

Gurjot Singh Khakh


Professor Torres

9/7/2025

IT 100

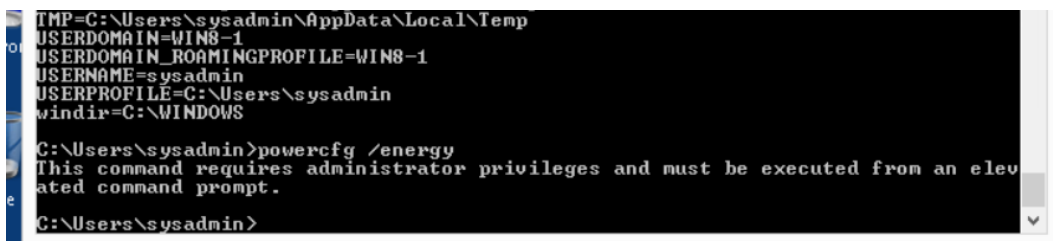
Lab 3

- Copy parts A, B, and C from Canvas

Part A: Log on to "EACH" system in [NDG A+ v4, Lab 1](#) 

- Gather hardware information using the GUI processes listed below:
  - Task Manager
  - Device Manager
  - Resource Monitor
  - System Info
- Gather hardware information using the command line
  - Research 10 commands that can be run from the command line (ex wmic, systeminfo)

Part A Windows 8:



```
TMP=C:\Users\sysadmin\AppData\Local\Temp
USERDOMAIN=WIN8-1
USERDOMAIN_ROAMINGPROFILE=WIN8-1
USERNAME=sysadmin
USERPROFILE=C:\Users\sysadmin
windir=C:\WINDOWS

C:\Users\sysadmin>powercfg /energy
This command requires administrator privileges and must be executed from an elevated command prompt.

C:\Users\sysadmin>
```

```
Command Prompt

C:\Users\sysadmin>bcdedit
The boot configuration data store could not be opened.
Access is denied.

C:\Users\sysadmin>fsutil
---- Commands Supported ----

8dot3name      8dot3name management
behavior        Control file system behavior
dirty           Manage volume dirty bit
file            File specific commands
fsinfo          File system information
hardlink        Hardlink management
objectid        Object ID management
quota           Quota management
repair          Self healing management
reparsepoint    Reparse point management
resource        Transactional Resource Manager management
sparse          Sparse file control
transaction     Transaction management
usn             USN management
volume          Volume management
win             Transparent wim hosting management

C:\Users\sysadmin>
```

```
C:\Users\sysadmin>bcdedit
The boot configuration data store could not be opened.
Access is denied.

C:\Users\sysadmin>
```

```
C:\Users\sysadmin>echo %PROCESSOR_IDENTIFIER%
Intel64 Family 6 Model 63 Stepping 2, GenuineIntel

C:\Users\sysadmin>
```

```
:Users\sysadmin>set
LLUSERSPROFILE=C:\ProgramData
PPDATA=C:\Users\sysadmin\AppData\Roaming
ommonProgramFiles=C:\Program Files\Common Files
ommonProgramFiles(x86)=C:\Program Files (x86)\Common Files
ommonProgramW6432=C:\Program Files\Common Files
OMPUTERNAME=WIN8-1
onSpec=C:\WINDOWS\system32\cmd.exe
P_NO_HOST_CHECK=NO
OMEDRIVE=C:
OMEPATH=\Users\sysadmin
OCALAPPDATA=C:\Users\sysadmin\AppData\Local
OGONSERVER=\\WIN8-1
UMBER_OF_PROCESSORS=1
S=Windows_NT
ath=C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32\Wbem;C:\WINDOWS\System32\
WindowsPowerShell\v1.0\
ATHEXT=.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
ROCESSOR_ARCHITECTURE=AMD64
ROCESSOR_IDENTIFIER=Intel64 Family 6 Model 63 Stepping 2, GenuineIntel
ROCESSOR_LEVEL=6
ROCESSOR_REVISION=3f02
rogramData=C:\ProgramData
```

```
C:\Users\sysadmin>chkdsk
Access Denied as you do not have sufficient privileges.
You have to invoke this utility running in elevated mode.
C:\Users\sysadmin>
```

```
Command Prompt
C:\Users\sysadmin>tasklist
Image Name                      PID Session Name        Session#    Mem Usage
=====
System Idle Process              0 Services              0             4 K
System                           4 Services              0            320 K
smss.exe                        336 Services           0             296 K
csrss.exe                       424 Services           0           2,664 K
wininit.exe                     488 Services           0           2,672 K
csrss.exe                       496 Console             1          11,536 K
winlogon.exe                   536 Console             1           3,660 K
services.exe                   576 Services              0           5,696 K
lsass.exe                      584 Services              0           9,824 K
svchost.exe                     644 Services              0           8,972 K
svchost.exe                     676 Services              0           5,892 K
dwm.exe                        812 Console             1          41,504 K
vmacthlp.exe                   864 Services              0           2,504 K
svchost.exe                     888 Services              0          28,592 K
svchost.exe                     912 Services              0          27,992 K
svchost.exe                     972 Services              0          15,820 K
svchost.exe                    1020 Services              0          41,916 K
```

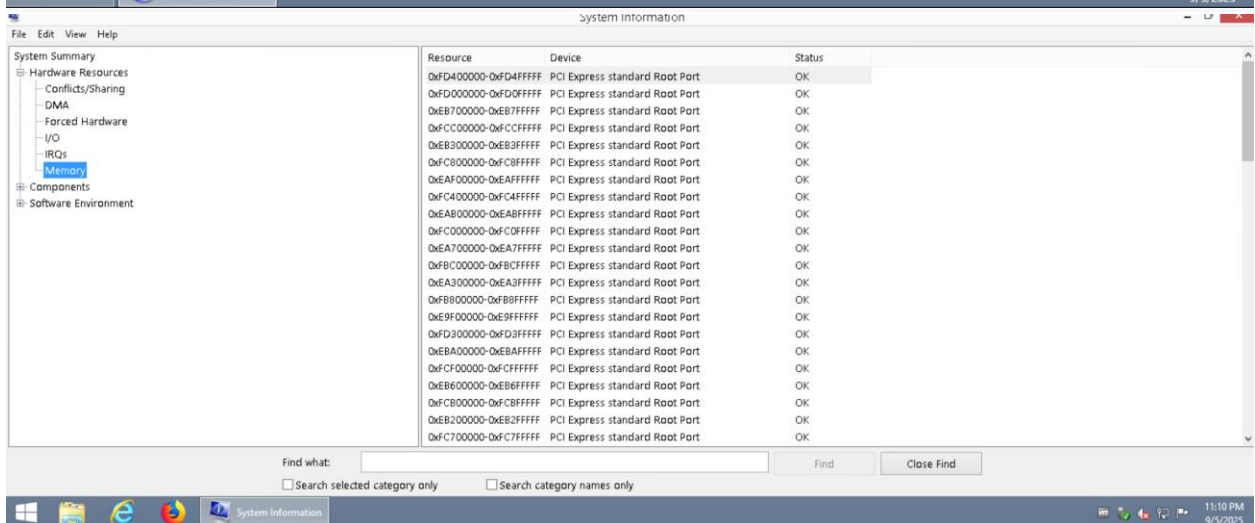
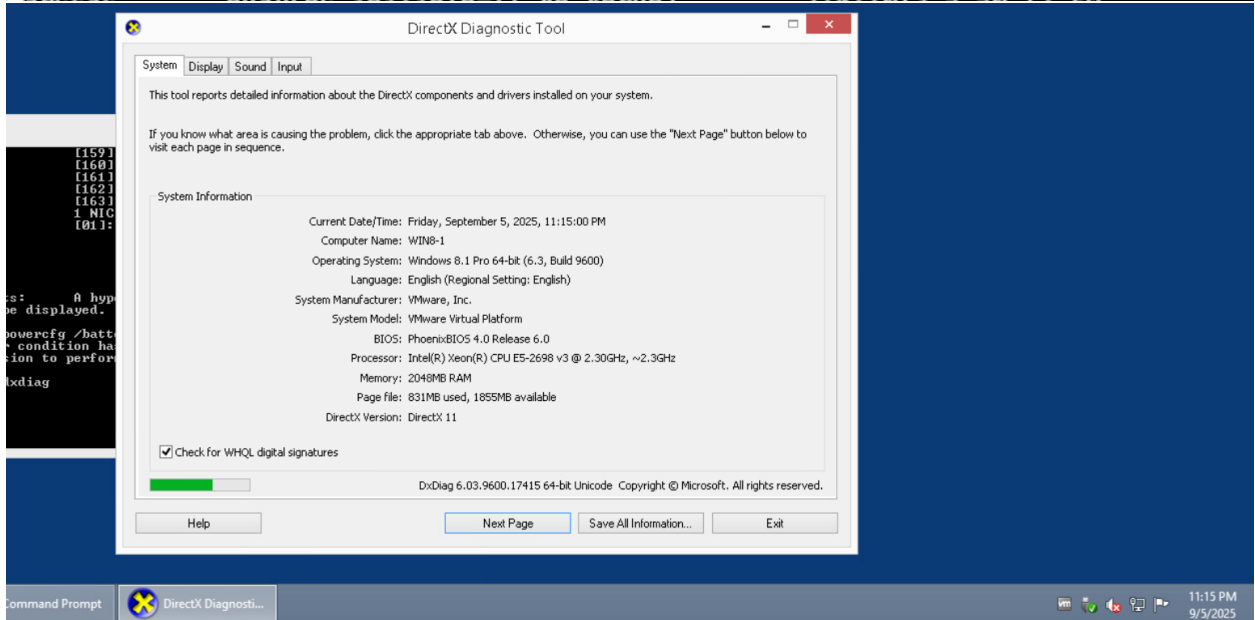
```
System Information
File Edit View Help
System Summary
Hardware Resources
Components
Software Environment
Item Value
OS Name Microsoft Windows 8.1 Pro
Version 6.3.9600 Build 9600
Other OS Description Not Available
OS Manufacturer Microsoft Corporation
System Name WIN8-1
System Manufacturer VMware, Inc.
System Model VMware Virtual Platform
System Type x64-based PC
System SKU
Processor Intel(R) Xeon(R) CPU E5-2698 v3 @ 2.30GHz, 2295 N
BIOS Version/Date Phoenix Technologies LTD 6.00, 12/12/2018
```

