

Windows

Incident Response

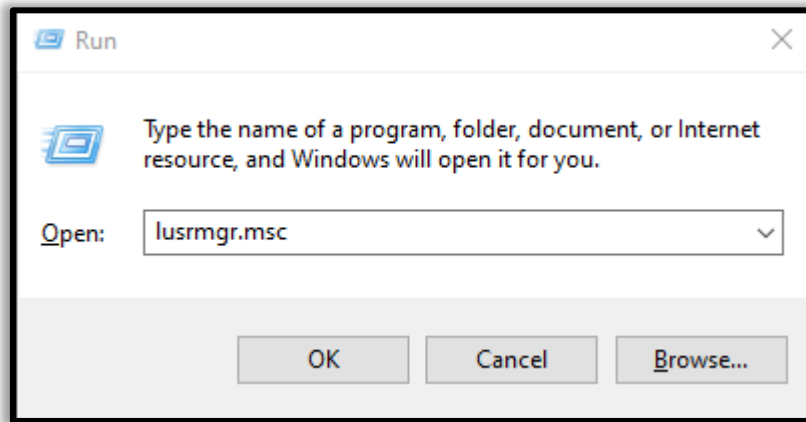
Users

In Incident response it is very necessary to investigate the user activity. It is used to find if there is any suspicious user account is present or any restricted permissions have been assigned to a user. By checking the user account one can be able to get answers to questions like which user is currently logged in and what kind of a user account one has.

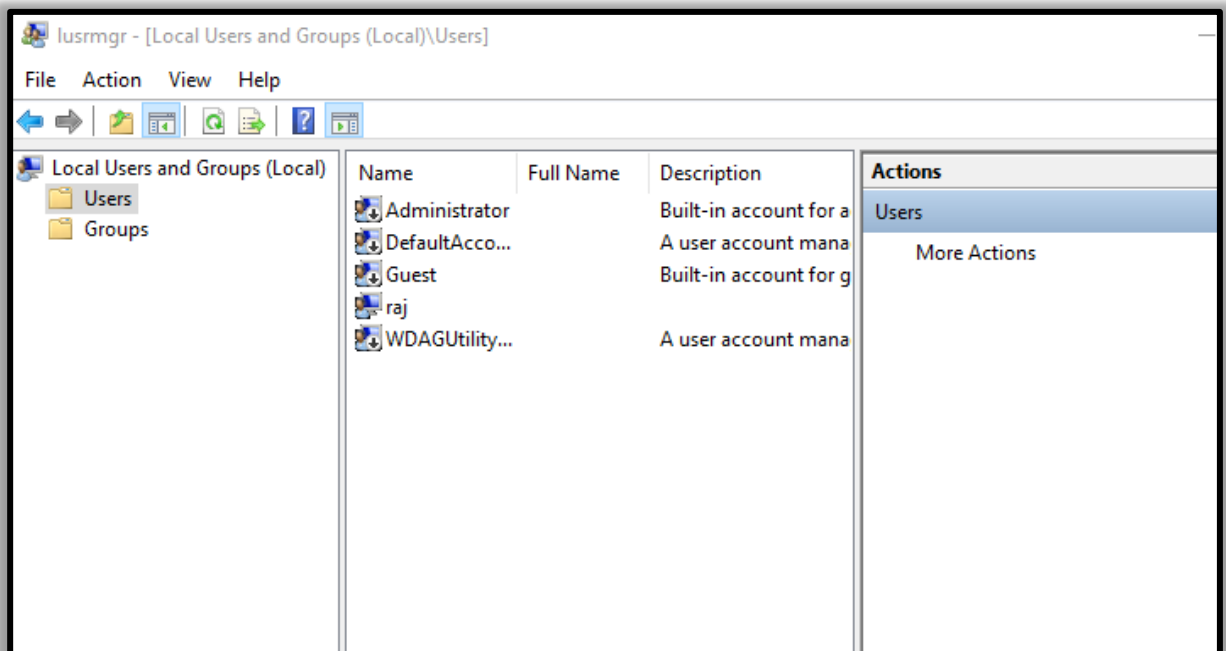
The ways one can view the user accounts are:

Local users

To view the local user accounts in GUI, press '**Windows+R**', then type '**lusrmgr.msc**'.



Now click on '**okay**', and here you will be able to see the user accounts and their descriptions.



net user

You can now open the command prompt and run it as an administrator. Then type the command '**net user**' and press enter. You can now see the user accounts for the system and the type of account it is.

net user

```
Microsoft Windows [Version 10.0.18362.1016]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\raj>net user

User accounts for \\DESKTOP-A0AP00M

-----
Administrator          DefaultAccount          Guest
raj                     WDAGUtilityAccount
The command completed successfully.

C:\Users\raj>
```

net localgroup

'**Net localgroup groupname**' command is used to manage local user groups on a system. By using this command, an administrator can add local or domain users to a group, delete users from a group, create new groups and delete existing groups.

Open Command prompt and run as an administrator then type '**net local group administrators**' and press enter.

net local group administrators

```
C:\Users\raj>net localgroup administrators
Alias name     administrators
Comment       Administrators have complete and unrestricted access to the computer/domain

Members
-----
Administrator
raj
The command completed successfully.
```

Local user

To view the local user accounts in PowerShell, open PowerShell as an administrator, type '**Get-LocalUser**' and press enter. You will be able to see the local user accounts, with their names, if they are enabled and their description.

