Campfire-1,evtx \ pf(EvtxECmd \ Timeline Explorer \ PECmd)

Sherlock Scenario

In this Sherlock, you will familiarize yourself with Sysmon logs and various useful EventIDs for identifying and analyzing malicious activities on a Windows system. Palo Alto's Unit42 recently conducted research on an UltraVNC campaign, wherein attackers utilized a backdoored version of UltraVNC to maintain access to systems. This lab is inspired by that campaign and guides participants through the initial access stage of the campaign.

* * *

About Campfire-1

In this Sherlock activity, players will examine artefacts and logs from a Domain Controller, as well as endpoint artefacts from where Kerberoast attack activity originated. We will explore what to look for to properly identify Kerberoasting attack activity and how to avoid false positives given the complexity of Active Directory.

因win11直下載失敗,改由linux下載並轉到win11

指令: wget.exe -r -np http://192.168.64.2:8000/Triage/

文件:眾多pf檔、2個evtx)

使用工具:EvtxECmd、Timeline Explorer、PECmd

工具參考:

- https://ericzimmerman.github.io/#!index.md
- https://github.com/EricZimmerman/evtx
- https://github.com/EricZimmerman/PECmd

指令:

```
- EvtxECmd.exe -f "C:\Users\TS0\Downloads\192.168.64.2+8000\Triage\Domain
Controller\SECURITY-DC.evtx" --csv "C:\Users\TS0\Downloads\log" --csvf
SECURITY-DC-OutputFile.csv
```

- EvtxECmd.exe -f

"C:\Users\TSO\Downloads\192.168.64.2+8000\Triage\Workstation\PowershellOperational.evtx" --csv "C:\Users\TSO\Downloads\log" --csvf PowershellOperational-OutputFile.csv

* * *

PECmd.exe -d

```
"C:\Users\TS0\Downloads\192.168.64.2+8000\Triage\Workstation\2024-05-
21T033012_triage_asset\C\Windows\prefetch" --csv
"C:\Users\TS0\Downloads\log" --csvf foo.csv --json
C:\Users\TS0\Downloads\log\json
```

Task 1

Analyzing Domain Controller Security Logs, can you confirm the date & time when the kerberoasting activity occurred?

我看kerber的event id = 4769

Payload Data2 Payload Data			
2024-05-21 03:05:54 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:05:54 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:05:54 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:05:54 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: krbtgt 2024-05-21 03:05:54 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:06:15 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:06:15 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:12:05 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL ServiceName: FORELA-WKSTN02 2024-05-21 03:12:05 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:13:02 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL ServiceName: DC01\$ 2024-05-21 03:13:02 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL ServiceName: DC01\$	Time Created	▲ Payload Data1	Payload Data2
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2024-05-21 03:13:02 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL ServiceName: DC01\$	2024-05-21 03:12:0	:05 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL	ServiceName: FORELA-WKSTN001\$
	2024-05-21 03:12:0	:05 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL	ServiceName: DC01\$
2024-05-21 03:15:12 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$	2024-05-21 03:13:6	:02 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL	ServiceName: DC01\$
	2024-05-21 03:15:1	:12 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL	ServiceName: DC01\$
2024-05-21 03:18:09 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL ServiceName: MSSQLService	2024-05-21 03:18:0	:09 Target: FORELA.LOCAL\alonzo.spire@FORELA.LOCAL	ServiceName: MSSQLService
2024-05-21 03:18:51 Target: FORELA.LOCAL\Administrator@FORELA.LOCAL ServiceName: DC01\$	2024-05-21 03:18:5	:51 Target: FORELA.LOCAL\Administrator@FORELA.LOCAL	ServiceName: DC01\$
2024-05-21 03:20:24 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL ServiceName: DC01\$	2024-05-21 03:20:2	:24 Target: FORELA.LOCAL\DC01\$@FORELA.LOCAL	ServiceName: DC01\$

2024-05-21 03:18:09

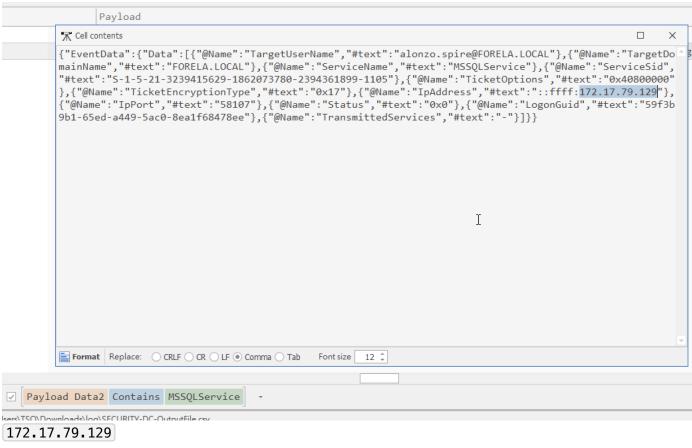
Task 2

What is the Service Name that was targeted?

同上: MSSQLService

Task 3

It is really important to identify the Workstation from which this activity occurred. What is the IP Address of the workstation?

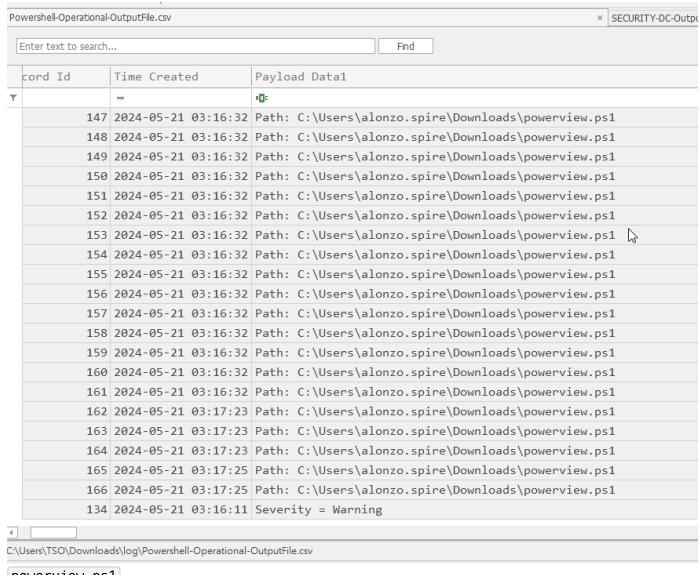


Kerberoastable accounts in the network?

Task 4

Now that we have identified the workstation, a triage including PowerShell logs and Prefetch files are provided to you for some deeper insights so we can understand how this activity occurred on the endpoint. What is the name of the file used to Enumerate Active directory objects and possibly find

更換至 Powershell-Operational.evtx



powerview.ps1

Task 5

When was this script executed?

同上,第一筆紀錄:

2024-05-21 03:16:32

Task 6

What is the full path of the tool used to perform the actual kerberoasting attack?

這裡要看pf,找USER執行檔案的

a column header here to group by that column			
Run Time	Executable Name		
=	n⊡r USER		
2024-05-21 03:13:01	\VOLUME{01d951602330db46-52233816}\WINDOWS\SYSTEM32\OOBE\USEROOE		
2024-05-21 03:18:08	\VOLUME{01d951602330db46-52233816}\USERS\ALONZO.SPIRE\DOWNLOADS\		

B



Task 7

When was the tool executed to dump credentials?

同上

2024-05-21 03:18:08