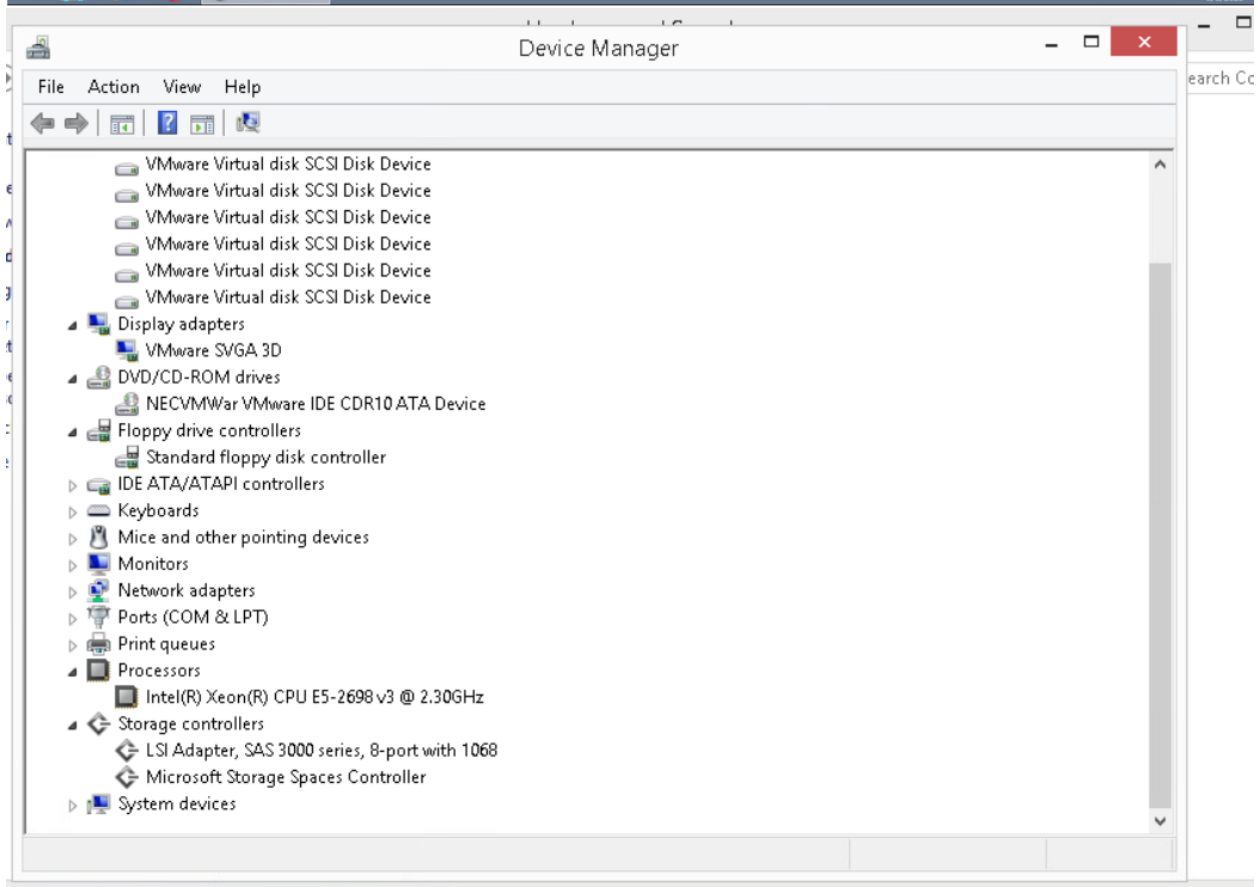
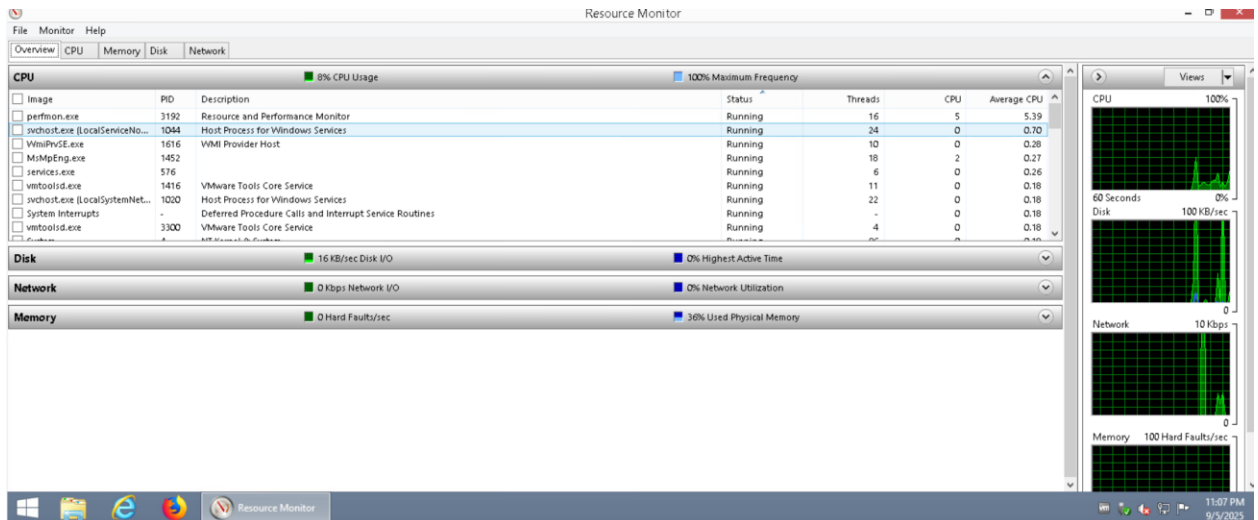
```
C:\Users\sysadmin>tasklist
```

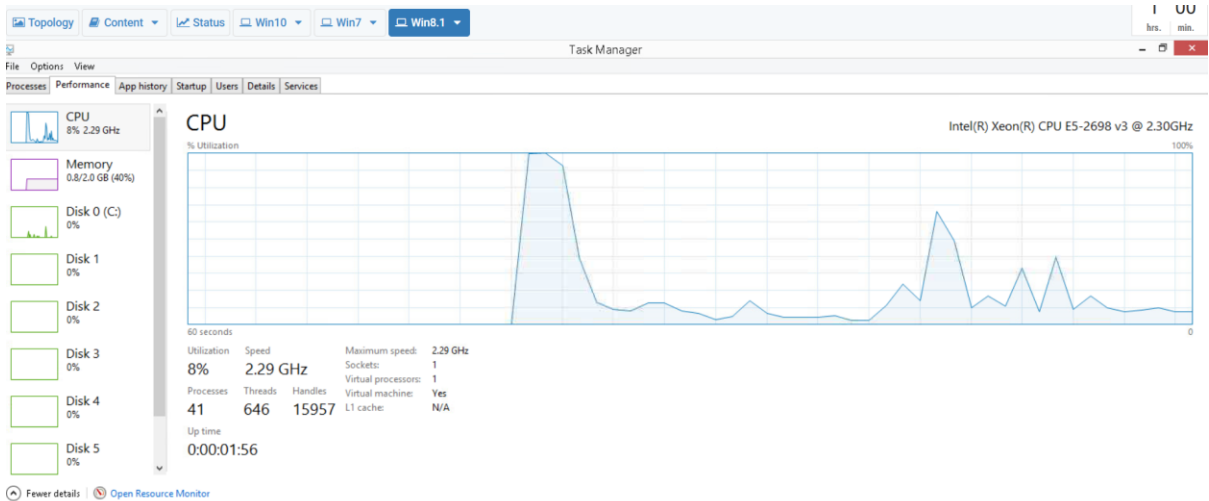
Image Name	PID	Session Name	Session#	Mem Usage
System Idle Process	0	Services	0	4 K
System	4	Services	0	320 K
smss.exe	336	Services	0	296 K
csrss.exe	424	Services	0	2,664 K
wininit.exe	488	Services	0	2,672 K
csrss.exe	496	Console	1	11,536 K
winlogon.exe	536	Console	1	3,660 K
services.exe	576	Services	0	5,696 K
lsass.exe	584	Services	0	9,824 K
svchost.exe	644	Services	0	8,972 K
svchost.exe	676	Services	0	5,892 K
dwm.exe	812	Console	1	41,504 K
vmacthlp.exe	864	Services	0	2,504 K
svchost.exe	888	Services	0	28,592 K
svchost.exe	912	Services	0	27,992 K
svchost.exe	972	Services	0	15,820 K
svchost.exe	1020	Services	0	41,916 K