Get-LocalUser

```
PS C:\Users\raj> Get-LocalUser
```

Name	Enabled	Description
Administrator	False	Built-in account for administering the computer/domain
DefaultAccount	False	A user account managed by the system.
Guest	False	Built-in account for guest access to the computer/domain
raj	True	
WDAGUtilityAccount	False	A user account managed and used by the system for Windows

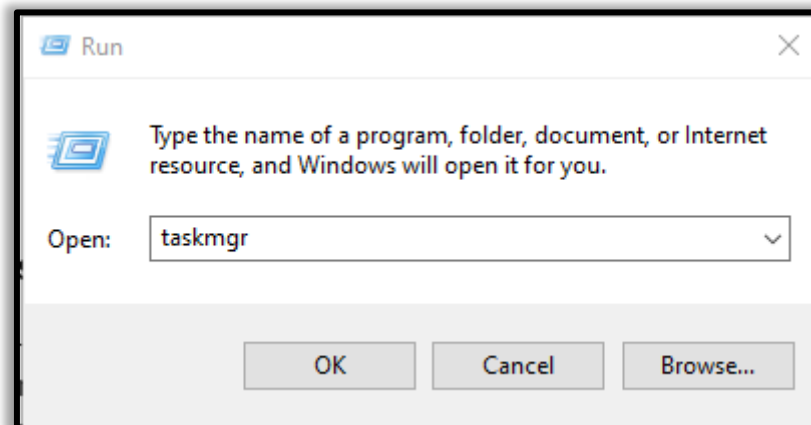
Processes

To get the list of all the processes running on the system, you can use '**tasklist**' command for this purpose. By making use of this command, you can get a list of the processes the memory space used, running time, image file name, services running in the process etc

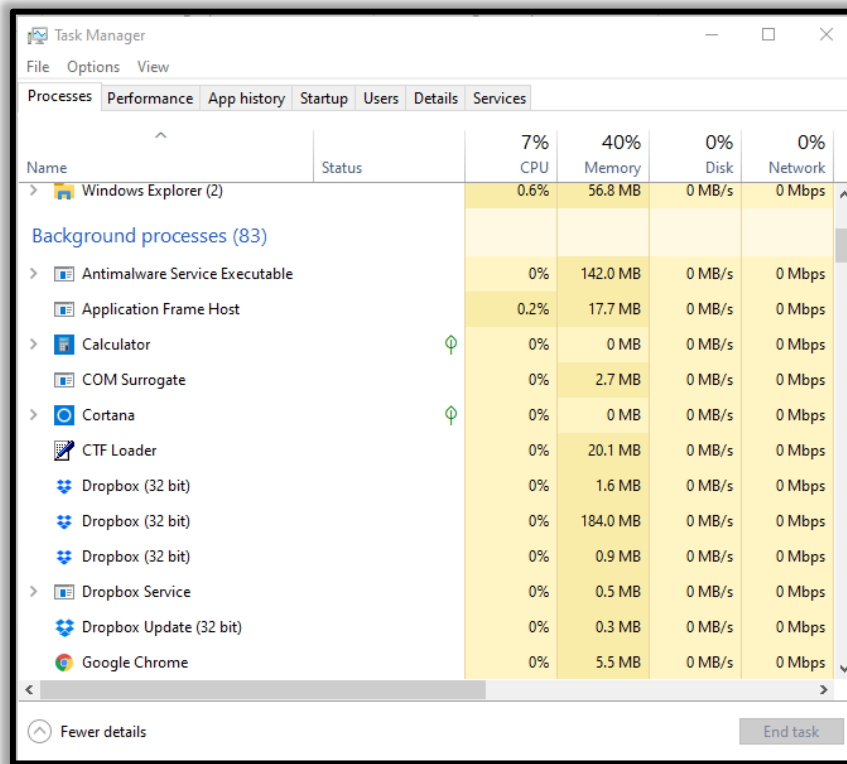
To view the processes, you can use the following methods;

Task Manager

To view the running processes in a GUI, press '**Windows+R**', then type '**taskmgr.exe**'.



Now click on '**OK**' and you will be able to see all the running processes in your system and will be able to check if there is any unnecessary process running.



tasklist

To view the processes in the command prompt, Open the command prompt as an administrator and type 'tasklist' and press enter. Here you will be able to see all the running processes with their Process ID (PID) and their session name and the amount of memory used.

tasklist

```
C:\Users\raj>tasklist
```

Image Name	PID	Session Name	Session#	Mem Usage
System Idle Process	0	Services	0	8 K
System	4	Services	0	10,924 K
Registry	120	Services	0	70,260 K
smss.exe	476	Services	0	1,004 K
csrss.exe	696	Services	0	5,092 K
wininit.exe	784	Services	0	6,212 K
services.exe	928	Services	0	9,424 K
lsass.exe	936	Services	0	20,464 K
svchost.exe	628	Services	0	3,268 K
svchost.exe	632	Services	0	27,772 K
fontdrvhost.exe	776	Services	0	2,540 K
svchost.exe	1072	Services	0	17,056 K
svchost.exe	1124	Services	0	7,648 K
svchost.exe	1340	Services	0	9,180 K
svchost.exe	1380	Services	0	9,596 K
svchost.exe	1388	Services	0	8,700 K
svchost.exe	1400	Services	0	6,464 K
svchost.exe	1396	Services	0	8,872 K
svchost.exe	1548	Services	0	5,184 K
svchost.exe	1556	Services	0	6,944 K
svchost.exe	1724	Services	0	11,032 K
svchost.exe	1772	Services	0	13,708 K

Powershell

To view the process list in PowerShell, run PowerShell as an administrator and type 'Get-Process' and press enter. It gets a list of all active processes running on the local computer.

```
get-process
```

```
PS C:\Users\raj> get-process
```

Handles	NPM(K)	PM(K)	WS(K)	CPU(s)	Id	SI	ProcessName
839	43	58120	53140	2.31	6932	3	ApplicationFrameHost
712	27	49920	41864	64.00	9812	0	audiodg
540	27	19396	9844	0.39	1472	3	Calculator
228	15	13956	25800	0.08	1968	3	chrome
897	77	831828	852736	633.58	2184	3	chrome
271	17	6752	16964	1.42	2992	3	chrome
532	36	31084	48220	41.77	4064	3	chrome
235	16	17460	37160	0.13	5720	3	chrome
322	21	70192	107132	8.31	5868	3	chrome
234	16	26116	38540	0.53	5968	3	chrome
321	10	2140	8896	0.09	6304	3	chrome

Windows system has an extremely powerful tool with the Windows Management Instrumentation Command (WMIC). Wmic is very useful when it comes to incident response. This tool is enough to notice some abnormal signs in the system. This command can be used in the Command-prompt as well as PowerShell when run as an administrator. The syntax is '**wmic process list full**'.

```
wmic process list full
```

```
PS C:\Windows\system32> wmic process list full
```

