

Using Commands



Introduction to Linux

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The format of a command

command [options] parameters

“Traditionally, UNIX command-line options consist of a dash, followed by one or more lowercase letters. The GNU utilities added a double-dash, followed by a complete word or compound word.”

Two very typical examples are:

-h

--help

and

-v

--version

Command parameters

The *parameter* is what the command **acts on**.

- Often there are multiple parameters.
- In Unix uppercase and lowercase for both options and parameters matter.
- **Spaces** are critical.

“-- help” is wrong.

“--help” is right.

Some command examples

Let's start simple:

- Display a **list** of files:

```
ls
```

- Display a **list** of files in a **long** listing format:

```
ls -l
```

- Display a **list** of **all** files in a **long** listing format with **human-readable** file sizes:

```
ls -alh
```

Some command examples cont.

Some equivalent ways to do “`ls -alh`”:

```
ls -lah
```

```
ls -l -a -h
```

```
ls -l --all -human-readable
```

Note that there is no double-dash option for “`-l`”.

You can figure this out by typing:

```
man ls
```

Or by typing:

```
ls --help
```

Where's the parameter?

We typed the “`ls`” command with several options, but no parameter. Do you think “`ls`” uses a parameter?

What is the parameter for “`ls -l`”?

It is “`.`” -- our current directory.

“`ls -l`” and “`ls -l .`” are the same.

We'll discuss files and directories in our next section.

A disconcerting Unix feature

If a command executes successfully and there is no output returned from the command execution *this is normal*.

That is, if you type:

```
cp file1 file2
```

The result is that you get your command prompt back. *Nothing means success*.

Let's give this a try...

A disconcerting Unix feature cont.

Try doing the following on your machine:

```
# cd [cd = change dir]  
# touch file1 [touch = create/update]  
# cp file1 file2 [cp = copy]
```

The “#” indicates the command prompt. A “#” usually means you are the *root* user. A “\$” for the command prompt indicates a normal user.

Using pipes

In Unix it is very easy to use the result of one command as the input for another.

To do this we use the pipe symbol “|”. For example:

```
ls -l /sbin | sort
```

```
ls -l /sbin | sort | more
```

What will these commands do?

Take advantage of the command line

The command line in Unix is *much more powerful* than what you may be used to in Windows.

- You can easily edit long commands
- You can find and recover past commands
- You can quickly copy and paste commands.

Your mission

Should you choose to accept it...

- Pay close attention to options and parameters.
- Use “man command” or “command --help” to figure out how each command works.
- A command, generally, acts upon it's parameter or parameters based on the options you give to the command...