Windows Incident Response

<u>Users</u>

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'.

🖅 Run	\times
٨	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
<u>O</u> pen:	lusrmgr.msc v
	OK Cancel <u>B</u> rowse

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

File Action View Help							
← ➡ 2 🔐 🙆 🗟 [Local Users and Groups (Local)	Name	Full Name	Description	Actions			
C Users Groups	🙇 Administrator 🕵 DefaultAcco		Built-in account for a A user account mana	Users More Actions			
	🕵 Guest 🌉 raj		Built-in account for g	indici i di di di			
	WDAGUtility		A user account mana				



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	C:\Users\raj>net user					
User accounts for \\DESK	(ТОР-АӨАРӨОМ					
Administrator raj The command completed su	DefaultAccount WDAGUtilityAccount uccessfully.	Guest				
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>no Alias name	et localgroup admi administrators	nistrators			
Comment	Administrators ha	/e complete and	unrestricted	access to .	the computer/domain
Members					
Administrator					
Administrator					
raj					
The command co	mpleted successful	ly.			

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-Local	User
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	
WDAGUtilityAccou	unt 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'.

💷 Run	\times
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	taskmgr v
	OK Cancel Browse

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.

🙀 Task M	anager							_		<
File Optio	ons View									
Processes	Performance	App history	Startup	Users	Details	Services				
	^					7%	40%	0%	0%	
Name			Statu	IS		CPU	Memory	Disk	Network	
🔿 🐂 Wi	ndows Explorer	(2)				0.6%	56.8 MB	0 MB/s	0 Mbps	^
Backgro	ound proces	ses (83)								
> 🔳 An	timalware Servi	ce Executable				0%	142.0 MB	0 MB/s	0 Mbps	Ľ
🔳 Ap	plication Frame	Host				0.2%	17.7 MB	0 MB/s	0 Mbps	
> 📊 Ca	lculator				φ	0%	0 MB	0 MB/s	0 Mbps	
📧 CC	M Surrogate					0%	2.7 MB	0 MB/s	0 Mbps	
> 🖸 Co	rtana				φ	0%	0 MB	0 MB/s	0 Mbps	
📝 ст	F Loader					0%	20.1 MB	0 MB/s	0 Mbps	
😛 Dr	opbox (32 bit)					0%	1.6 MB	0 MB/s	0 Mbps	
😛 Dr	opbox (32 bit)					0%	184.0 MB	0 MB/s	0 Mbps	
😛 Dr	opbox (32 bit)					0%	0.9 MB	0 MB/s	0 Mbps	
> 🔳 Dr	> 📧 Dropbox Service					0%	0.5 MB	0 MB/s	0 Mbps	
💝 Dr	😌 Dropbox Update (32 bit)					0%	0.3 MB	0 MB/s	0 Mbps	
👩 Google Chrome						0%	5.5 MB	0 MB/s	0 Mbps	~
<									>	
Sewer	details								End task	

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.



Image Name	PID	Session Name	Session#	Mem Usage
======================================	======= = 0	Services	· ====== · · · · · · · · · · · · · · ·	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
sychost exe	1772	Services	A	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:\Us	ers\raj>	get-proce	55				
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'.



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.



PS C:\Windows\system32> wmic process get name,parentprocessid,proce	ssid	
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



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.

💁 Services					_	\times
File Action View	Help					
🗢 🄿 📰 Q 🗔	🗼 📝 📷 🕨 🕨 💷 II ID					
🔍 Services (Local)	Name	Description	Status	Startup Type	Log On As	^
	ActiveX Installer (AxInstSV)	Provides Us		Manual	Local Syste	
	Agent Activation Runtime	Runtime for		Manual	Local Syste	
	🎑 AllJoyn Router Service	Routes AllJo		Manual (Trig	Local Service	
	🎑 App Readiness	Gets apps re		Manual	Local Syste	
	Application Identity	Determines		Manual (Trig	Local Service	
	Application Information	Facilitates t	Running	Manual (Trig	Local Syste	
	Application Layer Gateway	Provides su		Manual	Local Service	
	Application Management	Processes in		Manual	Local Syste	
	AppX Deployment Service (Provides inf		Manual	Local Syste	

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.



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 DISPLAY	NAME: Appinfo NAME: Application I TYPE STATE WIN32_EXIT_CODE SERVICE_EXIT_CODE CHECKPOINT WAIT_HINT	[n 1 : :	Formation 30 WIN32 4 RUNNING (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN) 0 (0x0) 0 (0x0) 0x0 0x0			
SERVICE DISPLAY	NAME: AudioEndpoint NAME: Windows Audio TYPE STATE WIN32_EXIT_CODE SERVICE_EXIT_CODE CHECKPOINT WAIT_HINT	tBu 5 F	uilder Endpoint Builder 30 WIN32 4 RUNNING (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN) 0 (0x0) 0 (0x0) 0x0 0x0			
SERVICE DISPLAY	NAME: Audiosrv NAME: Windows Audio TYPE STATE WIN32_EXIT_CODE SERVICE_EXIT_CODE CHECKPOINT WAIT_HINT		<pre>10 WIN32_OWN_PROCESS 4 RUNNING (STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN) 0 (0x0) 0 (0x0) 0x0 0x0</pre>			