To get more details about the parent process IDs, Name of the process and the process ID, open PowerShell as an administrator and type '**wmic process get name,parentprocessid,processid**'. This would be the next step after you determine which process is performing a strange network activity. You will see the following details.

```
wmic process get name,parentprocessid,processid
```

```

PS C:\Windows\system32> wmic process get name,parentprocessid,processid
Name                                     ParentProcessId  ProcessId
System Idle Process                     0                0
System                                  0                4
Registry                                4                120
smss.exe                                 4                476
csrss.exe                                676              696
wininit.exe                             676              784
services.exe                            784              928
lsass.exe                                784              936
svchost.exe                             928              628
svchost.exe                             928              632
fontdrvhost.exe                         784              776
svchost.exe                             928              1072
svchost.exe                             928              1124
svchost.exe                             928              1340
svchost.exe                             928              1380
svchost.exe                             928              1388
svchost.exe                             928              1400
svchost.exe                             928              1396
svchost.exe                             928              1548
svchost.exe                             928              1556
svchost.exe                             928              1724
svchost.exe                             928              1772
svchost.exe                             928              1780

```

To get the path of the Wmic process, open PowerShell and type **'wmic process where 'ProcessID=PID' get CommandLine'** and press enter.

```
wmic process where 'ProcessID=PID' get CommandLine
```

```

PS C:\Windows\system32> wmic process where "ProcessID=4420" get CommandLine
CommandLine
"C:\Program Files (x86)\TeamViewer\TeamViewer_Service.exe"

PS C:\Windows\system32>

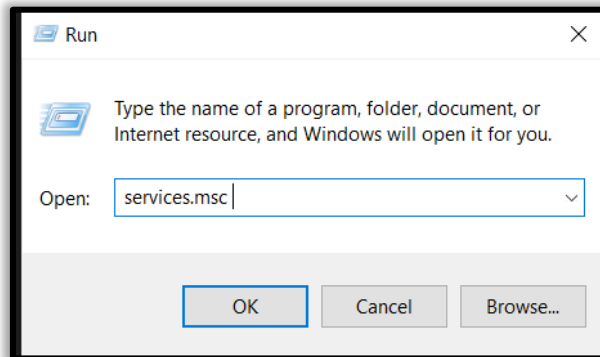
```

Services

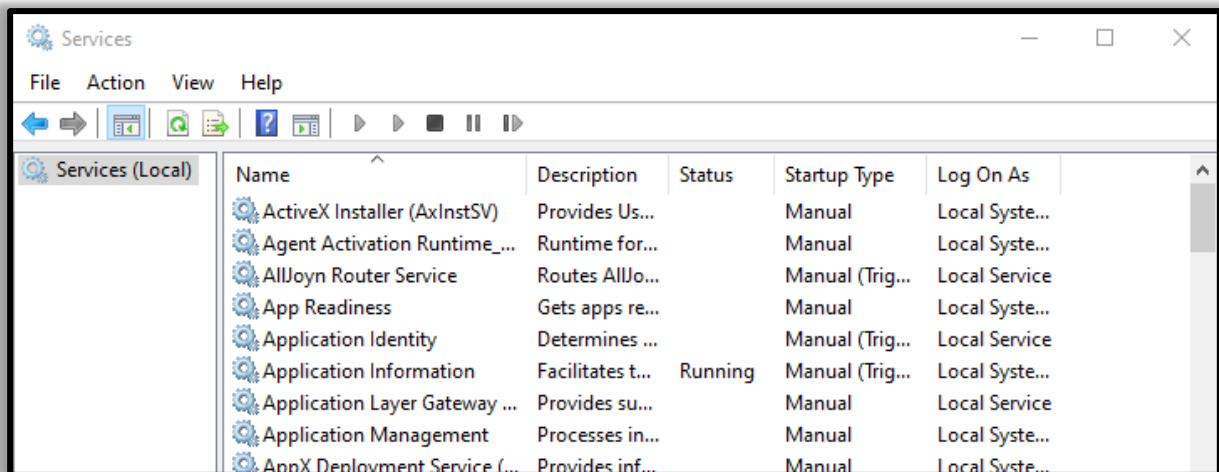
To identify if there is any abnormal service running in your system or some service is not functioning properly, you can view your services.

GUI

To view all the services in GUI, press '**Windows+R**' and type '**services.msc**'.



Now click on '**OK**' to see the list of processes.



net start

To start and view the list of services that are currently running in your system, open the command prompt as an administrator, type '**net start**' and press enter.

```
net start
```



```
C:\Users\raj>net start
These Windows services are started:

Application Information
AVCTP service
Background Tasks Infrastructure Service
Base Filtering Engine
Bluetooth Audio Gateway Service
Bluetooth Support Service
Capability Access Manager Service
Clipboard User Service_4f10ff4
```

sc query

To view whether a service is running and to get its more details like its service name, display name, etc.

[sc query | more](#)

```
C:\Users\raj>sc query | more

SERVICE_NAME: Appinfo
DISPLAY_NAME: Application Information
        TYPE               : 30  WIN32
        STATE                : 4  RUNNING
                        (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN)
        WIN32_EXIT_CODE       : 0  (0x0)
        SERVICE_EXIT_CODE    : 0  (0x0)
        CHECKPOINT            : 0x0
        WAIT_HINT             : 0x0

SERVICE_NAME: AudioEndpointBuilder
DISPLAY_NAME: Windows Audio Endpoint Builder
        TYPE               : 30  WIN32
        STATE                : 4  RUNNING
                        (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN)
        WIN32_EXIT_CODE       : 0  (0x0)
        SERVICE_EXIT_CODE    : 0  (0x0)
        CHECKPOINT            : 0x0
        WAIT_HINT             : 0x0

SERVICE_NAME: Audiosrv
DISPLAY_NAME: Windows Audio
        TYPE               : 10  WIN32_OWN_PROCESS
        STATE                : 4  RUNNING
                        (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN)
        WIN32_EXIT_CODE       : 0  (0x0)
        SERVICE_EXIT_CODE    : 0  (0x0)
        CHECKPOINT            : 0x0
        WAIT_HINT             : 0x0
```