C:\Users\sadmin>driverquery

Module Name	Display Name	Driver Type	Link Date
1394ohci	1394 OHCI Compliant Ho	Kernel	8/22/2013 4:38:14 AM
3ware	3ware	Kernel	4/11/2013 3:49:23 PM
ACPI	Microsoft ACPI Driver	Kernel	2/10/2018 8:02:05 AM
acpiex	Microsoft ACPIEx Drive	Kernel	8/22/2013 4:37:47 AM
acpipagr	ACPI Processor Aggrega	Kernel	8/22/2013 4:38:48 AM
AcpiPmi	ACPI Power Meter Drive	Kernel	8/22/2013 4:38:53 AM
acpitime	ACPI Wake Alarm Driver	Kernel	8/22/2013 4:38:58 AM
ADP80XX	ADP80XX	Kernel	7/12/2013 2:47:36 PM
AFD	Ancillary Function Dri	Kernel	1/10/2018 6:48:05 AM
agp440	Intel AGP Bus Filter	Kernel	2/10/2018 9:52:32 AM
ahcache	Application Compatibil	Kernel	3/19/2015 6:56:10 PM
AmdK8	AMD K8 Processor Drive	Kernel	8/22/2013 1:46:34 AM
AmdPPM	AMD Processor Driver	Kernel	8/22/2013 1:46:34 AM
amdsata	amdsata	Kernel	7/8/2013 3:54:38 PM
amdsbs	amdsbs	Kernel	12/11/2012 1:21:44 PM
amdxta	amdxta	Kernel	7/8/2013 3:45:00 PM
AppID	AppID Driver	Kernel	3/10/2018 9:50:58 AM
axpss	Adapte...	Kernel	7/8/2013 5:50:12 PM

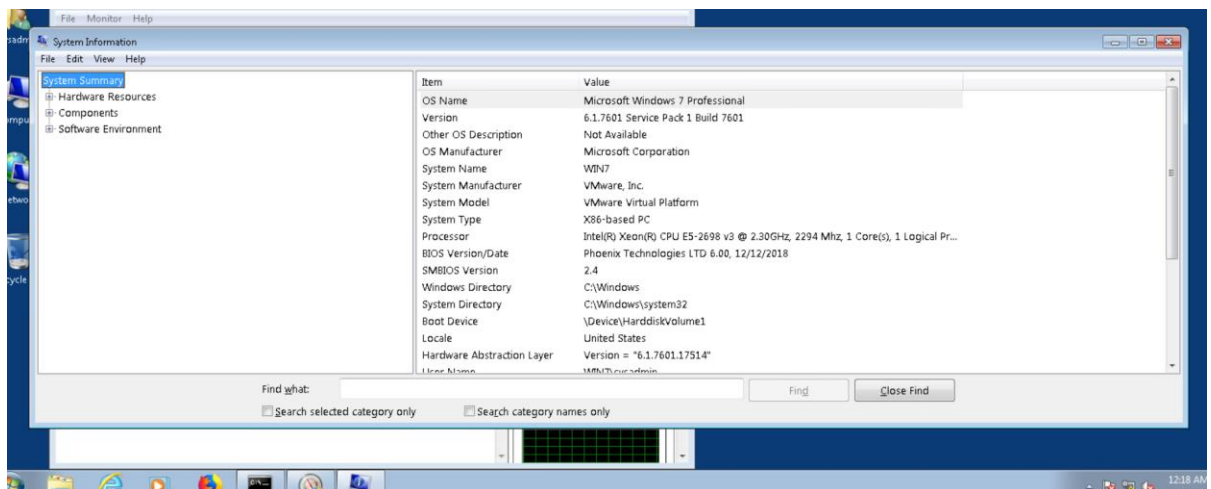


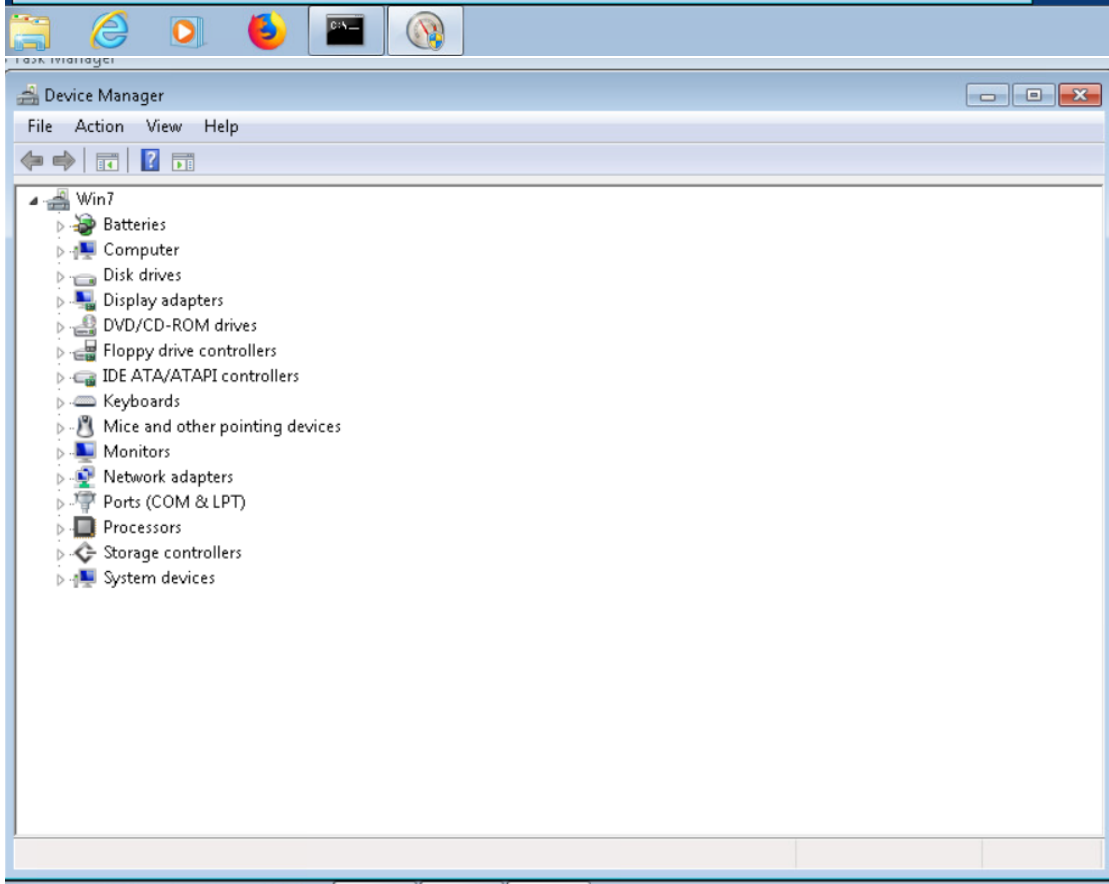
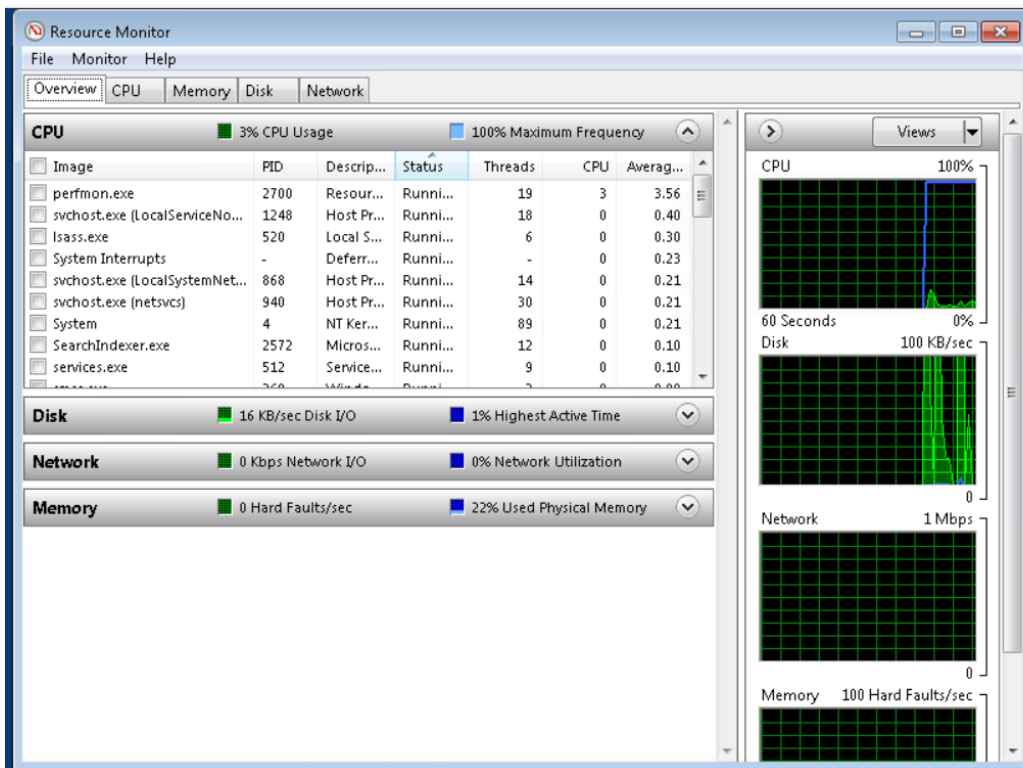


