



GENERAL INFORMATION

Mission Name

ForensicsTest

History Background

In the previous mission, ETHAN is arrested by Claire and Tarain. Claire and Ethan are going to work together to catch the SHAX hackers and both must be tested on their skills.

Technical High-Level Overview

Player must put in practice his knowledge about investigation event logs. The goal of this mission is to identify which event record id was deleted on Phaldra's Computer.

Short Mission Description

You're going to be tested to ensure your forensic knowledge is up to date. Please identify which event id record was deleted. Keep in mind, your goal, implies to analyse every event log file.

Mission Description

Player must put in practice his knowledge about locating tools to delete Windows events. You're going to be tested to ensure that your knowledge is up to date. Please identify which event id record was deleted. Keep in mind, your goal, implies to analyse every event log file on Phaldra's computer in 2049 when Phaldra tried to hide his footprints.

Location

SYLVARCON | EBAND DEPARTMENT - RECON HQ



Tools

- FTK Imager
- Event Log Explorer - <https://eventlogxp.com/>

Questions

Which event id was deleted?

- 7045

Which tool was used to delete events?

- DeleteRecordOfFileEx.exe

Hints

1. Locate any tool to deleted eventlogs on Desktop folder.
2. System.evtx was tampered.
3. Compare System.evtx located on Phaldras Desktop and System.evtx on legit folder

Write Up

First of all, player should mount evidence provided to extract event logs, using FTK imager:

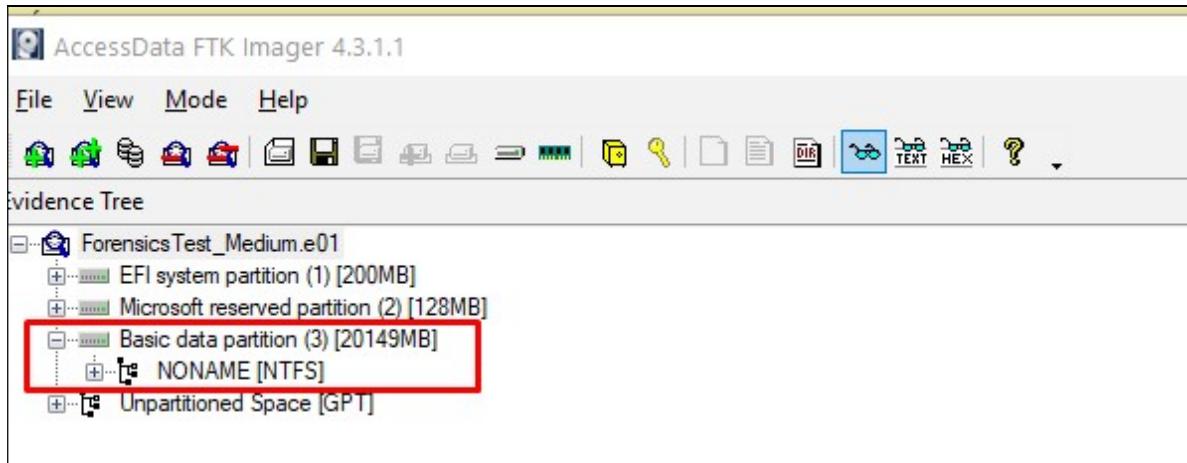


Figure 1

Later, player must extract all event logs located at: C:\Windows\System32\winevt\Logs:

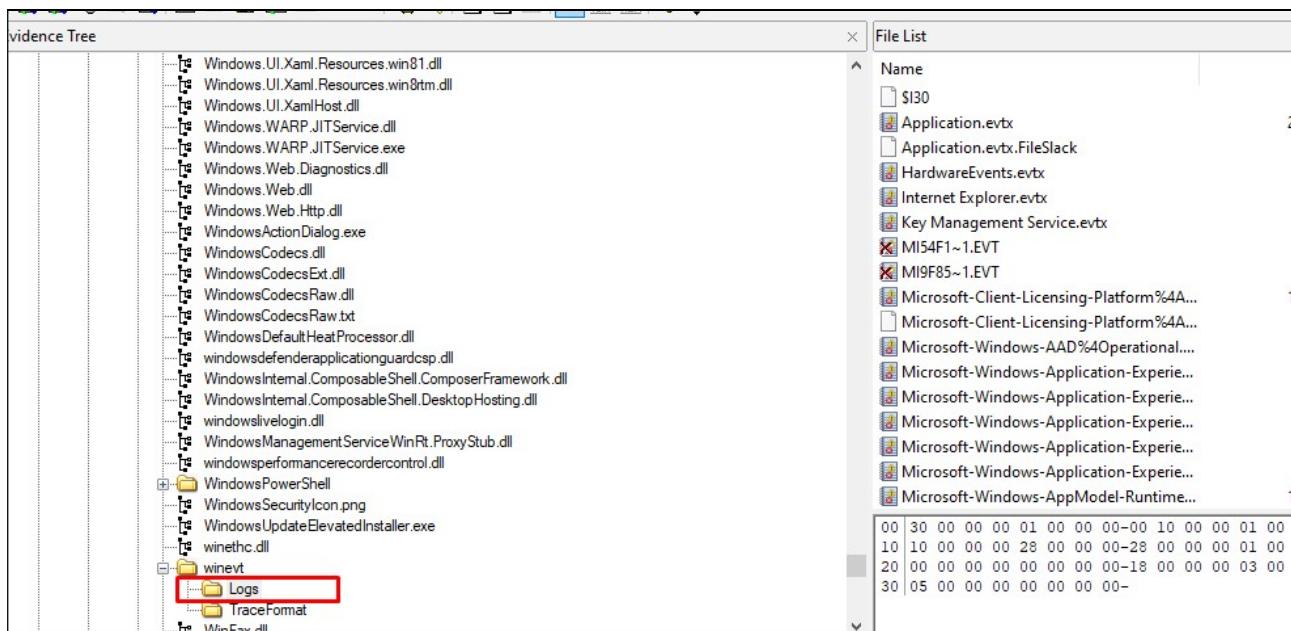


Figure 2

Player must analyse all events log to identify which event log record id was deleted. The clue is located on several folders on Phalda's Desktop:

| Name | Size | Type | Date Modified |
|--|------|-------------------|---------------------|
| Eventlogedit-evtx--Evolution-master-v1.1 | 1 | Directory | 14/04/2049 15:34:44 |
| salida | 1 | Directory | 03/05/2049 9:06:37 |
| \$I30 | 4 | NTFS Index All... | 03/05/2049 9:04:23 |
| desktop.ini | 1 | Regular File | 14/04/2021 14:34:59 |
| Eventlogedit-evtx--Evolution-master-v1.... | 921 | Regular File | 28/04/2021 13:44:39 |
| Eventlogedit-evtx--Evolution-master-v1.... | 4 | File Slack | |
| NEWFOL~1 | | \$I30 INDX Entry | |

Figure 3

The first clue would be to identify this folder, it seems to be, binaries to deleted event logs:

| Name | Size | Type |
|--------------------------------------|------|-------------------|
| DeleteRecord-EvtExportLog.exe | 123 | Regular File |
| DeleteRecordbyGetHandle.exe | 153 | Regular File |
| DeleteRecordbyGetHandleEx.exe | 141 | Regular File |
| DeleteRecordbyTerminateProcess.exe | 174 | Regular File |
| DeleteRecordbyTerminateProcessEx.exe | 129 | Regular File |
| DeleteRecordoffile.exe | 131 | Regular File |
| DeleteRecordoffileEx.exe | 123 | Regular File |
| Dll-EvtExportLog.dll | 112 | Regular File |
| Dll-rewriting.dll | 117 | Regular File |
| Loader-EvtExportLog.exe | 150 | Regular File |
| Loader-rewriting.exe | 136 | Regular File |
| README.md | 6 | Regular File |
| SuspendorResumeTid.exe | 118 | Regular File |
| SuspendorResumeTidEx.exe | 119 | Regular File |
| \$I30 | 8 | NTFS Index All... |