Task Scheduler

tasklist

If you want a list of running processes with their associated services in the command prompt, run command prompt as an administrator, then type '**tasklist /svc**' and press enter.

```
tasklist /svc
```

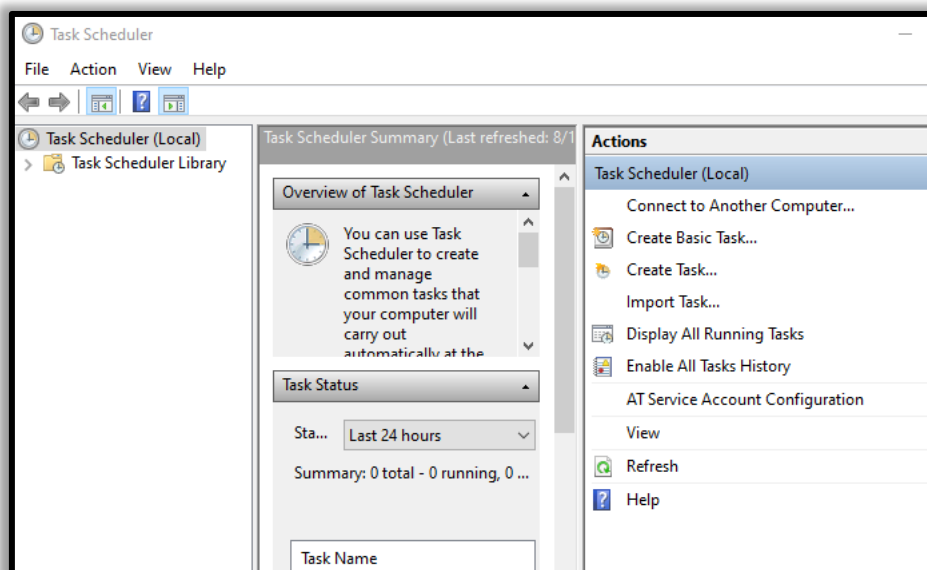
```
C:\Users\raj>tasklist /svc

Image Name                PID Services
-----
System Idle Process       0 N/A
System                    4 N/A
Registry                  120 N/A
smss.exe                  476 N/A
csrss.exe                 696 N/A
wininit.exe              784 N/A
services.exe             928 N/A
lsass.exe                936 EFS, KeyIso, SamSs, VaultSvc
svchost.exe              628 PlugPlay
svchost.exe              632 BrokerInfrastructure, DcomLaunch, Power,
                        CustomEventsBroker
```

GUI

Task Scheduler is a component in the Windows which provides the ability to schedule the launch of programs or any scripts at a pre-defined time or after specified time intervals. You can view these scheduled tasks which are of high privileges and look suspicious. To view the task scheduler in GUI, then go the path and press enter.

C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Administrative Tools



Schtasks

To view the schedule tasks in the command prompt, run command prompt as an administrator, type '**schtasks**' and press enter.

schtasks

```
C:\Users\raj>schtasks

Folder: \
TaskName                               Next Run Time           Status
=====
JavaUpdateSched                        N/A                     Running
update-S-1-5-21-1097824736-1555393654-24 8/17/2020  8:25:00 PM        Ready
User_Feed_Synchronization-{CE537D28-0D95 8/17/2020  8:50:34 PM        Ready

Folder: \Microsoft
TaskName                               Next Run Time           Status
=====
INFO: There are no scheduled tasks presently available at your access level.

Folder: \Microsoft\Office
TaskName                               Next Run Time           Status
=====
Office 15 Subscription Heartbeat        8/18/2020  2:26:03 AM    Ready
OfficeTelemetryAgentFallBack            N/A                     Ready
OfficeTelemetryAgentLogOn               N/A                     Ready

Folder: \Microsoft\OneCore
TaskName                               Next Run Time           Status
=====
INFO: There are no scheduled tasks presently available at your access level.
```