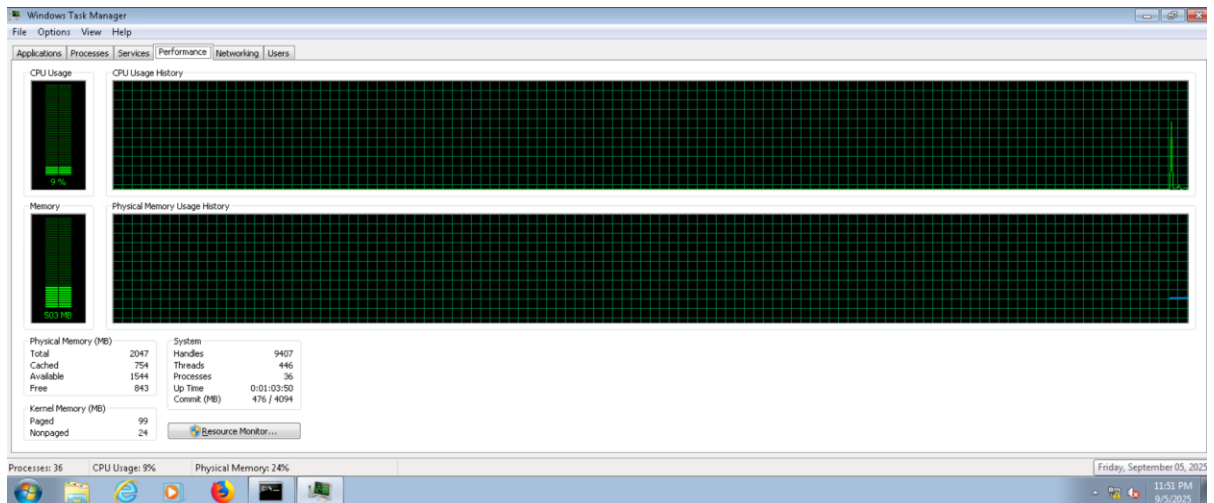


I did the 10 commands on windows 8 as you said that only have to do it on one system and screenshotted with all the running commands

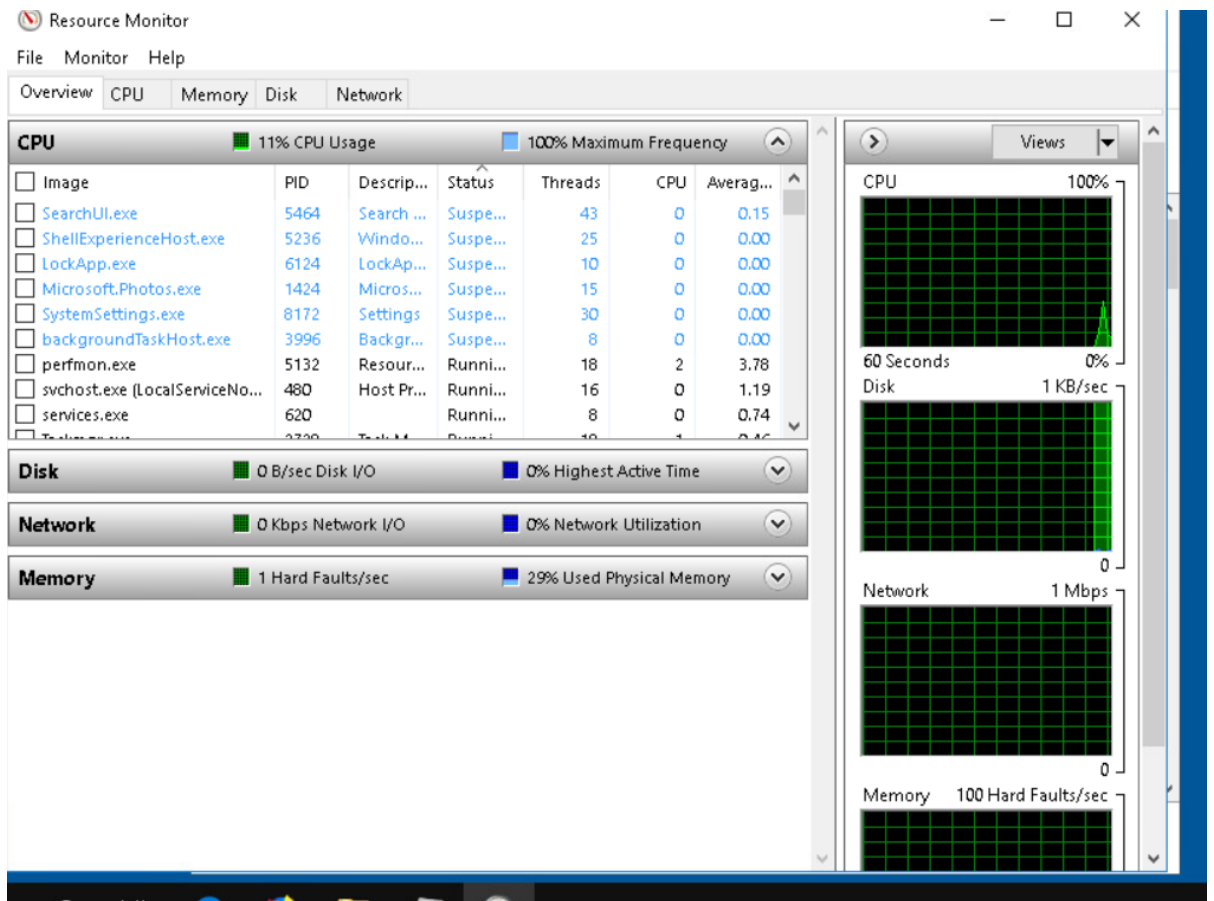
Part A Windows 7:







## Part A Windows 10:





Task Manager

File Options View

Processes Performance App history Startup Users Details Services

Name	Status	20% CPU	30% Memory	1% Disk	0% Network
<b>Apps (1)</b>					
Task Manager		16.6%	15.3 MB	0.1 MB/s	0 Mbps
<b>Background processes (34)</b>					
Antimalware Service Executable		0%	129.6 MB	0.1 MB/s	0 Mbps
Application Frame Host		0%	3.7 MB	0 MB/s	0 Mbps
COM Surrogate		0%	0.9 MB	0 MB/s	0 Mbps
COM Surrogate		0%	1.0 MB	0 MB/s	0 Mbps
COM Surrogate		0%	1.8 MB	0 MB/s	0 Mbps
COM Surrogate		0%	3.0 MB	0 MB/s	0 Mbps
Cortana (3)		0.6%	85.5 MB	0 MB/s	0 Mbps
CTF Loader		1.7%	2.6 MB	0 MB/s	0 Mbps
Device Association Framework ...		0%	2.2 MB	0 MB/s	0 Mbps
Host Process for Windows Tasks		0%	2.2 MB	0.1 MB/s	0 Mbps
Microsoft Distributed Transactio...		0%	2.1 MB	0 MB/s	0 Mbps

Fewer details End task

Device Manager

File Action View Help

- Win10
  - Batteries
  - Computer
  - Disk drives
  - Display adapters
  - DVD/CD-ROM drives
  - IDE ATA/ATAPI controllers
  - Keyboards
  - Mice and other pointing devices
  - Monitors
  - Network adapters
  - Print queues
  - Processors
  - Software devices
  - Storage controllers
  - System devices

System Information

File Edit View Help

System Summary

Item	Value
OS Name	Microsoft Windows 10 Pro
Version	10.0.17134 Build 17134
Other OS Description	Not Available
OS Manufacturer	Microsoft Corporation
System Name	WIN10
System Manufacturer	VMware, Inc.
System Model	VMware Virtual Platform
System Type	x64-based PC
System SKU	
Processor	Intel(R) Xeon(R) CPU E5-2698 v3 @ 2.30GHz, 2295 Mhz, 1 Core(s), 1 Logical Pr...
Processor	Intel(R) Xeon(R) CPU E5-2698 v3 @ 2.30GHz, 2295 Mhz, 1 Core(s), 1 Logical Pr...
BIOS Version/Date	Phoenix Technologies LTD 6.00, 12/12/2018
SMBIOS Version	2.4
Embedded Controller Version	0.00
BIOS Mode	Legacy
BaseBoard Manufacturer	Intel Corporation
BaseBoard Model	Not Available

Find what: Search selected category only Search category names only Find Close Find

## Part B: Log on to "EACH" system in [NISGTC Linux+ Series 1, Lab 1](#)

- Research 10 commands that can be run from the Linux Terminal and run them on "EACH" system