Figure 4

At this point, player might consider looking at the security events to identify de execution of this binaries or prefetch files. For this challenge, security events (Security.evtx) were deleted, so the last evidence would be to check prefetch:

| | | | |
|--------------------------------------|----|--------------|---------------------|
| CONTROL.EAL-0LAJ465A.pf | 11 | Regular File | 14/04/2049 15:39:10 |
| DEFrag.EXE-3D9E8D72.pf | 6 | Regular File | 14/04/2049 15:30:50 |
| DEFrag.EXE-3D9E8D72.pf.FileSlack | 3 | File Slack | |
| DELETERECORDOFFILEEX.EXE-A4A306CE.pf | 3 | Regular File | 03/05/2049 9:10:22 |
| DLLHOST.EXE-09954371.pf | 10 | Regular File | 03/05/2049 9:12:47 |
| DLLHOST.EXE-15CDDA9C.pf | 16 | Regular File | 03/05/2049 9:10:11 |
| DLLHOST.EXE-4427C062.pf | 6 | Regular File | 03/05/2049 9:02:33 |

Figure 5

It's a shame, Prefetch doesn't show which command was launched. Other clue to investigate would be on Phalda's Desktop:

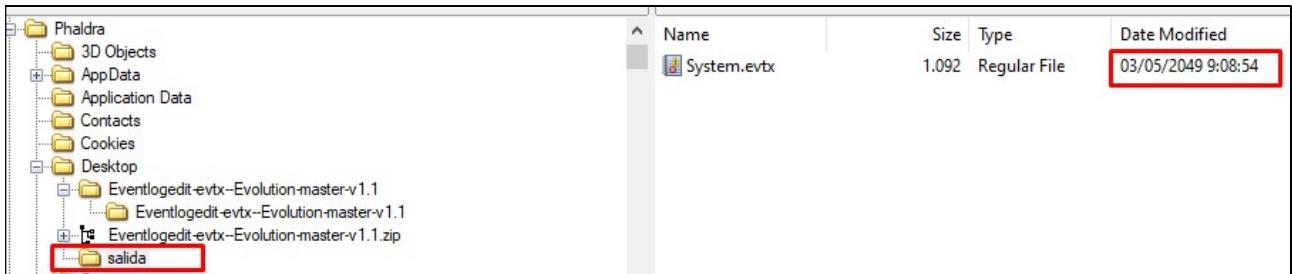


Figure 6

Date Modified of Security.evtx is close to Prefetch file, speaking in terms of dates. At this point, player having identified this clue, their goal would be analyse System.evtx on Phalda's Desktop and Security.evtx on the legit folder.

Legit Security Evtx filtered by 7045 event id:

| Type | Date | Time | Event | Source | Category |
|-------------|------------|----------|-------|-------------------------|----------|
| Information | 14/04/2049 | 17:54:03 | 7045 | Service Control Manager | None |
| Information | 14/04/2021 | 17:15:39 | 7045 | Service Control Manager | None |
| Information | 14/04/2021 | 17:15:25 | 7045 | Service Control Manager | None |
| Information | 14/04/2021 | 17:15:25 | 7045 | Service Control Manager | None |
| Information | 06/04/2021 | 21:03:27 | 7045 | Service Control Manager | None |
| Information | 06/04/2021 | 21:03:27 | 7045 | Service Control Manager | None |
| Information | 06/04/2021 | 20:04:00 | 7045 | Service Control Manager | None |
| Information | 06/04/2021 | 17:55:34 | 7045 | Service Control Manager | None |
| Information | 06/04/2021 | 17:55:30 | 7045 | Service Control Manager | None |
| Information | 06/04/2021 | 17:55:29 | 7045 | Service Control Manager | None |

Figure 7

Phaldra Security Evtx filtered by event id 7045:

| Type | Date | Time | Event | Source | Category | User | Computer |
|-----------------|------------|----------|-------|-------------------------|----------|--|-----------------|
| (i) Information | 03/05/2049 | 11:02:54 | 7045 | Service Control Manager | None | \\$-1-5-21-727859889-851745308-1404830963-1000 | DESKTOP-B7AUQEA |
| (i) Information | 14/04/2049 | 17:54:03 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 14/04/2021 | 17:15:39 | 7045 | Service Control Manager | None | \\$-1-5-21-727859889-851745308-1404830963-1000 | DESKTOP-B7AUQEA |
| (i) Information | 14/04/2021 | 17:15:25 | 7045 | Service Control Manager | None | \\$-1-5-21-727859889-851745308-1404830963-1000 | DESKTOP-B7AUQEA |
| (i) Information | 14/04/2021 | 17:15:25 | 7045 | Service Control Manager | None | \\$-1-5-21-727859889-851745308-1404830963-1000 | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 21:03:27 | 7045 | Service Control Manager | None | \\$-1-5-21-727859889-851745308-1404830963-1000 | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 21:03:27 | 7045 | Service Control Manager | None | \\$-1-5-21-727859889-851745308-1404830963-1000 | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 20:04:00 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:34 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:30 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:29 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:29 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:29 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:29 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:23 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |
| (i) Information | 06/04/2021 | 17:55:23 | 7045 | Service Control Manager | None | \SYSTEM | DESKTOP-B7AUQEA |

Figure 8

Phaldra deleted a event record id, in this case, an event id 7045:

Standard XML

| | | | |
|--------------|---|-----------------------------|-------------------------------|
| Date: | 03/05/2049 | Source: | Service Control Manager |
| Time: | 11:02:54 | Category: | None |
| Type: | Information | Event ID: | 7045 |
| User: | \\$-1-5-21-727859889-851745308-1404830963-1000 | | |
| Computer: | DESKTOP-B7AUQEA | | |
| Description: | <p>Se instaló un servicio en el sistema.</p> <p>Nombre del servicio: PSEXESVC Nombre del archivo del servicio: %SystemRoot%\PSEXESVC.exe Tipo de servicio: user mode service Tipo de inicio de servicio: demand start Cuenta de servicio: LocalSystem</p> | | |
| Data: | <input checked="" type="radio"/> Bytes | <input type="radio"/> Words | <input type="radio"/> D-Words |

Figure 9

With event record id:

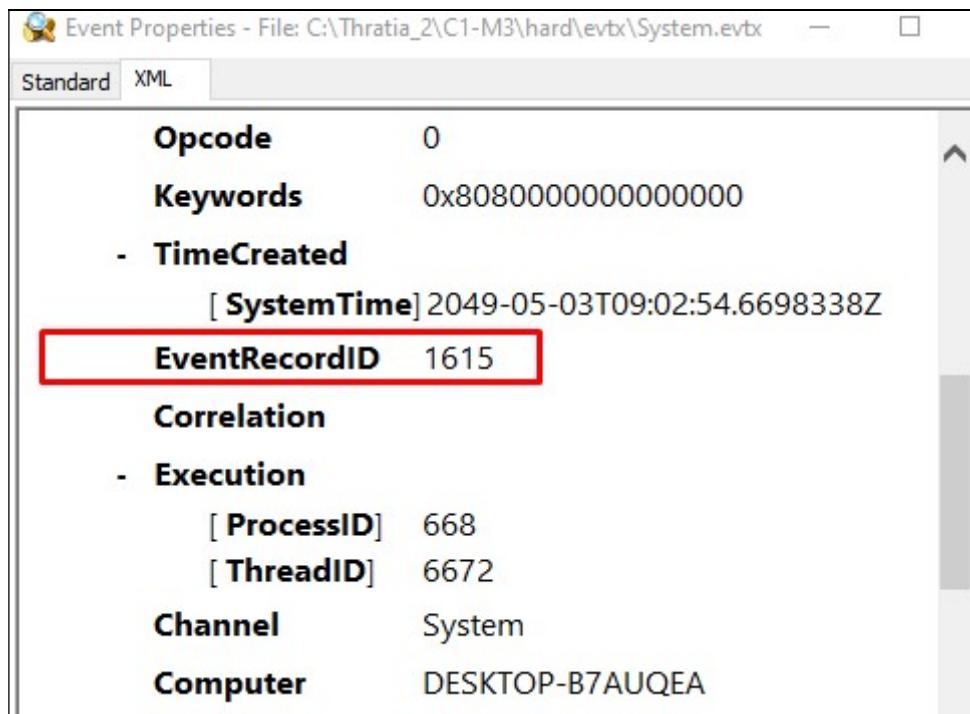


Figure 10

Flag Information

flag{1615}