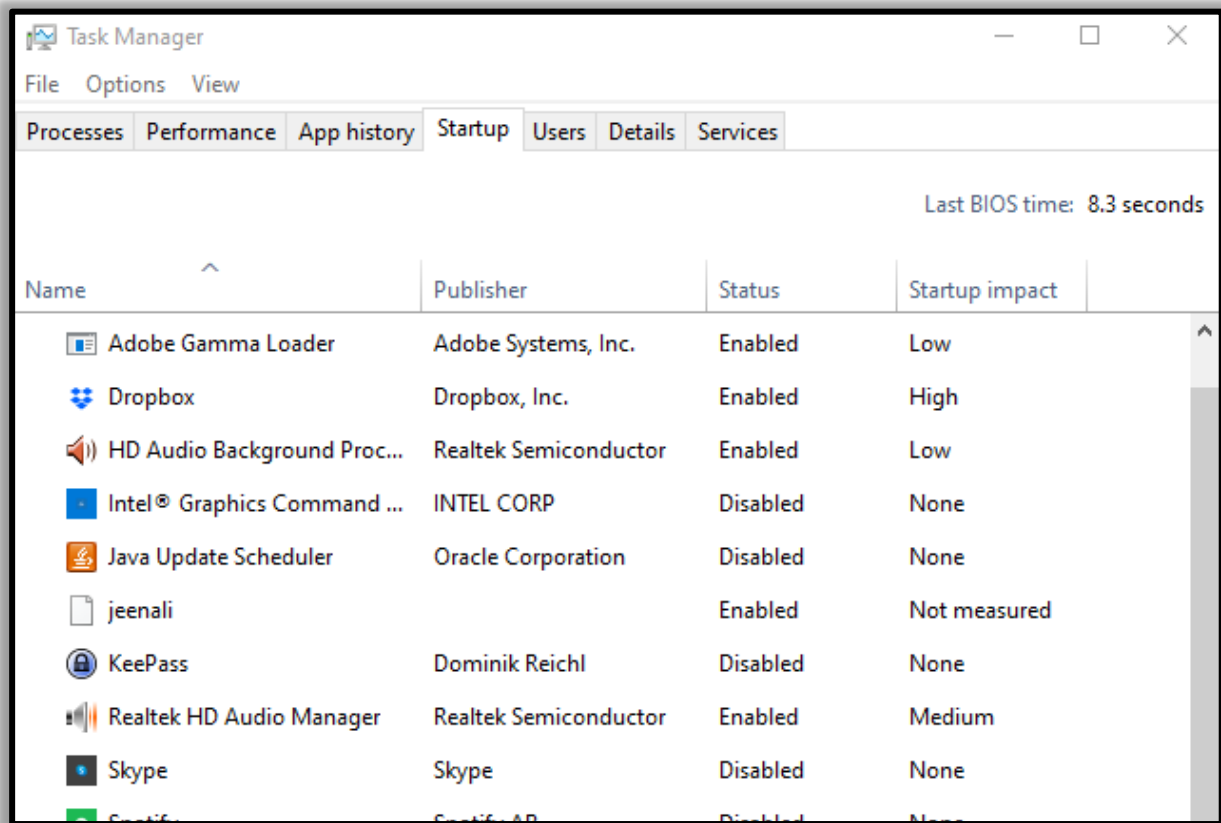
Startup

The startup folder in Windows, automatically runs applications when you log on. So, an incident handler, you should observe the applications that auto start.

GUI

To view the applications in Startup menu in GUI, open the task manager and click on the 'Startup' menu. By doing this, you can see which applications are enabled and disabled on startup. On opening the following path, it will give you the same option

dir /s /b "C:\Users\raj\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup"



Powershell

To view, the startup applications in the PowerShell run the PowerShell as an administrator, type 'wmic startup get caption,command' and press enter.

```
wmic startup get caption,command
```

```
PS C:\Windows\system32> wmic startup get caption,command
Caption          Command
OneDriveSetup    C:\Windows\SysWOW64\OneDriveSetup.exe /thfirstsetup
OneDriveSetup    C:\Windows\SysWOW64\OneDriveSetup.exe /thfirstsetup
jeenali          jeenali.txt
uTorrent         "C:\Users\raj\AppData\Roaming\uTorrent\uTorrent.exe" /MINIMIZED
Adobe Gamma Loader C:\PROGRA~2\COMMON~1\Adobe\CALIBR~1\ADOBEG~1.EXE
SecurityHealth   %windir%\system32\SecurityHealthSystray.exe
RtHDVCpl         "C:\Program Files\Realtek\Audio\HDA\RtkNGUI64.exe" /s
RtHDTVbg_PushButton "C:\Program Files\Realtek\Audio\HDA\RAVBg64.exe" /IM
WavesSvc         "C:\Windows\System32\DriverStore\FileRepository\oem49.inf_amd64_5ff3

PS C:\Windows\system32>
```

To get a detailed list of the AutoStart applications in **PowerShell**, you can run it as an administrator and type 'Get-CimInstance Win32_StartupCommand | Select-Object Name, command, Location, User | Format-List' and press enter.

```
Get-CimInstance Win32_StartupCommand | Select-Object  
Name, command, Location, User | Format-List'
```

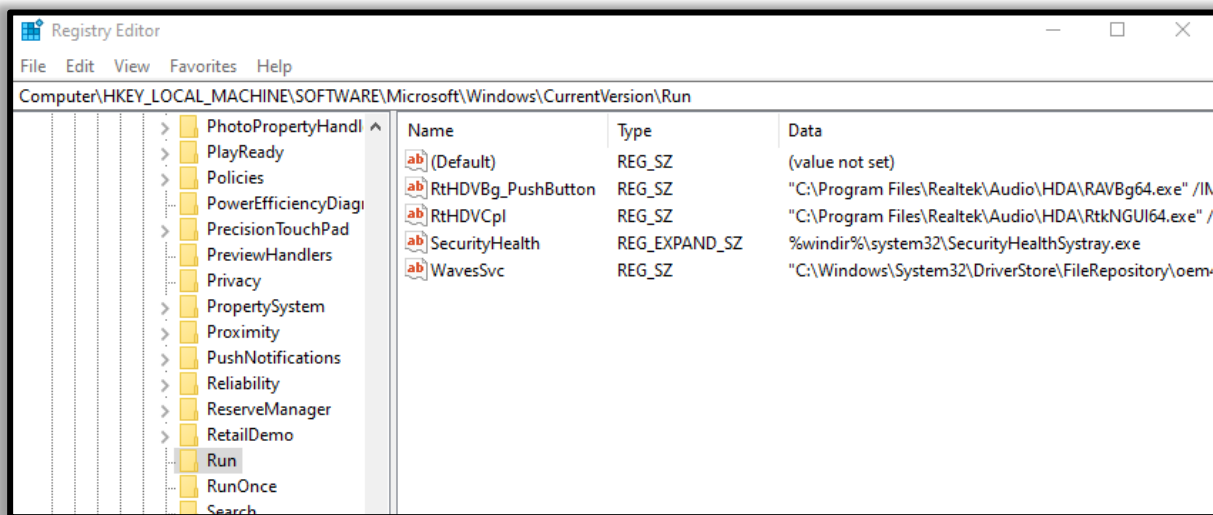
```
PS C:\Windows\system32> Get-CimInstance Win32_StartupCommand | Select-Object Name, command, Location, User | Format-List  
  
Name       : OneDriveSetup  
command    : C:\Windows\SysWOW64\OneDriveSetup.exe /thfirstsetup  
Location   : HKU\S-1-5-19\SOFTWARE\Microsoft\Windows\CurrentVersion\Run  
User       : NT AUTHORITY\LOCAL SERVICE  
  
Name       : OneDriveSetup  
command    : C:\Windows\SysWOW64\OneDriveSetup.exe /thfirstsetup  
Location   : HKU\S-1-5-20\SOFTWARE\Microsoft\Windows\CurrentVersion\Run  
User       : NT AUTHORITY\NETWORK SERVICE  
  
Name       : jeenal  
command    : jeenal.txt  
Location   : Startup  
User       : DESKTOP-A0AP00M\raj  
  
Name       : uTorrent  
command    : "C:\Users\raj\AppData\Roaming\uTorrent\uTorrent.exe" /MINIMIZED  
Location   : HKU\S-1-5-21-1097824736-1555393654-2427635684-1001\SOFTWARE\Microsoft\Windows\CurrentVersion\Run  
User       : DESKTOP-A0AP00M\raj
```

Registry

Sometimes if there is a presence of unsophisticated malware it can be found by taking a look at the Windows Registry's run key.