- **CentOs**

```
[sysadmin@localhost etc]$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
uucp:x:10:14:uucp:/var/spool/uucp:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
gopher:x:13:30:gopher:/var/gopher:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:99:99:Nobody:/:/sbin/nologin
dbus:x:81:81:System message bus:/:/sbin/nologin
avahi-autoipd:x:170:170:Avahi IPv4LL Stack:/var/lib/avahi-autoipd:/sbin/nologin
vcsa:x:69:69:virtual console memory owner:/dev:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/cache/rpcbind:/sbin/nologin
rtkit:x:499:497:RealtimeKit:/proc:/sbin/nologin
ntp:x:38:38::/etc/ntp:/sbin/nologin
saslauth:x:498:76:"Saslauthd user"/var/empty/saslauth:/sbin/nologin
postfix:x:89:89::/var/spool/postfix:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
haldaemon:x:68:68:HAL daemon:/:/sbin/nologin
pulse:x:497:496:PulseAudio System Daemon:/var/run/pulse:/sbin/nologin
gdm:x:42:42::/var/lib/gdm:/sbin/nologin
rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin
nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin
abrt:x:173:173::/etc/abrt:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/var/empty/ssh:/sbin/nologin
```

etc: bash

```
named:x:25:25:named:/var/named:/sbin/nologin
[sysadmin@localhost etc]$ ls -l
bash: ls: command not found
[sysadmin@localhost etc]$ cd /etc
[sysadmin@localhost etc]$ cd /etc
[sysadmin@localhost etc]$
```

```
[sysadmin@localhost etc]$ yum
Loaded plugins: downloadonly, fastestmirror, refresh-packagekit, security
You need to give some command
Usage: yum [options] COMMAND

List of Commands:

check                Check for problems in the rpmdb
check-update         Check for available package updates
clean               Remove cached data
deplist             List a package's dependencies
distribution-synchronization Synchronize installed packages to the latest available versions
downgrade           downgrade a package
erase               Remove a package or packages from your system
groupinfo           Display details about a package group
groupinstall        Install the packages in a group on your system
grouplist           List available package groups
groupremove         Remove the packages in a group from your system
help               Display a helpful usage message
history             Display, or use, the transaction history
info               Display details about a package or group of packages
install            Install a package or packages on your system
list               List a package or groups of packages
load-transaction    load a saved transaction from filename
makecache           Generate the metadata cache
provides            Find what package provides the given value
reinstall           reinstall a package
repolist            Display the configured software repositories
resolvedep          Determine which package provides the given dependency
search             Search package details for the given string
shell              Run an interactive yum shell
update             Update a package or packages on your system
update-minimal      Works like update, but goes to the 'newest' package match which fixes a problem that affects your system
updateinfo          Acts on repository update information
upgrade            Update packages taking obsoletes into account
version            Display a version for the machine and/or available repos.
```

```
[sysadmin@localhost etc]$ grep
Usage: grep [OPTION]... PATTERN [FILE]...
Try 'grep --help' for more information.
[sysadmin@localhost etc]$ grep root /etc/passwd
root:x:0:0:root:/root:/bin/bash
operator:x:11:0:operator:/root:/sbin/nologin
[sysadmin@localhost etc]$
```

etc: bash

```
operator:x-110-operator:7 root:/sbin/motdlogin
[sysadmin@localhost etc]$ top
top - 23:34:05 up 32 min, 2 users, load average: 0.00, 0.00, 0.00
Tasks: 146 total, 1 running, 145 sleeping, 0 stopped, 0 zombie
Cpu(s): 2.3%us, 0.7%sy, 0.0%ni, 97.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Mem: 1940044k total, 599172k used, 1340872k free, 30164k buffers
Swap: 4161528k total, 0k used, 4161528k free, 348000k cached
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
2238	root	20	0	42220	26m	7476	S	1.0	1.4	0:06.43	Xorg
3089	sysadmin	20	0	154m	25m	18m	S	0.7	1.3	0:01.40	konsole
3154	sysadmin	20	0	2684	1132	872	R	0.7	0.1	0:00.11	top
20	root	20	0	0	0	0	S	0.3	0.0	0:01.53	ata/0
1379	root	20	0	38460	3928	3256	S	0.3	0.2	0:01.47	vmtoolsd
1	root	20	0	2872	1416	1200	S	0.0	0.1	0:01.22	init
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
4	root	20	0	0	0	0	S	0.0	0.0	0:00.00	ksoftirqd/0
5	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
6	root	RT	0	0	0	0	S	0.0	0.0	0:00.01	watchdog/0
7	root	20	0	0	0	0	S	0.0	0.0	0:01.40	events/0
8	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cgroup
9	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khelper
10	root	20	0	0	0	0	S	0.0	0.0	0:00.00	netns
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	async/mgr
12	root	20	0	0	0	0	S	0.0	0.0	0:00.00	pm
13	root	20	0	0	0	0	S	0.0	0.0	0:00.00	sync_supers
14	root	20	0	0	0	0	S	0.0	0.0	0:00.00	bdi-default
15	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kintegrityd/0
16	root	20	0	0	0	0	S	0.0	0.0	0:00.29	kblockd/0

etc: top

```
[sysadmin@localhost ~]$ chmod
chmod: missing operand
Try 'chmod --help' for more information.
[sysadmin@localhost ~]$ chmod +x script.sh
chmod: cannot access 'script.sh': No such file or directory
[sysadmin@localhost ~]$
```

sysadmin : bash

```
[sysadmin@localhost ~]$ rm
rm: missing operand
Try 'rm --help' for more information.
[sysadmin@localhost ~]$ rm file.txt
rm: cannot remove 'file.txt': No such file or directory
[sysadmin@localhost ~]$
```

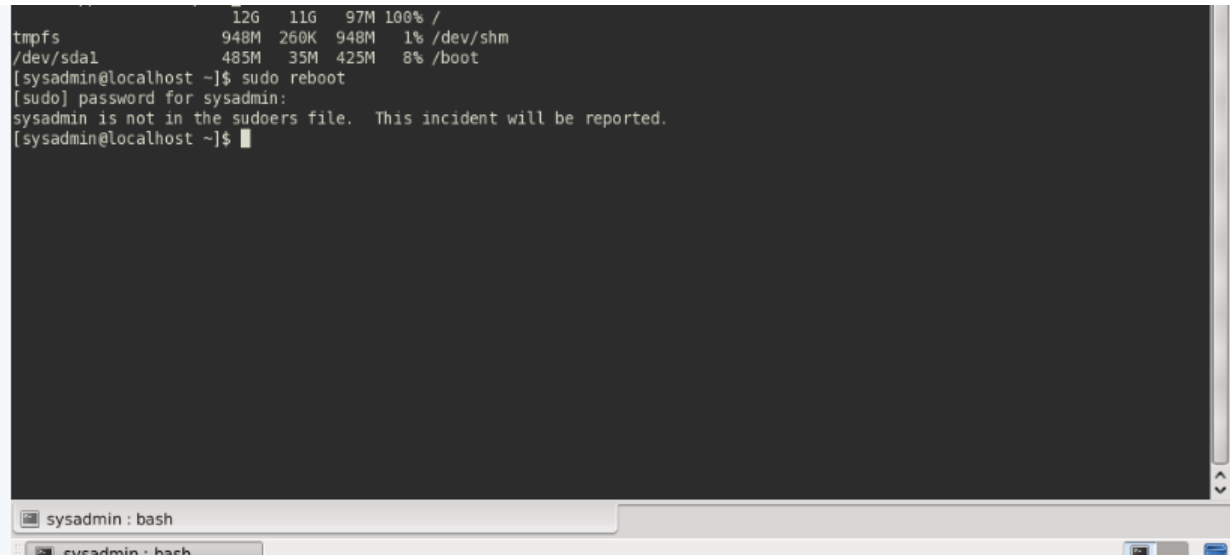
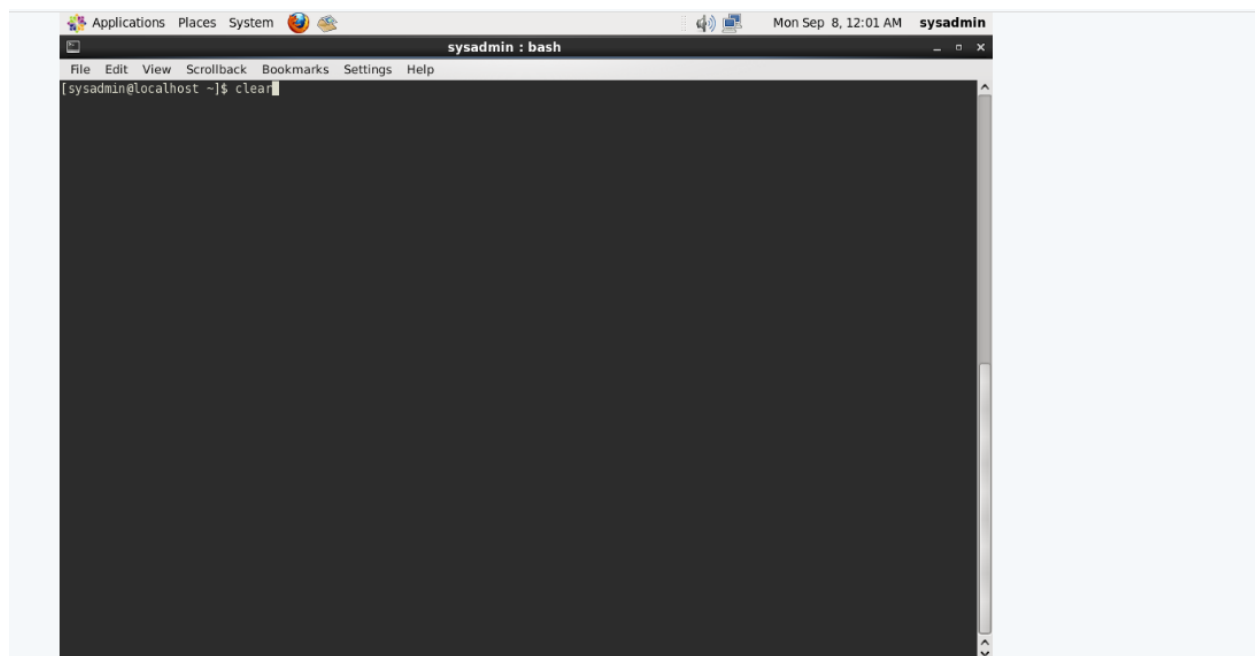
```
rm: cannot remove 'file.txt': No such file or directory
[sysadmin@localhost ~]$ df -h

```

Filesystem	Size	Used	Avail	Use%	Mounted on
/dev/mapper/VolGroup-lv_root	12G	11G	97M	100%	/
tmpfs	948M	260K	948M	1%	/dev/shm
/dev/sda1	485M	35M	425M	8%	/boot

