

UNIX: Commands, Directories, and Files

Can you describe what the UNIX directories, /etc /var and /bin, are normally used for on a UNIX/Linux system?

The following describes the UNIX directories use:

/etc - stores system configuration files and user profile information

/var - stores administrative files

/bin - stores executable programs

What are /etc/passwd and /etc/group files?

The /etc/passwd file stores system users' password information, including the login ID, home directory, and default shell. The /etc/group files contain each system user's group ID.

If one was to run the commands "more" and "cat" on any text file, what would be the subsequent outcomes?

"more" provides a page by page view on the screen.

"cat" prints out the entire file on the screen at once.

Describe what the option -i will do to the command cp. (-i will prompt before overwriting an existing file).

```
# mkdir work
# cd work
# touch file1 file2
# ls -l

total 0
-rw-rw-r-- 1 root sys 0 Aug 20 19:21 file1
-rw-rw-r-- 1 root sys 0 Aug 20 19:21 file2
# cp file1 file3
# ls -l file3
-rw-rw-r-- 1 root sys 0 Aug 20 19:22 file3
# cp -i file1 file3
cp: overwrite 'file3'? n
# ls -l file3
```

UNIX: Commands, Directories, and Files

```
-rw-rw-r-- 1 root sys 0 Aug 20 19:22 file3
# cp -i file1 file3
cp: overwrite 'file3'? y
# ls -l file3
-rw-rw-r-- 1 root sys 0 Aug 20 19:25 file3
#
```

When we first said "no" to overwrite the first time, the timestamp of file3 did not change. When we said "yes" to overwrite, the timestamp was updated. This means that the file was overwritten at this time.

You are currently at the directory `/usr/share/man/man1/`, what command would you use to go to the directory `/usr/share/man/man5`?

```
cd ../man5 or cd /usr/share/man/man5
```

You are currently at the directory `/usr/share/man/man1/`, what command would you use to go to the directory `/usr/share`?

```
cd ../../ or cd /usr/share
```

How would you list all of the files in the current directory that end with `.txt`?

```
ls *.txt
```

What are the many ways to move the files from one directory (old) to a new directory (new)?

```
# mv old new
# cp -r old new
# rmdir old

# mkdir new
# cp old/* new
# rm -r old
```

What are some commonly used file system utilities?

UNIX: Commands, Directories, and Files

The following are some commonly used file system utilities:

- pwd - display current absolute directory path
- cd - change directory
- mkdir - create a new directory
- rmdir - delete a new directory
- cp - copy a file or directory
- mv - move a file or directory to a new location
- rm - delete a file or directory

The following are some commonly used utilities to view files:

- cat - view the file in entirety on the screen
- pg - page by page view of the file on the screen
- more - another page by page

What is the redirection symbol, and what does it do?

One important feature of the redirection symbol is the capability of redirecting input from or output to a file. UNIX defines the following default input and output methods:

Standard input - normally defaults to keyboard input

Standard output - normally defaults to current terminal screen

Redirection can change the default behavior. For example, the command "# ls -l / > /tmp/OUT.ls" will redirect the output from the "ls -l /" command to a file named "/tmp/OUT.ls" instead of printing to the screen.

Another command example is "# wc < /tmp/OUT.ls", which will redirect the input from the keyboard to an existing file called "/tmp/OUT.ls."