GUI

To view the GUI of the registry key, you can open REGEDIT reach the run key manually.



PowerShell

You can also view the registry of the Local Machine of the Run key in the PowerShell, by running it as an administrator and then type

'reg query HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run' and press enter.

```
reg query HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run
```

```
PS C:\Windows\system32> reg query HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run
SecurityHealth    REG_EXPAND_SZ    %windir%\system32\SecurityHealthSystray.exe
RtHDVCpl          REG_SZ           "C:\Program Files\Realtek\Audio\HDA\RtkNGUI64.exe" /s
RtHDTVbg_PushButton REG_SZ          "C:\Program Files\Realtek\Audio\HDA\RAVBg64.exe" /IM
WavesSvc          REG_SZ           "C:\Windows\System32\DriverStore\FileRepository\oem49.inf_amd64_5ff30...
```

You can also view the registry of the Current User of the Run key in the PowerShell, by running it as an administrator and then type

'reg query HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Run' and press enter.

```
reg query HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Run
```

```
PS C:\Windows\system32> reg query HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Run

HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Run
uTorrent          REG_SZ           "C:\Users\raj\AppData\Roaming\uTorrent\uTorrent.exe" /MINIMIZED

PS C:\Windows\system32>
```

Active TCP and UDP Port

As an Incident Responder you should carefully pay attention to the active TCP and UDP ports of your system.

netstat

The network statistics of a system can be using a tool. The criteria tested are incoming and outgoing connections, routing tables, port listening, and usage statistics. Open the command prompt, type '**netstat -ano**' and press enter.

netstat -ano

```
C:\Users\raj>netstat -ano
```

Active Connections

Proto	Local Address	Foreign Address	State	PID
TCP	0.0.0.0:135	0.0.0.0:0	LISTENING	1072
TCP	0.0.0.0:443	0.0.0.0:0	LISTENING	5700
TCP	0.0.0.0:445	0.0.0.0:0	LISTENING	4
TCP	0.0.0.0:808	0.0.0.0:0	LISTENING	3836
TCP	0.0.0.0:903	0.0.0.0:0	LISTENING	3828
TCP	0.0.0.0:913	0.0.0.0:0	LISTENING	3828
TCP	0.0.0.0:1688	0.0.0.0:0	LISTENING	3820
TCP	0.0.0.0:5040	0.0.0.0:0	LISTENING	6216
TCP	0.0.0.0:7680	0.0.0.0:0	LISTENING	2792
TCP	0.0.0.0:9001	0.0.0.0:0	LISTENING	4
TCP	0.0.0.0:17500	0.0.0.0:0	LISTENING	5580
TCP	0.0.0.0:49664	0.0.0.0:0	LISTENING	936
TCP	0.0.0.0:49665	0.0.0.0:0	LISTENING	784
TCP	0.0.0.0:49666	0.0.0.0:0	LISTENING	1892

Powershell

Well, this can also be checked in the PowerShell with a different command. Run PowerShell and type '**Get-NetTCPConnection -LocalAddress 192.168.0.110 | Sort-Object LocalPort**' and press enter. You will get detailed information about the IP and the local ports.

Get-NetTCPConnection -LocalAddress 192.168.0.110 | Sort-Object LocalPort

```
PS C:\Windows\system32> Get-NetTCPConnection -LocalAddress 192.168.0.110 | Sort-Object LocalPort
```

LocalAddress	LocalPort	RemoteAddress	RemotePort	State
192.168.0.110	139	0.0.0.0	0	Listen
192.168.0.110	57631	23.54.90.8	443	CloseWait
192.168.0.110	57632	23.54.90.8	443	CloseWait
192.168.0.110	57633	23.54.90.8	443	CloseWait
192.168.0.110	57634	23.54.90.8	443	CloseWait
192.168.0.110	57635	23.54.90.8	443	CloseWait
192.168.0.110	57636	23.215.197.169	80	CloseWait
192.168.0.110	57637	23.215.197.169	80	CloseWait
192.168.0.110	57638	23.215.197.169	80	CloseWait
192.168.0.110	57639	23.215.197.169	80	CloseWait
192.168.0.110	57640	23.215.197.169	80	CloseWait
192.168.0.110	57641	23.215.197.169	80	CloseWait
192.168.0.110	57642	23.60.172.136	443	CloseWait
192.168.0.110	57643	23.60.172.136	443	CloseWait
192.168.0.110	57646	23.54.90.8	443	CloseWait
192.168.0.110	57917	104.244.42.134	443	CloseWait

File Sharing

As an incident responder you should make sure that every file share is accountable and reasonable and there is no unnecessary file sharing.

net view

In order to check up on the file sharing options in command prompt, type 'net view \\

```
net view \\<127.0.0.1
```

```
C:\Users\raj>net view \\<127.0.0.1
Shared resources at \\<127.0.0.1

Share name  Type  Used as  Comment
-----
jeenali     Disk
Users       Disk
The command completed successfully.
```

SMBShare

To see the file sharing in PowerShell, you can type 'Get-SMBShare' and press enter.

```
Get-SMBShare
```

```
PS C:\Windows\system32> Get-SMBShare

Name      ScopeName Path      Description
----      -
ADMIN$    *         C:\Windows Remote Admin
C$        *         C:\       Default share
D$        *         D:\       Default share
IPC$      *         Remote IPC
jeenali   *         D:\jeenali
Users     *         C:\Users
```


Files

To view the files which could be malicious or end with a particular extension, you can use 'forfiles' command. Forfiles is a command line utility software. It was shipped with Microsoft Windows Vista. During that time, management of multiples files through the command line was difficult as most of the commands at that time we made to work on single files