```
[sysadmin@localhost ~]$
```

```
tmpfs          12G  11G  97M 100% /
/dev/sda1      948M 260K 948M  1% /dev/shm
/dev/sda1      485M  35M 425M  8% /boot
[sysadmin@localhost ~]$ sudo reboot
[sudo] password for sysadmin:
sysadmin is not in the sudoers file. This incident will be reported.
[sysadmin@localhost ~]$
```

A terminal window with a dark background. The top part shows the output of the 'df' command, displaying disk usage for tmpfs, /dev/sda1, and /dev/shm. Below that, the user 'sysadmin' attempts to run 'sudo reboot'. The system prompts for a password, which is entered. However, an error message appears: 'sysadmin is not in the sudoers file. This incident will be reported.' The prompt returns to the user's shell.

- Fedora Workstation

```
-o[oneline] | -t[imestamp] | -b[atch] [filename] |  
-rc[vbuf] [size]]  
[sysadmin@localhost ~]$ ping www.google.com
```

```
[sysadmin@localhost ~]$ cat /etc/passwd  
root:x:0:0:root:/root:/bin/bash  
bin:x:1:1:bin:/bin:/sbin/nologin  
daemon:x:2:2:daemon:/sbin:/sbin/nologin  
adm:x:3:4:adm:/var/adm:/sbin/nologin  
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin  
sync:x:5:0:sync:/sbin:/bin/sync  
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown  
halt:x:7:0:halt:/sbin:/sbin/halt  
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin  
uucp:x:10:14:uucp:/var/spool/uucp:/sbin/nologin  
operator:x:11:0:operator:/root:/sbin/nologin  
games:x:12:100:games:/usr/games:/sbin/nologin  
gopher:x:13:30:gopher:/var/gopher:/sbin/nologin  
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin  
nobody:x:99:99:Nobody:./:/sbin/nologin  
usbmuxd:x:113:113:usbmuxd user:./:/sbin/nologin  
smolt:x:999:999:Smolt:/usr/share/smolt:/sbin/nologin  
avahi-autoipd:x:170:170:Avahi IPv4LL Stack:/var/lib/avahi-autoipd:/sbin/nologin  
dbus:x:81:81:System message bus:./:/sbin/nologin  
abrt:x:173:173:./etc/abrt:/sbin/nologin  
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin  
colord:x:998:996:User for colord:/var/lib/colord:/sbin/nologin  
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin  
pulse:x:997:995:PulseAudio System Daemon:/var/run/pulse:/sbin/nologin  
openvpn:x:996:993:OpenVPN:/etc/openvpn:/sbin/nologin  
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin  
mysql:x:27:27:MySQL Server:/var/lib/mysql:/bin/bash  
nm-openconnect:x:995:992:NetworkManager user for OpenConnect:./:/sbin/nologin  
sasauth:x:994:991:"Sasauthd user":/run/sasauthd:/sbin/nologin  
mailnull:x:47:47:./var/spool/mqueue:/sbin/nologin  
smmsp:x:51:51:./var/spool/mqueue:/sbin/nologin  
sshd:x:74:74:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin  
rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin  
nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin  
chrony:x:993:990:./var/lib/chrony:/sbin/nologin  
tcpdump:x:72:72:./:/sbin/nologin
```

~ : bash



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Topology

Content

Status

Fedora Workstation

Ubuntu Workstation

CentOS Server

Ub

```
~: bash
File Edit View Bookmarks Settings Help
-l[oops] { maximum-addr-flush-attempts } |
-o[ne]line | -t[imestamp] | -b[at]ch [filename] |
-rc[vbuf] [size]}
[sysadmin@localhost ~]$ ping www.google.com
ping: unknown host www.google.com
[sysadmin@localhost ~]$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
uucp:x:10:14:uucp:/var/spool/uucp:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
gopher:x:13:30:gopher:/var/gopher:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:99:99:Nobody:./:/sbin/nologin
usbmuxd:x:113:113:usbmuxd user:./:/sbin/nologin
smolt:x:999:999:Smolt:/usr/share/smolt:/sbin/nologin
avahi-autoipd:x:170:170:Avahi IPv4LL Stack:/var/lib/avahi-autoipd:/sbin/nologin
dbus:x:81:81:System message bus:./:/sbin/nologin
abrt:x:173:173:./etc/abrt:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin
colord:x:998:996:User for colord:/var/lib/colord:/sbin/nologin
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin
pulse:x:997:995:PulseAudio System Daemon:/var/run/pulse:/sbin/nologin
openvpn:x:996:993:OpenVPN:/etc/openvpn:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
mysql:x:27:27:MySQL Server:/var/lib/mysql:/bin/bash
nm-openconnect:x:995:992:NetworkManager user for OpenConnect:./:/sbin/nologin
sasauth:x:994:991:"Sasauthd user":/run/sasauthd:/sbin/nologin
mailnull:x:47:47:./var/spool/mqueue:/sbin/nologin
smb:x:51:51:./var/spool/mqueue:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/var/empty/ssh:/sbin/nologin
rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin
nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin
chrony:x:993:990:./var/lib/chrony:/sbin/nologin
tcpdump:x:72:72:./:/sbin/nologin
sysadmin:x:1000:1000:sysadmin:/home/sysadmin:/bin/bash
[sysadmin@localhost ~]$ clear
```



```
File Edit View Bookmarks Settings Help
[sysadmin@localhost ~]$ sudo reboot

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

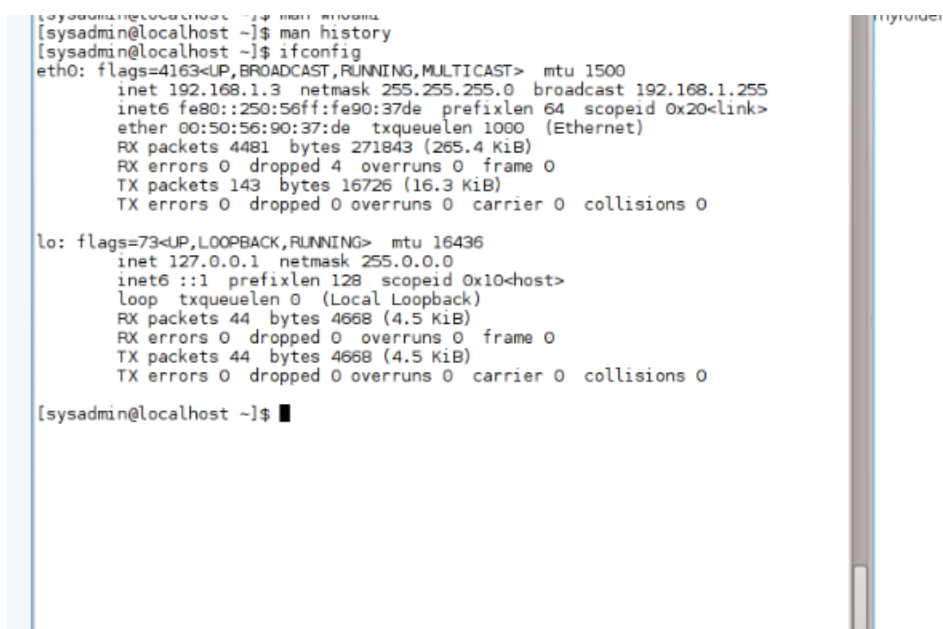
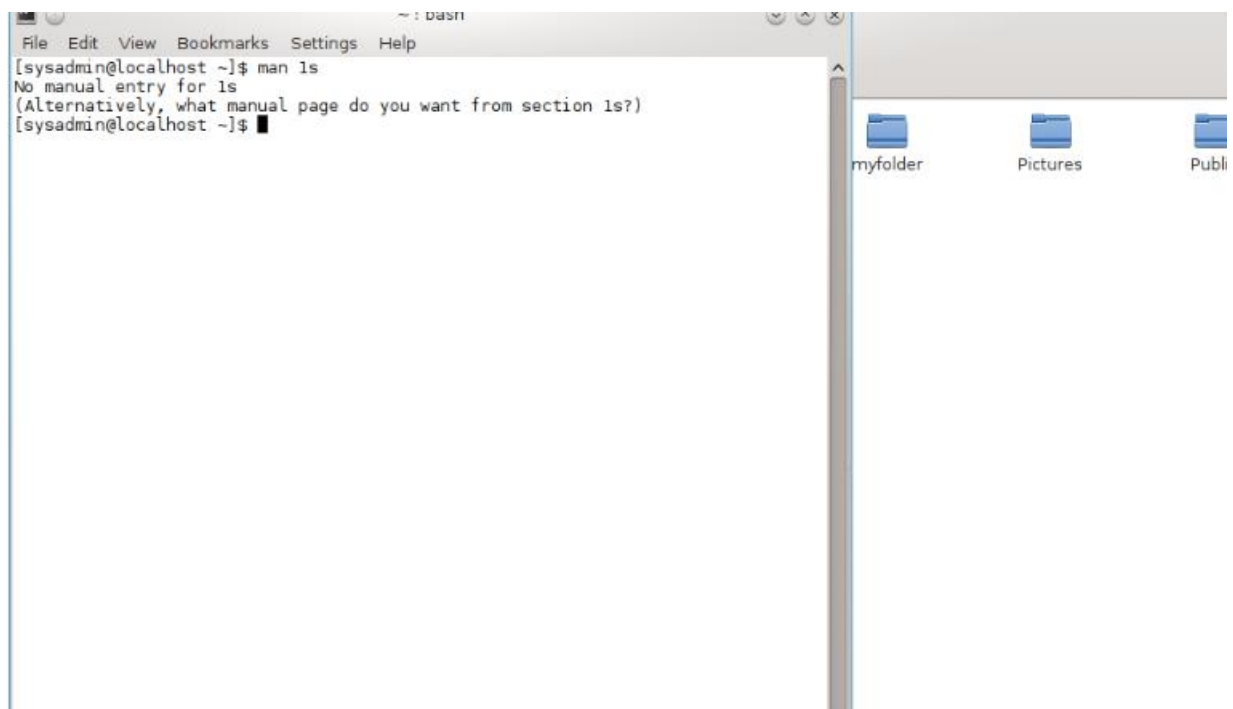
    #1) Respect the privacy of others.
    #2) Think before you type.
    #3) With great power comes great responsibility.

