

HiveForce Labs

# THREAT ADVISORY

 **ATTACK REPORT**

## **New Banshee Stealer Threatens macOS Systems, Stealing Sensitive Data**

Date of Publication

August 19, 2024

Admiralty Code

A1

TA Number

TA2024316

# Summary

**Attack Discovered:** August 2024

**Attack Region:** Worldwide

**Malware:** BANSHEE Stealer

**Attack:** A new macOS malware named "BANSHEE Stealer" has been discovered, specifically targeting Apple macOS systems. This sophisticated malware is being sold on the cybercrime underground for a hefty price of \$3,000 per month and is compatible with both x86\_64 and ARM64 architectures. BANSHEE Stealer poses a significant threat to macOS users, as it targets crucial system information, browser data, and cryptocurrency wallets.

## 🗡️ Attack Regions



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# Attack Details

## #1

In August 2024, a newly identified macOS malware dubbed "BANSHEE Stealer" emerged, likely the handiwork of Russian cybercriminals. This sophisticated malware is designed to siphon a broad spectrum of sensitive information, including system details, browser data, and cryptocurrency wallets. Notably, it was developed within an underground forum and is compatible with both macOS x86\_64 and ARM64 architectures. With a steep monthly price tag of \$3,000, BANSHEE Stealer highlights the increasing focus of cybercriminals on macOS platforms.

## #2

BANSHEE Stealer employs basic evasion techniques to avoid detection. It can detect debugging attempts via the ``sysctl`` API and recognize virtual machines using the `system_profiler` command output. Additionally, the malware checks the system's preferred language through the API and avoids infecting machines where Russian is set as the primary language.

## #3

One of its deceptive tactics includes presenting a fake Osascript password prompt, which tricks users into entering their password under the guise of a system update. The entered password is then verified using the ``dscl`` command and stored in a file. These credentials can subsequently be used to decrypt the system's keychain, granting attackers access to stored passwords.

## #4

BANSHEE Stealer meticulously gathers system information and converts it into a JSON object. Further it copies the keychain file to a directory named ``/Passwords``. The malware also executes AppleScripts, which are written to a file in ``/tmp/tempAppleScript``. One of the initial scripts mutes the system sound before beginning the collection of files, including Safari cookies, the Notes database, and files with specific extensions from the Desktop and Documents folders.

## #5

It targets multiple web browsers and cryptocurrency wallets, including Safari, Google Chrome, Mozilla Firefox, Brave, Microsoft Edge, Vivaldi, Yandex, Opera, OperaGX, Exodus, Electrum, Coinomi, Guarda, Wasabi Wallet, Atomic, and Ledger. The collected data is then compiled, compressed, encoded with XOR, and transmitted via a POST request using the built-in `cURL` command.

## #6

Despite its potential for harm, BANSHEE Stealer lacks advanced obfuscation techniques, and the inclusion of debugging information makes it easier for analysts to dissect its functions. Nonetheless, its specific targeting of macOS systems and extensive data collection capabilities render it a serious threat to users on this platform.

# Recommendations



**Robust Endpoint Security:** Deploy advanced endpoint security solutions that include real-time malware detection and behavioral analysis. Regularly update antivirus and anti-malware software to ensure the latest threat definitions are in place. A multi-layered approach to endpoint security can prevent malwares from infiltrating the network through vulnerable endpoints and can detect and block malicious activities effectively.



**Implement Behavioral Analysis:** Deploy advanced security solutions that employ behavioral analysis and anomaly detection to identify unusual patterns of activity indicative of malware presence. This proactive approach can help catch sophisticated threats before they fully compromise your systems.

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

|   |   |  |   |
|---|---|--|---|
| <b><u>TA0043</u></b><br>Reconnaissance                | <b><u>TA0002</u></b><br>Execution                   | <b><u>TA0006</u></b><br>Credential Access                | <b><u>TA0007</u></b><br>Discovery                       |
| <b><u>TA0009</u></b><br>Collection                    | <b><u>TA0010</u></b><br>Exfiltration                | <b><u>T1046</u></b><br>Network Service Discovery         | <b><u>T1560</u></b><br>Archive Collected Data           |
| <b><u>T1560.001</u></b><br>Archive via Utility        | <b><u>T1518</u></b><br>Software Discovery           | <b><u>T1059</u></b><br>Command and Scripting Interpreter | <b><u>T1059.002</u></b><br>AppleScript                  |
| <b><u>T1119</u></b><br>Automated Collection           | <b><u>T1082</u></b><br>System Information Discovery | <b><u>T1217</u></b><br>Browser Information Discovery     | <b><u>T1567</u></b><br>Exfiltration Over Web Service    |
| <b><u>T1592</u></b><br>Gather Victim Host Information | <b><u>T1592.001</u></b><br>Hardware                 | <b><u>T1592.002</u></b><br>Software                      | <b><u>T1497</u></b><br>Virtualization/Sandbox Evasion   |
| <b><u>T1083</u></b><br>File and Directory Discovery   | <b><u>T1056</u></b><br>Input Capture                | <b><u>T1056.002</u></b><br>GUI Input Capture             | <b><u>T1555</u></b><br>Credentials from Password Stores |

|   |  |  |  |
|---|--|--|--|
| <b><u>T1555.001</u></b><br>Keychain             | <b><u>T1555.003</u></b><br>Credentials from Web Browsers | <b><u>T1614</u></b><br>System Location Discovery | <b><u>T1614.001</u></b><br>System Language Discovery |
| <b><u>T1539</u></b><br>Steal Web Session Cookie | <b><u>T1135</u></b><br>Network Share Discovery           | <b><u>T1005</u></b><br>Data from Local System    | <b><u>T1074</u></b><br>Data Staged                   |
| <b><u>T1074.001</u></b><br>Local Data Staging   |  |  |  |

## ✂ Indicators of Compromise (IOCs)

| TYPE          | VALUE  |
|---------------|--|
| <b>IPv4</b>   | 45[.]142[.]122[.]92  |
| <b>SHA256</b> | 11aa6eeca2547fcf807129787bec0d576de1a29b56945c5a8fb16ed8bf68f782 |

## ✂ References

<https://www.elastic.co/security-labs/beyond-the-wail>

# 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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