Forfiles

To view the .exe files with their path to locate them in the command prompt, type 'forfiles /D -10 /S /M *.exe /C "cmd /c echo @path"' and press enter.

```
forfiles /D -10 /S /M *.exe /C "cmd /c echo @path"
```

```
C:\Users\raj>forfiles /D -10 /S /M *.exe /C "cmd /c echo @path"
"C:\Users\raj\AppData\Local\JxBrowser\browsercore-64.0.3282.24.unknown\browsercore32.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\GameBarElevatedFT_Alias.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\MicrosoftEdge.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\python.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\python3.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.DesktopAppInstaller_8wekyb3d8bbwe\python.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.DesktopAppInstaller_8wekyb3d8bbwe\python3.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.MicrosoftEdge_8wekyb3d8bbwe\MicrosoftEdge.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.XboxGamingOverlay_8wekyb3d8bbwe\GameBarElevated
"C:\Users\raj\AppData\Local\VMware\vmware-download-2B3C\cdstmp_ws-windows_15.5.6_16341506\VMware-workstatio
"C:\Users\raj\AppData\Roaming\utorrent\helper\helper.exe"
"C:\Users\raj\AppData\Roaming\utorrent\updates\3.5.5_45724.exe"
"C:\Users\raj\AppData\Roaming\utorrent\updates\3.5.5_45724\utorrentie.exe"
"C:\Users\raj\Downloads\AnyDesk.exe"
"C:\Users\raj\Downloads\ARM_Setup_2020.2.1.exe"
```

To View files without its path and more details of the particular file extension and its modification date, type 'forfiles /D -10 /S /M *.exe /C "cmd /c echo @ext @fname @fdate"' and press enter.

```
forfiles /D -10 /S /M *.exe /C "cmd /c echo @ext @fname @fdate"
```

```
C:\Users\raj>forfiles /D -10 /S /M *.exe /C "cmd /c echo @ext @fname @fdate"
"exe" "browsercore32" 8/6/2018
"exe" "GameBarElevatedFT_Alias" 6/30/2020
"exe" "MicrosoftEdge" 7/2/2020
"exe" "python" 6/29/2020
"exe" "python3" 6/29/2020
"exe" "python" 6/29/2020
"exe" "python3" 6/29/2020
"exe" "MicrosoftEdge" 7/2/2020
"exe" "GameBarElevatedFT_Alias" 6/30/2020
"exe" "VMware-workstation-15.5.6-16341506" 6/29/2020
"exe" "helper" 8/7/2020
"exe" "3.5.5_45724" 7/27/2020
```

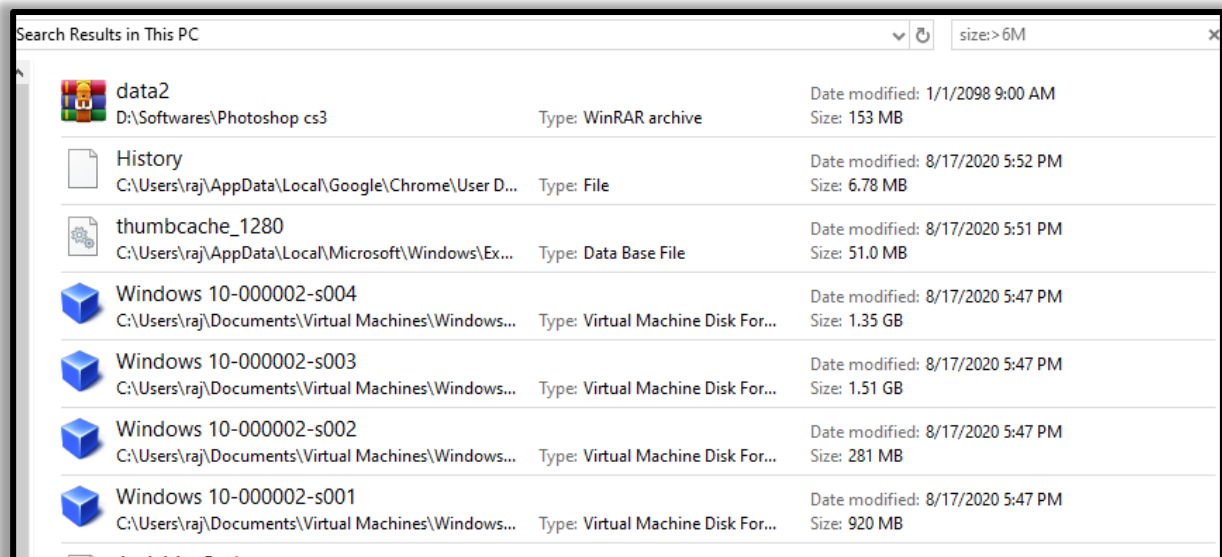
To check for files modified in the last 10 days type 'forfiles /p c: /S /D -10'.

```
forfiles /p c: /S /D -10
```

```
C:\>forfiles /p c: /S /D -10

"$Recycle.Bin"
"Android"
"Documents and Settings"
"MSOCache"
"PerfLogs"
"Project.log"
"Recovery"
"Users"
"S-1-5-18"
"S-1-5-21-1097824736-1555393654-2427635684-1000"
ERROR: Access is denied for "C:\$Recycle.Bin\S-1-5-18\".
ERROR: Access is denied for "C:\$Recycle.Bin\S-1-5-21-1097824736-1555393654-2427635684-1000\".
"$I2IEYQS"
"desktop.ini"
".android"
"adb.exe"
"AdbWinApi.dll"
"AdbWinUsbApi.dll"
"fastboot.exe"
"adb_usb.ini"
ERROR: Access is denied for "C:\MSOCache\".
ERROR: Access is denied for "C:\PerfLogs\".
"Common Files"
"desktop.ini"
```

To check for file size below 6MB, you can use the file explorer's search box and enter "size:>6M"



Firewall Settings

The incident responder should pay attention to the firewall configurations and settings and should maintain it regularly.

