

HiveForce Labs

# THREAT ADVISORY

 **ATTACK REPORT**

## **GlassWorm's Quiet Infiltration of Mac Systems**

Date of Publication

January 2, 2026

Last Update Date

March 19, 2026

Admiralty Code

A1

TA Number

TA2026001

# Summary

**First Seen:** October 17, 2025

**Malware:** GlassWorm

**Campaign:** ForceMemo

**Affected Platform:** macOS

**Targeted Region:** Middle East

**Targeted Industry:** Government

**Attack:** GlassWorm is a stealthy malware campaign targeting macOS by exploiting malicious VS Code extensions that conceal harmful code using invisible Unicode characters. Disguised as legitimate tools, these extensions deliver trojanized cryptocurrency wallet software, quietly stealing developer credentials and digital assets.

## 🔪 Attack Timeline



# 🔪 Attack Regions



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## Attack Details

### #1

GlassWorm is a self-propagating malware campaign that weaponizes the VS Code extension ecosystem. It conceals malicious logic using invisible Unicode characters and distributes trojanized extensions through VSCode and OpenVSX, with a current focus on macOS developers. Once installed, these extensions masquerade as legitimate tools while covertly deploying compromised cryptocurrency wallet applications.

### #2

After a deliberate 15-minute delay designed to evade sandbox analysis, the malware activates. An AES-256-CBC-encrypted payload embedded in compiled JavaScript initiates credential theft targeting GitHub, npm, and OpenVSX accounts, alongside wallet data harvested from multiple extensions. Persistence is established through LaunchAgents and AppleScript, while remote control is enabled via VNC and a SOCKS proxy.

### #3

Command-and-control traffic is routed through the Solana blockchain. GlassWorm actively searches for hardware wallet applications such as Ledger Live and Trezor Suite, replacing them with trojanized counterparts. This allows attackers to falsify receiving addresses, alter transaction data, capture seed phrases, and intercept device communications, effectively undermining hardware wallet security despite their air-gapped design.

# Recommendations



**Immediate Extension Removal:** Identify and uninstall all suspected malicious extensions without delay. Treat any unverified or sideloaded extension as potentially compromised until proven otherwise.



**Account and Credential Reset:** Rotate all developer credentials exposed on affected machines, including GitHub access tokens, npm credentials, SSH keys, and any cached authentication material to prevent downstream compromise.



**Filesystem Monitoring Controls:** Implement integrity monitoring on temporary and staging directories commonly abused by malware to detect unauthorized file creation or payload execution.



**Endpoint Detection Hardening:** Enhance detection capabilities to flag abnormal AppleScript activity, unauthorized access to Keychain databases, and development tools initiating unexpected network connections, particularly to blockchain-based endpoints.



## Potential MITRE ATT&CK TTPs

<b>TA0001</b> Initial Access	<b>TA0002</b> Execution	<b>TA0003</b> Persistence	<b>TA0005</b> Defense Evasion
<b>TA0006</b> Credential Access	<b>TA0007</b> Discovery	<b>TA0009</b> Collection	<b>TA0011</b> Command and Control
<b>TA0010</b> Exfiltration	<b>TA0040</b> Impact	<b>T1195</b> Supply Chain Compromise	<b>T1059</b> Command and Scripting Interpreter
<b>T1547</b> Boot or Logon Autostart Execution	<b>T1027</b> Obfuscated Files or Information	<b>T1497</b> Virtualization/Sandbox Evasion	<b>T1555</b> Credentials from Password Stores

<b>T1539</b> Steal Web Session Cookie	<b>T1552</b> Unsecured Credentials	<b>T1119</b> Automated Collection	<b>T1102</b> Web Service
<b>T1071</b> Application Layer Protocol	<b>T1041</b> Exfiltration Over C2 Channel	<b>T1565</b> Data Manipulation	<b>T1195.002</b> Compromise Software Supply Chain
<b>T1059.002</b> AppleScript	<b>T1059.007</b> JavaScript	<b>T1027.013</b> Encrypted/Encoded File	<b>T1497.003</b> Time-Based Evasion
<b>T1555.001</b> Keychain	<b>T1552.001</b> Credentials In Files	<b>T1102.002</b> Bidirectional Communication	<b>T1071.001</b> Web Protocols
<b>T1565.001</b> Stored Data Manipulation	<b>T1546</b> Event Triggered Execution	<b>T1614</b> System Location Discovery	<b>T1620</b> Reflective Code Loading

## ✂ Indicators of Compromise (IOCs)

TYPE	VALUE
<b>Extension ID</b>	studio-velte-distributor.pro-svelte-extension, cudra-production.vsce-prettier-pro, Puccin-development.full-access-catppuccin-pro-extension, codejoy.codejoy-vscode-extension@1.8.3, codejoy.codejoy-vscode-extension@1.8.4, l-igh-t.vscode-theme-seti-folder@1.2.3, kleinesfilmroellchen.serenity-dsl-syntaxhighlight@0.3.2, JScearcy.rust-doc-viewer@4.2.1, SIRILMP.dark-theme-sm@3.11.4, CodeInKlingon.git-worktree-menu@1.0.9, CodeInKlingon.git-worktree-menu@1.0.91, ginfuru.better-nunjucks@0.3.2, ellacrity.recoil@0.7.4, grrrck.positron-plus-1-e@0.0.71, jeronimoekerd.t.color-picker-universal@2.8.91, srcery.colors.srcery-colors@0.3.9, sissel.shopify-liquid@4.0.1, TretinV3.forts-api-extention@0.3.1, cline-ai-main.cline-ai-agent@3.1.3

TYPE	VALUE
<b>Domains</b>	api[.]mainnet-beta[.]solana[.]com, solana-mainnet[.]gateway[.]tatum[.]io, go[.]getblock[.]us, solana-rpc[.]publicnode[.]com, api[.]blockeden[.]xyz, solana[.]drpc[.]org, solana[.]leorpc[.]com, solana[.]api[.]onfinality[.]io, solana[.]api[.]pocket[.]network
<b>Solana C2 wallet</b>	BjVeAjPrSKFiingBn4vZvghsGj9KCE8AJVtbc9S8o8SC, 28PKnu7RzizxBzFPoLp69HLXp9bJL3JFtT2s5QzHsEA2
<b>IPv4</b>	45[.]32[.]151[.]157, 45[.]32[.]150[.]251, 217[.]69[.]11[.]60, 45[.]32[.]150[.]97, 217[.]69[.]11[.]57, 217[.]69[.]11[.]99, 217[.]69[.]0[.]159, 45[.]76[.]44[.]240
<b>URLs</b>	hxxps[:]//calendar[.]app[.]google/M2ZCvM8ULL56PD1d6, hxxp[:]//217[.]69[.]3[.]218/qQD%2FJoi3WCWSk8ggGHiTdg%3D%3D, hxxp[:]//217[.]69[.]3[.]218/get_arhive_npm/, hxxp[:]//217[.]69[.]3[.]218/get_zombi_payload/qQD%2FJoi3WCWSk8g gGHiTdg%3D%3D

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# 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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