[sudo] password for sysadmin:
sysadmin is not in the sudoers file. This incident will be reported.
[sysadmin@localhost ~]$
```

```
sysadmin is not in the sudoers file. This incident will be reported.
[sysadmin@localhost ~]$ history
 1 su
 2 ifconfig
 3 cd /etc/sysconfig
 4 su
 5 cd /etc/sysconfig/network-scripts/
 6 vim
 7 vi ifcfg-eth0
 8 cat ifcfg-eth0
 9 shutdown -h now
10 ifconfig
11 ping 24.225.0.240
12 ping ibm.com
13 dig
14 dig ibm.com
15 cd /etc
16 ls
17 vi resolv.conf
18 ping 192.168.246.71
19 route
20 ping 209.114.126.254
```

```
or history
[sysadmin@localhost ~]$ whoami
sysadmin
[sysadmin@localhost ~]$
```

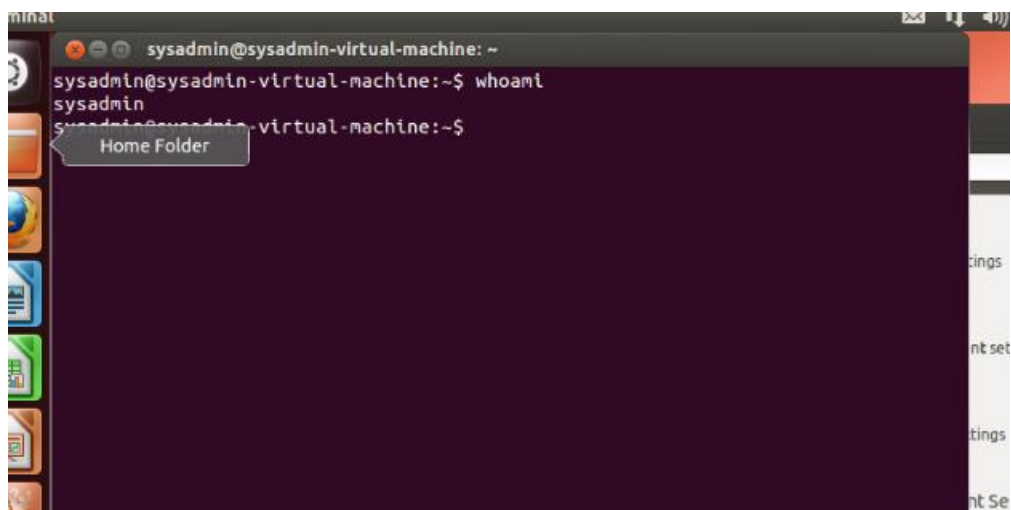
```
[sysadmin@localhost ~]$ echo "Hello World"
Hello World
[sysadmin@localhost ~]$
```



```
TX packets 44 bytes 4008 (4.5 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[sysadmin@localhost ~]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
rootfs          12G   3.2G  8.3G  28% /
devtmpfs        1001M    0 1001M   0% /dev
tmpfs           1009M   80K 1009M   1% /dev/shm
tmpfs           1009M  872K 1009M   1% /run
/dev/mapper/vg-lv_root 12G   3.2G  8.3G  28% /
tmpfs           1009M    0 1009M   0% /sys/fs/cgroup
tmpfs           1009M    0 1009M   0% /media
/dev/sdal        497M   60M  413M  13% /boot
[sysadmin@localhost ~]$
```

- Ubuntu Workstation



```
sysadmin@sysadmin-virtual-machine:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 00:50:56:90:97:94
          inet addr:192.168.1.5  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::250:56ff:fe90:9794/64  Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3175 errors:0 dropped:11 overruns:0 frame:0
          TX packets:4881 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:218946 (218.9 KB)  TX bytes:284751 (284.7 KB)
          Interrupt:18 Base address:0x2024

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:3542 errors:0 dropped:0 overruns:0 frame:0
          TX packets:3542 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:281649 (281.6 KB)  TX bytes:281649 (281.6 KB)

sysadmin@sysadmin-virtual-machine:~$
```

```
sysadmin@sysadmin-virtual-machine:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda1        15G   2.8G   12G   20% /
udev             494M   4.0K  494M    1% /dev
tmpfs            201M   704K   200M    1% /run
none             5.0M    0    5.0M    0% /run/lock
none             501M  152K   501M    1% /run/shm

sysadmin@sysadmin-virtual-machine:~$
```

```
sysadmin@sysadmin-virtual-machine:~$ whoami
sysadmin
sysadmin@sysadmin-virtual-machine:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 00:50:56:90:97:94
          inet addr:192.168.1.5  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::250:56ff:fe90:9794/64  Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3475 errors:0 dropped:11 overruns:0 frame:0
          TX packets:5349 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:238388 (238.3 KB)  TX bytes:309739 (309.7 KB)
          Interrupt:18 Base address:0x2024

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:3814 errors:0 dropped:0 overruns:0 frame:0
          TX packets:3814 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:303737 (303.7 KB)  TX bytes:303737 (303.7 KB)

sysadmin@sysadmin-virtual-machine:~$ clear
```

```
sysadmin@sysadmin-virtual-machine:~$ history
1  su
2  sudo su
3  su
4  sudo su
5  su
6  sudo su
7  ping 24.225.0.240
8  ping 192.168.1.1
9  ping 192.168.1.1
10 dpkg-query -l vim
11 dpkg-query -s gedit
12 dpkg-query -s gedit
13 dpkg-query -S /usr/bin/strace
14 dpkg-query -L strace
15 apt-get download vim
16 cd /etc/apt/
17 ls
18 vi sources.list
19 sudo su
20 whoami
```

```
26 ifconfig
27 clear
28 history
sysadmin@sysadmin-virtual-machine:~$ chkdsk
chkdsk: command not found
sysadmin@sysadmin-virtual-machine:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin:/bin/sh
sys:x:3:3:sys:/dev:/bin/sh
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/bin/sh
man:x:6:12:man:/var/cache/man:/bin/sh
lp:x:7:7:lp:/var/spool/lpd:/bin/sh
mail:x:8:8:mail:/var/mail:/bin/sh
news:x:9:9:news:/var/spool/news:/bin/sh
uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
proxy:x:13:13:proxy:/bin:/bin/sh
www-data:x:33:33:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
list:x:38:38:Mailing List Manager:/var/list:/bin/sh
irc:x:39:39:ircd:/var/run/ircd:/bin/sh
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
```

```
sysadmin@sysadmin-virtual-machine:~$ echo "Hello Gurjot"
Hello Gurjot
sysadmin@sysadmin-virtual-machine:~$
```

Printing  
...figure printers

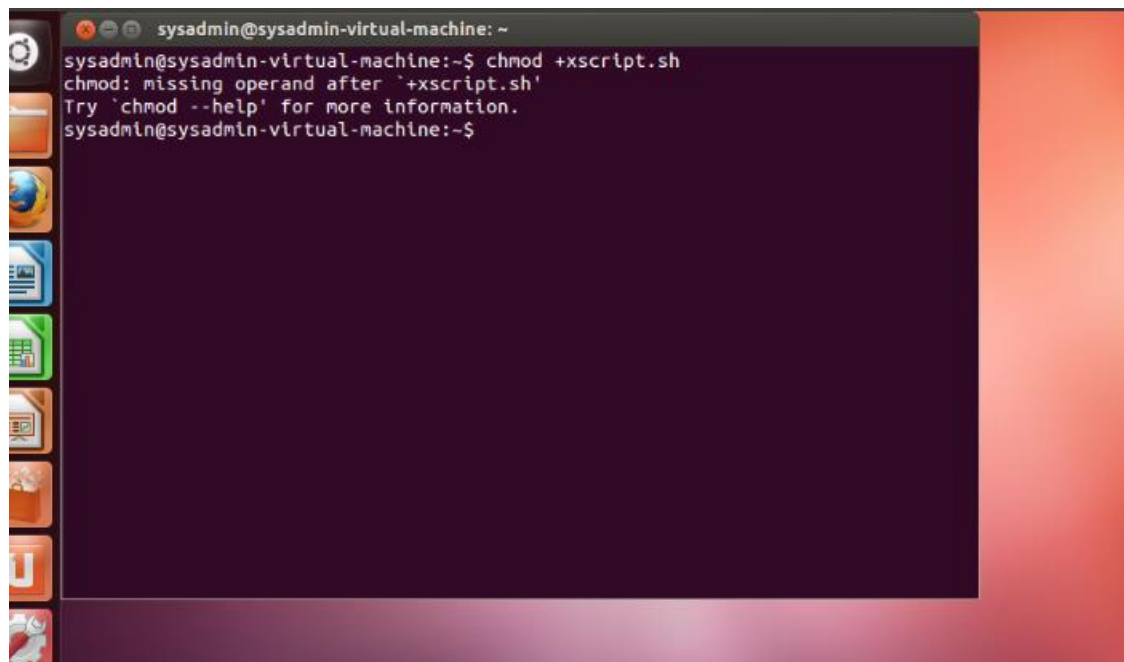
Privacy  
...acy and Activity Manager

Sound  
...sound events

