interacts with the installation prompts. Inno Setup is a free and popular tool for creating software installers specifically for Windows.

## #2

InnoLoader's primary function is to download and execute additional malicious payloads. Among these are the [StealC Infostealer](#), which is designed to harvest sensitive information, the [Socks5Systemz proxy](#) malware, which facilitates network-based attacks, and masquerades as a security browser plugin, and transforms into a commercial proxy resource and clicker. These payloads enable the attacker to perform a variety of malicious activities, from stealing data to controlling infected systems remotely.

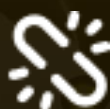
## #3

One of the most concerning aspects of InnoLoader is its ability to adapt its behavior based on instructions from its command-and-control (C2) server. This feature allows the malware to change its tactics to evade detection and analysis, making it a highly versatile and persistent threat. The dynamic nature of its operations means that it can continually evolve, posing ongoing challenges for cybersecurity professionals.

# Recommendations



**Monitoring and Detection:** Deploy advanced threat detection and monitoring tools capable of identifying and mitigating malware attacks in real-time. This includes behavior-based analytics, intrusion detection systems, and endpoint protection solutions.



**Regular Software Updates:** Keep all software, including operating systems and applications, updated with the latest patches to close vulnerabilities that malware can exploit.



**Network Segmentation:** Segment networks to limit the spread of malware infections. Restrict access to sensitive systems and data, and implement firewalls and access controls to prevent lateral movement by attackers.

## Potential **MITRE ATT&CK** TTPs

<b><u>TA0011</u></b> Command and Control	<b><u>TA0002</u></b> Execution	<b><u>TA0003</u></b> Persistence	<b><u>TA0010</u></b> Exfiltration
<b><u>TA0005</u></b> Defense Evasion	<b><u>TA0009</u></b> Collection	<b><u>TA0006</u></b> Credential Access	<b><u>TA0007</u></b> Discovery
<b><u>T1036</u></b> Masquerading	<b><u>T1204</u></b> User Execution	<b><u>T1204.002</u></b> Malicious File	<b><u>T1059.003</u></b> Windows Command Shell
<b><u>T1059</u></b> Command and Scripting Interpreter	<b><u>T1218</u></b> System Binary Proxy Execution	<b><u>T1218.007</u></b> Msiexec	<b><u>T1041</u></b> Exfiltration Over C2 Channel
<b><u>T1555</u></b> Credentials from Password Stores	<b><u>T1555.003</u></b> Credentials from Web Browsers	<b><u>T1082</u></b> System Information Discovery	<b><u>T1027</u></b> Obfuscated Files or Information
<b><u>T1547.009</u></b> Shortcut Modification	<b><u>T1547</u></b> Boot or Logon Autostart Execution	<b><u>T1105</u></b> Ingress Tool Transfer	

## Indicators of Compromise (IOCs)

TYPE	VALUE
<b>MD5</b>	b4c9d60f0e2c57c34ec6cb4a564c7ee1, 2e85211a7ab36e6d7e2a4a4b5d88b938, 6b5730e49a37d6ffee273790449ac037, 0283c9517cfb46faec1735262bd58654, fa24733f5a6a6f44d0e65d7d98b84aa6, 95007206c6b2407fb69748ef7c93612 , 1b3ad155c454d3351cfc107344bc4ad5, f8bb5272ce5d5b2e767f85e788dd4c5c , 0738205d5a1472662b94561e004d9803, ff640a60d25e4bcf1ef290c3d1893a17
<b>Hostname</b>	d9500682396017175017969210108a04a635094d7af3f018356690047bce5.aoa.aent78[.]sbs, e38ee82150cc00a8627814c6.bag.sack54[.]net

TYPE	VALUE
<b>URL</b>	hxxp://monkeyagreement[.]fun/coo.php?paw=883174&spot=1&a=2857&on=444&o=1678, hxxp://240601155506901.try.kyhd08[.]buzz/f/fvgbm0601901.txt, hxxp://monkeyagreement[.]fun/coo.php?paw=762694&spot=2&a=2857&on=458&o=1688, hxxps://cdn-edge-node[.]com/online_security_mkl.exe, hxxp://monkeyagreement[.]fun/coo.php?paw=401610&spot=3&a=2857&on=420&o=1662, hxxp://monkeyagreement[.]fun/coo.php?paw=895836&spot=4&a=2857&on=418&o=1660, hxxps://song.oaksfoxes[.]ltd/tid/202.exe, hxxp://monkeyagreement[.]fun/coo.php?paw=956684&spot=5&a=2857&on=460&o=1690, hxxp://monkeyagreement[.]fun/coo.php?paw=787557&spot=6&a=2857&on=244&o=331, hxxp://kapetownlink[.]com/installer.exe, hxxp://93.123.39[.]135/129edec4272dc2c8.php,
<b>Domains</b>	valuescent[.]website, caretouch[.]hair, whipunit[.]hair, eyesnose[.]hair, nightauthority[.]xyz, cattlebusiness[.]icu, monkeyagreement[.]fun, laughvein[.]hair, brotherpopcorn[.]website, selectionword[.]xyz

## References

<https://asec.ahnlab.com/en/67502/>

<https://www.hivepro.com/a-new-info-stealing-malware-named-stealc-targeting-cryptocurrency-wallets/>

<https://www.hivepro.com/threat-advisory/socks5systemz-proxy-botnet-infects-10000-systems/>

# 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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