CentOS General Use

**Network**

Enter # ifconfig | Displays IP addresses and all network interfaces

Enter # ip addr show | Displays IP addresses of all network interfaces

Enter # ping host | Used to determine connection between systems

Enter # whois domain | Get domain information

Enter # wget file | Install file link

Enter # curl -O | Install file link

nmap:

Enter # nmap localhost | Scans open ports on local machine

Enter # nmap 10.254.0.0/24 > nmapscan.txt | Scans network and inputs into nmapscan.txt

Enter # nmap x.x.x.x |

Enter # netstat -tulnp | Lists open ports with process ID, protocol, and state

Enter # nmap -sP 192.168.1.0/24 | Pings every IP in range

Enter # namp -sP -sV 192.168.1.0/24 | Pings every IP in range and looks for services

No Internet Connection?

Enter # ifdown eth0 | Turns off adapter.

Enter # ifup eth0 | Turns on adapter.

Enter # dhclient eth0 | Finds available IP address on network using DHCP (eth0 varies).

Enter # sytemctl restart networking | Restarts network.

Enter # ping 8.8.8.8 | If get replies then connection is working.

**File Commands**

Enter # ls | List directories and files

Enter # ls -la | List directories, files and hidden files

Enter # cd /directory | Change directories

Enter # cd .. | Go back to previous directory

Enter # pwd | Show current directory

Enter # mkdir directory | Create directory

Enter # rm file | Remove file

Enter # rm -f file | Force remove file

Enter # rm -r directory | Delete directory

Enter # rm -rf directory | Force delete directory

Enter # cp file1 file2 | Copy file1 to file2

Enter # mv file1 file2 | Rename file1 to file2

Enter # mv directory1 directory2 | Rename directory

Enter # touch file | Create or update a file

Enter # cat > file | Places standard input into file

Enter # head file | Output the first lines of file

Enter # tail file | Output the last lines of file

Enter # tail -f file | Output the file as it grows

Enter # vi file.txt | Edit a file

**Transfer file from Windows to Linux:**

Enter # pscp C:\Users\username\Desktop\example.txt user@host:/home/sysadmin

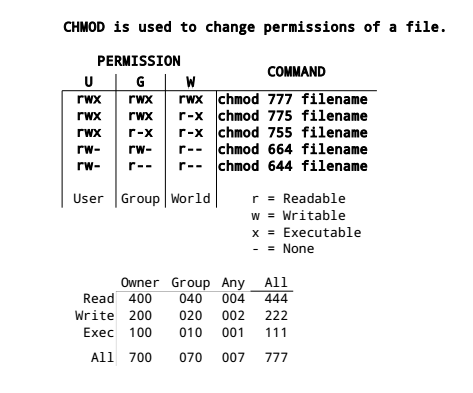
**Transfer folder and its content from Windows to Linux:**

Enter # pscp -r C:\Users\username\Desktop user@host:/home/sysadmin

**File Permissions and ownership**

Enter # chmod 777 file | Changes permissions to file

Enter # chown user file.txt | Changes file ownership

Table

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**Searching**

Enter # grep pattern files | Search for pattern in files

Enter # grep -r pattern directory | Search recursively for pattern in directory

Enter # command | grep pattern | Search for pattern in the output of command

Enter # locate file | Find all instances of file

Enter # cat filename.txt | grep word | Displays the file and highlights selected word

Enter # find /home -name “index” | Finds files name that begins with index in home folder

Enter # find /home -size +10000k | Finds files greater than 10000k in home folder

**Compression**

Enter # tar cf file.tar files | Create a file.tar containing files

Enter # tar xf file.tar | Extract the files from file.tar

Enter # tar czf file.tar.gz files | Create a tar using Gzip

Enter # tar xzf file.tar.gz | Extract a tar using Gzip

**System Information**

Enter # date | Show current date and time

Enter # uptime | Show current uptime

Enter # w | Display who is online

Enter # whoami | Display who you are logged in as

Enter # finger user | Display information about user

Enter # uname -a | Show kernel information

Enter # hostnamectl | Display system information

Enter # hostname | Display host name

Enter # cat /proc/cpuinfo | Show cpu information

Enter # cat /proc/meminfo | Show memory information

Enter # man command | Show manual for command

Enter # df | Show disk usage

Enter # du | Show directory space usage

Enter # free | Show memory and swap usage

Enter # whereis app | Show possible locations of app

Enter # which app | Show which app will be run by default

Enter # yum repolist | Displays the repolist

Enter # last reboot | Shows system reboot history

**Process Management**

Enter # ps | Displays active processes

Enter # ps aux | grep ssh | Finds specific services

Enter # top | Displays all running processes

Enter # kill pid | Kill process id pid (Add -9 before PID to force termination)

Enter # killall proc | Kill all processes named proc \*

**SSH**

Enter # ssh user@host | Connect to host as user

Enter # ssh -p port user@host | Connect to host on port as user

Enter # ssh-copy-id user@host | Login with key

**SELinux**

Enter # getsebool -a | List current SELinux Booleans

Enter # setsebool -P httpd\_read\_user\_content 1 | Create SELinux Boolean (Website)

Enter # getsebool httpd\_read\_user\_content | Check status of SELinux Boolean

**Basic Functionality**

Enter # yum update -y | Updates installed packages to the latest version

Enter # dnf check-update | Checks any packages needed to be upgraded.

Enter # yum upgrade -y | Upgrades any packages needed to be upgraded.

Enter # poweroff | Turns off system.

Enter # reboot | Restarts system

Enter # sleep | Puts system to sleep

Enter # systemctl start service | Starts service

Enter # systemctl stop service | Stops service

Enter # systemctl status service | Checks status of service

Enter # crontab -l | Lists current cron jobs

Enter # crontab -e | Edit crons for current user

Enter # touch file.sh then chmod +x | to create a script (chmod makes it executable)

Enter # yum install epel-release -y | Install repository to install other programs

Enter # yum install program | If in repository, it will install the program

**Users**

Enter # useradd user | Adds new user

Enter # userdel user | Deletes user

Enter # pkill -u username | sudo userdel -r username | Kill user session and remove them

Enter # groupadd admin | Adds user group named admin

Enter # usermod user | modifies user

Enter # vi /etc/sudoers | Edit sudoers file and add user who wants sudo privileges

Graphical user interface, text, application, email

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**Mount USB**

**Miscellaneous Commands**

Enter # sed

Enter # awk

**Install GUI (CentOS 7)**

Enter # yum -y groups install “GNOME Desktop”

Enter # echo “exec gnome-session” >>~/.xinitrc

Enter # systemctl set-default graphical.target

Enter # reboot