```
sysadmin@sysadmin-virtual-machine: ~
ECHO(1) User Commands ECHO(1)
NAME
    echo - display a line of text
SYNOPSIS
    echo [SHORT-OPTION]... [STRING]...
    echo LONG-OPTION
DESCRIPTION
    Echo the STRING(s) to standard output.
    -n      do not output the trailing newline
    -e      enable interpretation of backslash escapes
    -E      disable interpretation of backslash escapes (default)
    --help  display this help and exit
    --version
            output version information and exit
manual page echo(1) line 1 (press h for help or q to quit)
```

```
sysadmin@sysadmin-virtual-machine: ~
sysadmin@sysadmin-virtual-machine:~$ sudo reboot
```





- Ubuntu Server

```
sysadmin@ubuntusrv:~$ whoami
sysadmin
sysadmin@ubuntusrv:~$

sysadmin@ubuntusrv:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/mapper/ubuntusrv-root 15G  1.9G   13G  14% /
udev            494M  4.0K  494M   1% /dev
tmpfs           201M  224K  201M   1% /run
none            5.0M   0     5.0M   0% /run/lock
none            501M   0     501M   0% /run/shm
/dev/sda1       228M   24M  192M  12% /boot
sysadmin@ubuntusrv:~$

ver: Command not found
sysadmin@ubuntusrv:~$ echo "Hello Gurjot"
Hello Gurjot
sysadmin@ubuntusrv:~$ _
```

```
4 apt-get -d install vim
5 ifconfig
6 apt-get -d update
7 sudo su
8 ping 24.225.0.240
9 vim
10 cd /etc/network
11 vi interfaces
12 sudo su
13 cd /etc/network
14 sudo su
15 sudo -i
16 exit
17 sudo -i
18 exit
19 sudo -i
20 exit
21 sudo -i
22 exit
23 whoami
24 df -h
25 ver
26 echo "Hello Gurjot"
27 history
sysadmin@ubuntusrv:~$ history _
```

```
sysadmin@ubuntusrv:~$ clear_
```



```
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin:/bin/sh
sys:x:3:3:sys:/dev:/bin/sh
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/bin/sh
man:x:6:12:man:/var/cache/man:/bin/sh
lp:x:7:7:lp:/var/spool/lpd:/bin/sh
mail:x:8:8:mail:/var/mail:/bin/sh
news:x:9:9:news:/var/spool/news:/bin/sh
uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
proxy:x:13:13:proxy:/bin:/bin/sh
www-data:x:33:33:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
list:x:38:38:Mailing List Manager:/var/list:/bin/sh
irc:x:39:39:ircd:/var/run/ircd:/bin/sh
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
libuuid:x:100:101::/var/lib/libuuid:/bin/sh
syslog:x:101:103::/home/syslog:/bin/false
messagebus:x:102:105::/var/run/dbus:/bin/false
whoopsie:x:103:106::/nonexistent:/bin/false
landscape:x:104:109::/var/lib/landscape:/bin/false
sshd:x:105:65534::/var/run/sshd:/usr/sbin/nologin
sysadmin:x:1000:1000:sysadmin,,,:/home/sysadmin:/bin/bash
susadmin@ubuntuusrv:~$
```

```
ipconfig: command not found
sysadmin@ubuntuusrv:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 00:50:56:90:36:ec
          inet addr:192.168.1.4  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::250:56ff:fe90:36ec/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:7213 errors:0 dropped:23 overruns:0 frame:0
          TX packets:6 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:432799 (432.7 KB)  TX bytes:468 (468.0 B)
          Interrupt:18 Base address:0x2000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:40 errors:0 dropped:0 overruns:0 frame:0
          TX packets:40 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:3008 (3.0 KB)  TX bytes:3008 (3.0 KB)
```

## NAME

ifconfig - configure a network interface

## SYNOPSIS

```
ifconfig [-v] [-a] [-s] [interface]
ifconfig [-v] interface [aftype] options | address ...
```

## DESCRIPTION

Ifconfig is used to configure the kernel-resident network interfaces. It is used at boot time to set up interfaces as necessary. After that, it is usually only needed when debugging or when system tuning is needed.

If no arguments are given, ifconfig displays the status of the currently active interfaces. If a single interface argument is given, it displays the status of the given interface only; if a single -a argument is given, it displays the status of all interfaces, even those that are down. Otherwise, it configures an interface.

## Address Families

If the first argument after the interface name is recognized as the name of a supported address family, that address family is used for

Manual page ifconfig(8) line 1 (press h for help or q to quit)

```
[ 1.700811] scsi target2:0:0: Domain Validation skipping write tests
[ 1.700892] scsi target2:0:0: Ending Domain Validation
[ 1.700981] scsi target2:0:0: FAST-40 WIDE SCSI 80.0 MB/s ST (25 ns, offset 1
27)
[ 1.703345] sd 2:0:0:0: [sda] 33554432 512-byte logical blocks: (17.1 GB/16.0
GiB)
[ 1.703487] sd 2:0:0:0: [sda] Write Protect is off
[ 1.703577] sd 2:0:0:0: [sda] Cache data unavailable
[ 1.703647] sd 2:0:0:0: [sda] Assuming drive cache: write through
[ 1.703851] sd 2:0:0:0: [sda] Cache data unavailable
[ 1.703921] sd 2:0:0:0: [sda] Assuming drive cache: write through
[ 1.704349] sda: sda1 sda2 < sda5 >
[ 1.704599] sd 2:0:0:0: [sda] Cache data unavailable
[ 1.704670] sd 2:0:0:0: [sda] Assuming drive cache: write through
[ 1.704746] sd 2:0:0:0: [sda] Attached SCSI disk
[ 1.706610] sd 2:0:0:0: Attached scsi generic sg1 type 0
Begin: Running /scripts/local-premount ... done.
[ 1.891471] EXT4-fs (dm-0): mounted filesystem with ordered data mode. Opts:
(null)
Begin: Running /scripts/local-bottom ... done.
done.
Begin: Running /scripts/init-bottom ... done.
[ 2.244999] udevd[337]: starting version 175
[ 2.356246] piix4_smbus 0000:00:07.3: Host SMBus controller not enabled!
```

```
sysadmin@ubuntu:~$ ncdu /
The program 'ncdu' is currently not installed. You can install it by typing:
sudo apt-get install ncdu
You will have to enable the component called 'universe'
sysadmin@ubuntu:~$
```

## Part C:

- On the computer that you are doing this assignment on, gather hardware information:
  - if you are using a MAC, research how to get hardware info (GUI and command line)
  - if you are using Windows, use PowerShell to get your hardware info (research)

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\gurjo> Get-CimInstance Win32_PhysicalMemory | Select-Object Manufacturer, Capacity, Speed, PartNumber

Manufacturer      Capacity Speed PartNumber
-----
Samsung           17179869184 7500 K3KL9L90CM-MGCT
Samsung           17179869184 7500 K3KL9L90CM-MGCT

PS C:\Users\gurjo> Get-CimInstance Win32_PhysicalMemory | Select-Object Manufacturer, Capacity, Speed, PartNumber

Manufacturer      Capacity Speed PartNumber
-----
Samsung           17179869184 7500 K3KL9L90CM-MGCT
Samsung           17179869184 7500 K3KL9L90CM-MGCT

PS C:\Users\gurjo> Get-CimInstance Win32_Processor | Select-Object Name, NumberOfCores, NumberOfLogicalProcessors, MaxClockSpeed

Name                NumberOfCores NumberOfLogicalProcessors MaxClockSpeed
-----
Intel(R) Core(TM) 7 150U           10                12            1800

Name                AdapterRAM DriverVersion
-----
Intel(R) Graphics 2147479552 32.0.101.6790

PS C:\Users\gurjo> Get-CimInstance Win32_BaseBoard | Select-Object Manufacturer, Product, SerialNumber

Manufacturer Product SerialNumber
-----
HP           8CB4      PTQRCL3MYL7FXD

PS C:\Users\gurjo> Get-CimInstance Win32_NetworkAdapter | Where-Object {$_.PhysicalAdapter -eq $true} | Select-Object Name, MACAddress, Speed

Name                MACAddress      Speed
-----
Intel(R) Wi-Fi 6E AX211 160MHz 9C:67:D6:E5:9F:F2 292500000
VirtualBox Host-Only Ethernet Adapter 0A:00:27:00:00:0B 1000000000

PS C:\Users\gurjo> Get-CimInstance Win32_BIOS | Select-Object Manufacturer, SMBIOSBIOSVersion, ReleaseDate

Manufacturer SMBIOSBIOSVersion ReleaseDate
-----
Insyde       F.30              4/9/2025 5:00:00 PM
```

- Add notes and screenshots
- Can you reproduce the lab with the questions and your screenshots with notes?
- If your boss asked you for this, did you provide the answer with context?