To view the firewall configurations in the command prompt, type 'netsh firewall show config' and press enter to view the inbound and outbound traffic.

```
netsh firewall show config
```

```
C:\>netsh firewall show config

Domain profile configuration:
-----
Operational mode           = Enable
Exception mode             = Enable
Multicast/broadcast response mode = Enable
Notification mode         = Enable

Allowed programs configuration for Domain profile:
Mode   Traffic direction   Name / Program
-----
Enable  Inbound            µTorrent (TCP-In) / C:\Users\raj\AppData\Roaming\µTo

Port configuration for Domain profile:
Port   Protocol  Mode   Traffic direction   Name
-----

Standard profile configuration (current):
-----
Operational mode           = Enable
Exception mode             = Enable
Multicast/broadcast response mode = Enable
Notification mode         = Enable

Service configuration for Standard profile:
Mode   Customized  Name
-----
Enable  No          Network Discovery

Allowed programs configuration for Standard profile:
Mode   Traffic direction   Name / Program
-----
Enable  Inbound            µTorrent (TCP-In) / C:\Users\raj\AppData\Roaming\µTo
Enable  Inbound            Firefox (C:\Program Files\Mozilla Firefox) / C:\Prog

Port configuration for Standard profile:
Port   Protocol  Mode   Traffic direction   Name
-----

Log configuration:
-----
File location   = C:\Windows\system32\LogFiles\Firewall\pfirewall.log
Max file size   = 4096 KB
Dropped packets = Disable
Connections    = Disable
```

To view the firewall settings of the current profile in the command prompt, type 'netsh advfirewall show currentprofile' and press enter.

netsh advfirewall show currentprofile

```
C:\>netsh advfirewall show currentprofile

Public Profile Settings:
-----
State                                ON
Firewall Policy                      BlockInbound,AllowOutbound
LocalFirewallRules                   N/A (GPO-store only)
LocalConSecRules                     N/A (GPO-store only)
InboundUserNotification              Enable
RemoteManagement                    Disable
UnicastResponseToMulticast           Enable

Logging:
LogAllowedConnections                Disable
LogDroppedConnections                Disable
FileName                             %systemroot%\system32\LogFiles\Firewall\pfirewall.log
MaxFileSize                           4096

Ok.
```

Sessions with other system

To check the session details that are created with other systems, you can type 'net use' in command prompt and press enter.

net use

```
Microsoft Windows [Version 10.0.18362.1016]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\raj>net use
New connections will be remembered.

Status          Local          Remote          Network
-----
OK              \\192.168.0.106\IPC$  Microsoft Windows Network
The command completed successfully.

C:\Users\raj>
```

Open Sessions

You can type 'net session' in the command prompt and press enter to see any open sessions of your system. It gives you the details about the duration of the session.

net session

```
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>net session

Computer                User name                Client Type              Opens Idle time
-----
\\192.168.0.110         administrator            Microsoft Windows security auditing. 0 00:02:31

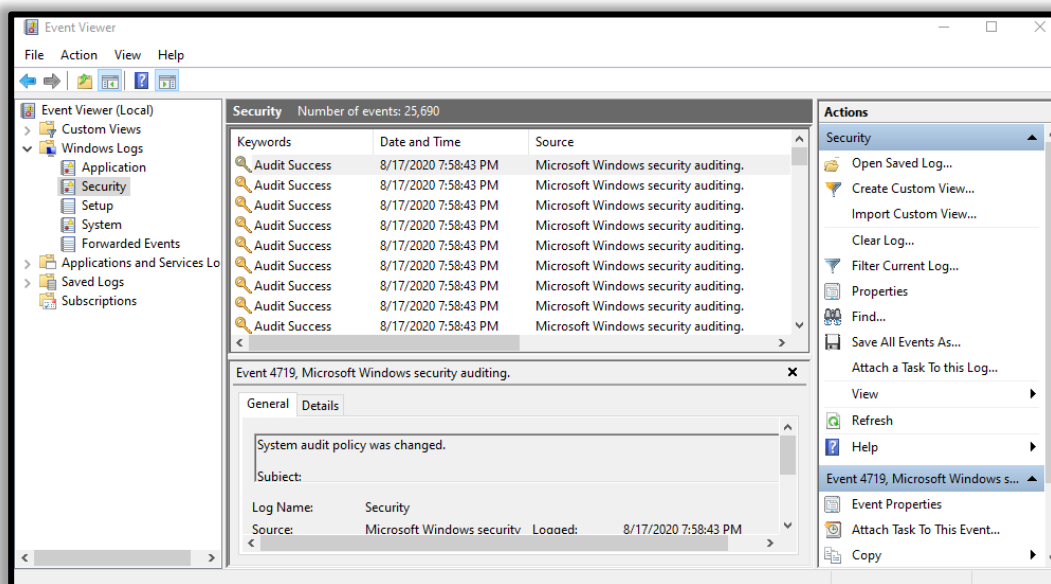
The command completed successfully.

C:\Users\Administrator>
```

Log Entries

To view the log entries in GUI you can open the event viewer and see the logs. Press 'Windows+ R' and type 'eventvwr.msc' and press 'OK'.

Event Viewer



Cmd

To export certain logs of a particular event in command prompt type 'wevtutil qe security' and press enter.

```
wevtutil qe security
```

```
C:\Windows\system32>wevtutil qe security
```

PowerShell

To get the event log list in the PowerShell, type 'Get-EventLog -list' and type the particular event in the supply value and you will get event details of that particular event.

```
Get-Eventlog -List
```

```
PS C:\Users\raj> Get-EventLog -List
```

Max(K)	Retain	OverflowAction	Entries	Log
20,480	0	OverwriteAsNeeded	12,676	Application
20,480	0	OverwriteAsNeeded	0	HardwareEvents
512	7	OverwriteOlder	0	Internet Explorer
20,480	0	OverwriteAsNeeded	0	Key Management Service
128	0	OverwriteAsNeeded	128	0Alerts
512	7	OverwriteOlder	2	OneApp_IGCC
				Security
20,480	0	OverwriteAsNeeded	7,887	System
15,360	0	OverwriteAsNeeded	422	Windows PowerShell

```
PS C:\Users\raj> Get-EventLog
```

```
cmdlet Get-EventLog at command pipeline position 1  
Supply values for the following parameters:  
LogName: 0Alerts
```

Index	Time	EntryType	Source	InstanceID	Message
128	Aug 16 12:55	Information	Microsoft Office ...	300	Microsoft Word...
127	Aug 16 02:22	Information	Microsoft Office ...	300	Microsoft Word...

Conclusion

Hence, one can make use of these commands as an incident responder and keep their systems away from threat.

References

- <https://www.hackingarticles.in/incident-response-linux-cheatsheet/>
- <https://www.hackingarticles.in/incident-response-windows-cheatsheet/>