Detecting Privilege Escalation Zero Day (CVE-2021-41379)

November 24th, 2021 - 3 min read

by Bhabesh Raj Rai, Associate Security Analytics Engineer

On November 22, 2021, Security researcher Abdelhamid Naceri dropped PoC for a privilege escalation vulnerability (CVE-2021-41379) in the Windows installer that Microsoft had patched in November's Patch Tuesday. The PoC works on all supported versions of Windows.

The specific flaw exists within the Windows Installer service. An attacker can abuse the Windows Installer service to delete a file or directory by creating a junction. Instead of providing the bypass, Naceri provided a more powerful variant of the vulnerability that allows an unprivileged user to run the command prompt as SYSTEM.

Naceri explained that his PoC would bypass any group policies configured to prevent normal users from performing MSI installations.

Detecting Exploitation in LogPoint

A naive detection approach for exploitation of this zero-day is via Application installation logs. Look out for the application name "test pkg" used in the PoC.

```
norm_id=WinServer label=Application label=Install application="test pkg"
```

Threat actors car

this configuratio

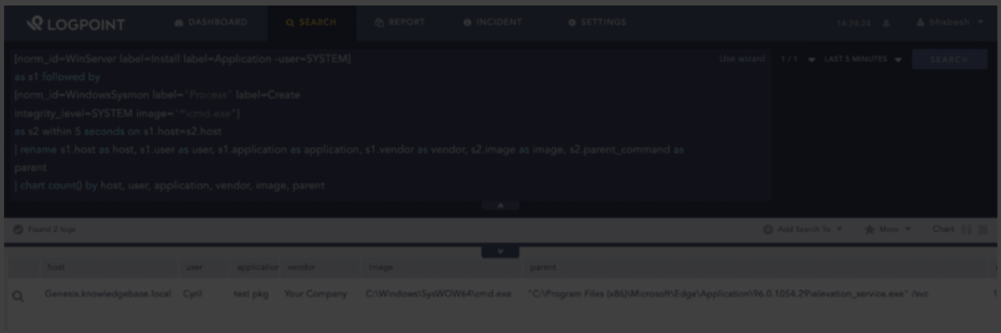
Elevation Servic

```
norm_id=Win
integrity_l
parent_comm
image="C:\W
```

Finally, we prese

prompt precede

```
[norm_id=Wi
as s1 follo
[norm_id=Wi
integrity_l
as s2 withi
| rename s1.host as host, s1.user as user, s1.application as application,
s1.vendor as vendor, s2.image as image, s2.parent_command as parent
| chart count() by host, user, application, vendor, image, parent
```



```
[norm_id=WinServer label=Install label=Application -user=SYSTEM]
as s1 followed by
[norm_id=WindowsSysmon label="Process" label=Create
integrity_level=SYSTEM image="*\cmd.exe"]
as s2 within 5 seconds on s1.host=s2.host
| rename s1.host as host, s1.user as user, s1.application as application, s1.vendor as vendor, s2.image as image, s2.parent_command as
parent
| chart count() by host, user, application, vendor, image, parent
```

host	user	application	vendor	image	parent
Genesis.knowledgebase.local	Cyril	test pkg	Your Company	C:\Windows\SysWOW64\cmd.exe	"C:\Program Files (x86)\Microsoft\Edge\Application\96.0.1054.29\elevation_service.exe" /svc

Monitor for exploitation attempt

According to Naceri, the best workaround available is to wait for Microsoft's patch. In the meantime, we recommend that enterprise defenders monitor for any exploitation attempt of this critical local privilege escalation (LPE) zero-day. As the PoC is public, we can expect ransomware and less sophisticated threat actors to add this in their arsenal to decrease their time to objective metric

Discover More About Logpoint

Book a demo Customer cases Customer reviews

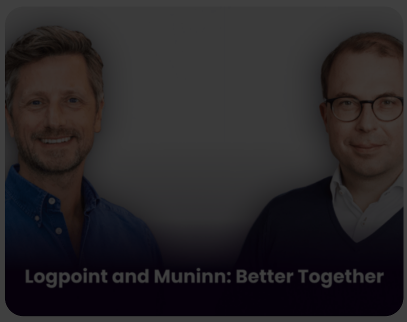
Related Posts

Uncover more resources with Logpoint's latest release

October 30th, 2024

Latrodectus: The Wrath of Black Widow

October 22nd, 2024



Logpoint and Muninn: Better Together

October 1st, 2024

LOGPOINT

Detect. Manage. Respond.

Products

- SIEM
- Automation
- Case Management
- Behavior Analytics
- Cyber Defense Platform

Why Logpoint?

- Product Recognition
- Customer Cases
- EAL3+ Certificate
- Newsletter

Company

- About us
- Management
- Careers at Logpoint
- Media Room
- Logpoint in the media

Support

- Cyber Library
- Service Desk
- Documentation
- Community
- Contact

Contact

info@logpoint.com

+45 7060 6100

Cookiebot by Usercentrics

Consent | Details | About

This website uses cookies

We use cookies to personalise content and ads, to provide social media features and to analyse our traffic. We also share information about your use of our site with our social media, advertising and analytics partners who may combine it with other information that you've provided to them or that they've collected from your use of their services.

Necessary	Preferences	Statistics	Marketing