Linux Commands

Engineer [Day 1]

Let's learn about Files & Directory 🚀

✅ For Creating Files

- ⬜ cat
- ⬜ vi/vim
- ⬜ nano

✅ For Creating empty Files & Hidden Files

- ⬜ touch

✅ For Creating a Directory

- ⬜ mkdir dir1 - create a directory called 'dir1'
- ⬜ mkdir dir1 dir2 - create two directories simultaneously
- ⬜ mkdir -p /dira/dirb/dirc/dird - create a directory tree

✅ Removing Files or Directory

- ⬜ rm -f file1 - delete file called 'file1'
- ⬜ rmdir dir1 - delete directory called 'dir1'
- ⬜ rm -rf dir1 -remove a directory called 'dir1' and contents recursively
- ⬜ rm -rf dir1 dir2 - remove two directories and their contents recursively

✅ Copy, Rename, and Move Files & Directory

- ⬜ mv (source file name) (destination file name) - moving a file or directory means cutting & paste
- ⬜ mv (old file or dir name) (new name) - rename file or directory
- ⬜ cp (source file name) (destination file name) - copying a file
- ⬜ cp dir/* - copy all files of a directory within the current work directory

✅ For View File Content

- cat /etc/passwd - view the contents of a file starting from the first row
- more /etc/passwd - view content of a file along
- less /etc/passwd - similar to the 'more' command but which allows backward movement in the file as well as a forward movement

✅ Others Commands

- cd /home : enter to directory '/ home '
- cd .. -go back one level
- cd ../.. -go back two levels
- cd -go to the home directory
- cd - -go to the previous directory
- pwd -show the path of the working directory
- ls -view files of a directory
- ls -l -show details of files and directory
- ls -a -show hidden files
- lstree -show files and directories in a tree starting from the root
- clear -for clearing the screen

========== Day2==========
Learning Linux Commands For DevOps Engineer [Day 2]

Let's learn about Files Permission, Files Compression, Files (Softlink & Hardlink) and User & Group 🚀

✅ Users and Groups

- groupadd group_name -- create a new group
- groupdel group_name -- delete a group
- groupmod -n new_group_name old_group_name -- rename a group
- newgrp group_name -- log in to a new group to change default group of

newly created files

- ⬜ useradd user1 -- create a new user
- ⬜ userdel -r user1 -- delete a user ('-r' eliminates home directory)
- ⬜ passwd -- change password
- ⬜ passwd user1 -- change a user password (only by root)
- ⬜ gpasswd -a user_name group_name -- Adding user to group
- ⬜ gpasswd -M(user_name . . . etc.) group_name -- Adding Multiple user to group

✅ File Permissions

- ⬜ ls -la -- show permission
- ⬜ chmod user/group/owner+rwx directory1 -- set permissions reading (r), write (w) and (x) access to users owner (u) group (g) and others (o)
- ⬜ chmod user/group/owner-rwx directory1 -- remove permits reading (r), write (w) and (x) access to users group (g) and others
- ⬜ chown user1 file1 -- change owner of a file
- ⬜ chown user1 -R directory1 -- change the user owner of a directory and all the files and directories contained inside
- ⬜ chgrp gruppo1 file1 -- change the group of files
- ⬜ chown user1:gruppo1 file1 -- change user and group ownership of a file

✅ File & Directory Compression

- ⬜ zip file1.zip file1 -- create an archive compressed in zip
- ⬜ zip -r file1.zip file1 file2 dir1 -- compress in zip several files and directories simultaneously
- ⬜ unzip file1.zip -- decompress a zip archive
- ⬜ bunzip2 file1.bz2 -- decompress a file called 'file1.bz2'
- ⬜ bzip2 file1 -- compress a file called 'file1'

⬜ gunzip file1.gz -- decompress a file called 'file1.gz'

⬜ gzip file1 -- compress a file called 'file1'

⬜ tar -cvf archive.tar file1 -- create an uncompressed tarball

⬜ tar -cvf archive.tar file1 file2 dir1 -- create an archive containing 'file1', 'file2' and 'dir1'

⬜ tar -tf archive.tar -- show contents of an archive

⬜ tar -xvf archive.tar -- extract a tarball

⬜ tar -xvfz archive.tar.gz -- decompress a compressed tar archive in gzip

⬜ zip file1.zip file1 -- create an archive compressed in zip

⬜ zip -r file1.zip file1 file2 dir1 -- compress in zip several files and directories simultaneously

⬜ unzip file1.zip -- decompress a zip archive

✅ Softlink & Hardlink

⬜ ln -s (filename or dir_name) link (file or dir name) -- create a symbolic link to a file or directory

⬜ ln (filename or dir_name) link (file or dir name) -- create a physical link to the file or directory

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81. What is the df command in Linux?

Ans: Users can use the df command to troubleshoot disk space issues. Here df stands for display free disk space.

df Command Example:

df -h

82. What is a du command in Linux?

Ans: du command in Linux is used to retrieve more detailed information about which files use the disk space in a directory.

du Command Example:

$ du -sh /var/log/*

90. What is du -s * | sort -k1,1rn | head command used for?

Ans: This command shows top disk users in the current dir.

91. What does this du -hs /home/* | sort -k1,1h command do?

Ans: This command sort path by easy to interpret disk usage.
92. What is df -h command?
Ans: This command shows free space on mounted file systems.
93. What is df -i command?
Ans: df -I command shows free inodes on mounted filesystems.
94. What is fdisk -l command used for?
Ans: fdisk -I command show disks partitions sizes and types (run as root).

How can you find out how much memory Linux is using?

From a command shell, use the “concatenate” command: cat /proc/meminfo for memory usage information. You should see a line starting something like Mem: 64655360, etc. This is the total memory Linux thinks it has available to use.
You can also use commands
free - m

vmstat

top

stop
to find current memory usage

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Write a command that will do the following:
-look for all files in the current and subsequent directories with an extension c,v
-strip the,v from the result (you can use sed command)
-use the result and use a grep command to search for all occurrences of the word ORANGE in the files.
Find ./ -name "*.c,v" | sed 's/,v//g' | xargs grep "ORANGE"

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What is the command to calculate the size of a folder?
To calculate the size of a folder uses the command du –sh folder1.

How can you check the memory status?
You can use the command
free -m to display output in MB
free -g to display output in GB

Explain how you can find a file using Terminal?
To find a file you have to use a command, find . –name "process.txt". It will look for the current directory for a file called process.txt.