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,

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

Task Scheduler File Action View Help File I I I		
Task Scheduler (Local)	Task Scheduler Summary (Last refreshed: 8/1 Actions	
> 🐻 Task Scheduler Library	Task Scheduler (Local)	
	Overview of Task Scheduler Connect to Another Computer Create Basic Task Create Basic Task Create Task Create Task Create Task Create Task Display All Running Tasks Enable All Tasks History AT Service Account Configuration View Refresh Help 	

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 update-S-1-5-21-1097824736-1555393654-24 User_Feed_Synchronization-{CE537D28-0D95	N/A 8/17/2020 8:25:00 PM 8/17/2020 8:50:34 PM	Running Ready Ready
Folder: \Microsoft TaskName	Next Run Time	Status
INFO: There are no scheduled tasks prese	ntly 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 prese	ntly 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"

🙀 Task M	anager							_		\times
File Optio	ons View									
Processes	Performance	App history	Startup	Users	Details	Services				
							I	Last BIOS time	: 8.3 se	conds
Name	^		Publishe	r		Status	St	artup impact		
🔳 Ad	lobe Gamma Lo	ader	Adobe S	ystems,	Inc.	Enabled	Lo	ow		^
😛 Dr	opbox		Dropbox	, Inc.		Enabled	н	igh		- 1
🦚) HC) Audio Backgro	ound Proc	Realtek S	emicon	ductor	Enabled	Lo	w		
- Int	el® Graphics C	ommand	INTEL CO	ORP		Disabled	N	one		
📕 Jav	/a Update Sched	duler	Oracle C	orporat	ion	Disabled	N	one		
📄 jee	enali					Enabled	N	ot measured		
🔒 Ke	ePass		Dominik	Reichl		Disabled	N	one		
📲 Re	altek HD Audio	Manager	Realtek S	emicon	ductor	Enabled	M	ledium		
Skg	уре		Skype			Disabled	N	one		
- C	-116 -		Constitute A	D		Disabled	N.I			

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\system	m32> 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
RtHDVBg_PushButton	"C:\Program Files\Realtek\Audio\HDA\RAVBg64.exe" /IM
WavesSvc	<pre>"C:\Windows\System32\DriverStore\FileRepository\oem49.inf_amd64_5ff3</pre>

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:\Wind	ows\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 :	jeenali
command :	jeenali.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.

Registry Editor File Edit View F Computer\HKEY_LO	Favorites Help CAL_MACHINE\SOFTWARE\N	/icrosoft\Windows\Current\	/ersion\Run	– 🗆 X
	 PhotoPropertyHandl PlayReady Policies PowerEfficiencyDiagi PrecisionTouchPad PreviewHandlers Privacy PropertySystem Proximity PushNotifications Reliability ReserveManager RetailDemo Run RunOnce Search 	Name (Default) (Defa	Type REG_SZ REG_SZ REG_SZ REG_EXPAND_SZ REG_SZ	Data (value not set) "C:\Program Files\Realtek\Audio\HDA\RAVBg64.exe" /IN "C:\Program Files\Realtek\Audio\HDA\RtkNGUI64.exe" / %windir%\system32\SecurityHealthSystray.exe "C:\Windows\System32\DriverStore\FileRepository\oem-

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



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



Active TCP and UDP Port

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



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.

ne	гзт	<u>–a</u>	no
		<u>u</u>	110

C:\Users	C:\Users\raj>netstat -ano						
Active C	Connections						
Proto TCP TCP TCP TCP TCP TCP TCP TCP TCP TCP	Local Address 0.0.0.0:135 0.0.0.0:443 0.0.0.0:445 0.0.0.0:903 0.0.0.0:913 0.0.0.0:1688 0.0.0.0:5040 0.0.0.0:5040 0.0.0.0:7680 0.0.0.0:9001 0.0.0.0:17500 0.0.0.0:49664 0.0.0.0:49665	Foreign Address 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0 0.0.0.0:0	State LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING LISTENING	PID 1072 5700 4 3836 3828 3828 3828 3820 6216 2792 4 5580 936 784			
ТСР	0.0.0.0:49666	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> G	et-NetTCPConnection	-LocalAddress 192.168.0.11	0 Sort-Object Local	.Port
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 in no unnecessary file sharing.

net view

In order to check up on the file sharing options in command prompt, type 'net view \\<localhost>' and press enter.

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:\W:	indows\sys†	tem32> 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\python.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\python.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.DesktopAppInstaller_8wekyb3d8bbwe\python.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.DesktopAppInstaller_8wekyb3d8bbwe\python.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.DesktopAppInstaller_8wekyb3d8bbwe\python.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.MicrosoftEdge_8wekyb3d8bbwe\python3.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.MicrosoftEdge_8wekyb3d8bbwe\python3.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.MicrosoftEdge_8wekyb3d8bbwe\python3.exe"
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.MicrosoftEdge_8wekyb3d8bbwe\GameBarElevated
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.MicrosoftEdge_8wekyb3d8bbwe\GameBarElevated
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.Microsoft.MicrosoftEdge_8wekyb3d8bbwe\GameBarElevated
"C:\Users\raj\AppData\Local\Microsoft\WindowsApps\Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.WindowsApps\Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.WindowsApps\Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.Microsoft.WindowsApps\Microsoft.Microsoft

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" "MicrosoftEdga" 7/2/2020
exe "ICrosoficage //2/2020 "exe" "GameBarElevatedET 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'.



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

rch Resul	Its in This PC		ע פֿ size:>6M
i iii	data2 D:\Softwares\Photoshop cs3	Type: WinRAR archive	Date modified: 1/1/2098 9:00 AM Size: 153 MB
	History C:\Users\raj\AppData\Local\Google\Chrome\User D	Type: File	Date modified: 8/17/2020 5:52 PM Size: 6.78 MB
	thumbcache_1280 C:\Users\raj\AppData\Local\Microsoft\Windows\Ex	Type: Data Base File	Date modified: 8/17/2020 5:51 PM Size: 51.0 MB
3	Windows 10-000002-s004 C:\Users\raj\Documents\Virtual Machines\Windows	Type: Virtual Machine Disk For	Date modified: 8/17/2020 5:47 PM Size: 1.35 GB
3	Windows 10-000002-s003 C:\Users\raj\Documents\Virtual Machines\Windows	Type: Virtual Machine Disk For	Date modified: 8/17/2020 5:47 PM Size: 1.51 GB
3	Windows 10-000002-s002 C:\Users\raj\Documents\Virtual Machines\Windows	Type: Virtual Machine Disk For	Date modified: 8/17/2020 5:47 PM Size: 281 MB
3	Windows 10-000002-s001 C:\Users\raj\Documents\Virtual Machines\Windows	Type: Virtual Machine Disk For	Date modified: 8/17/2020 5:47 PM Size: 920 MB

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
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\uTo
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 advfirev	wall show currentprofile
C:\\netsh advfirewall show currents	profile
Public Profile Settings:	
State Firewall Policy LocalFirewallRules LocalConSecRules InboundUserNotification RemoteManagement UnicastResponseToMulticast	ON BlockInbound,AllowOutbound N/A (GPO-store only) N/A (GPO-store only) Enable Disable Enable
Logging: LogAllowedConnections LogDroppedConnections FileName MaxFileSize Ok.	Disable Disable %systemroot%\system32\LogFiles\Firewall\pfirewall.log 4096

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.



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 The command	completed	\\192.168.0.106\IPC\$ successfully.	Microsoft Windows Network			
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 The command completed	administrator successfully.		0 00:02:31				
C:\Users\Administrator>							

Log Enteries

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

ile Action View Help						
Event Viewer (Local)	Security Number of events: 25,690				Actions	
Custom Views	Keywords	Date and Time	Source	^	Security 🔺	
Application	Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		👩 Open Saved Log	
Security	Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		Create Custom View	
Setup	Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		I Internet Crusterer Minus	
🛃 System	🔍 Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		Import Custom view	
Forwarded Events	🔍 Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		Clear Log	
Applications and Services Lo	🔍 Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		Filter Current Log	
Saved Logs	🔍 Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		Properties	
Subscriptions	🔍 Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.		MA Find	
	🔍 Audit Success	8/17/2020 7:58:43 PM	Microsoft Windows security auditing.	~		
IL III	<			>	Save All Events As	
	Event 4719, Microsoft Windows security auditing.					
	General Details				View	
	Details				Q Refresh	
	System audit poli	cy was changed.		_	Help	
System addit policy was enanged.					, nop	
	Subject:			_	Event 4719, Microsoft Windows s 4	
	Log Name:	Security			Event Properties	
	Source:	Microsoft Windows security	v Logged: 8/17/2020 7:58:43 PM	~	Attach Task To This Event	
	<			>		

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



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	Overflo	owAction	Entries	Log			
20,480 20,480	0	Overwr: Overwr:	iteAsNeeded iteAsNeeded	12,676	Application HardwareEver	nts		
512 20,480	7 0	Overwri Overwri	iteOlder iteAsNeeded	0 0 100	0 Internet Explorer 0 Key Management Service			
128 512	0 7	Overwr: Overwr:	iteAsNeeded iteOlder	128 2	8 OAlerts 2 OneApp_IGCC Security			
20,480 15,360	0 0	Overwr: Overwr:	iteAsNeeded iteAsNeeded	7,887 422	System Windows Powe	erShell		
PS C:\Users\raj> Get-EventLog								
cmdlet Get-EventLog at command pipeline position 1 Supply values for the following parameters: LogName: OAlerts								
Index	Time		EntryType	Source		InstanceID	Message	
128 127	Aug 16 Aug 16	12:55 02:22	Information Information	Microsoft Microsoft	Office Office	300 300	Microsoft Word Microsoft Word	

Conclusion

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

<u>References</u>

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