

All CCV systems run a UNIX-like operating system called Linux. Interacting with a UNIX system takes place through a **command-line interface** in which you type and enter commands at a **prompt**.

```
[ccvuser@login001 ~]%
```

This is what the default prompt looks like after logging into Oscar. It shows the username (ccvuser), the system name (login001 is one of Oscar's login nodes), and the current directory (~ is shorthand for the home directory).

Changing Directories

You can view the current directory you are in with the **pwd** command ("print working directory").

```
[ccvuser@login001 ~]% pwd  
/gpfs/home/ccvuser
```

The **cd** command changes the working directory to a different directory.

```
[ccvuser@login001 ~]% cd /gpfs/scratch/ccvuser  
[ccvuser@login001 ccvuser]% pwd  
/gpfs/scratch/ccvuser
```

To create a new directory, use the **mkdir** command.

```
[ccvuser@login001 ccvuser]% mkdir mydirectory  
[ccvuser@login001 ccvuser]% cd mydirectory  
[ccvuser@login001 mydirectory]% pwd  
/gpfs/scratch/ccvuser/mydirectory
```

Managing Files

You can list the files in the current directory with the **ls** command.

```
[ccvuser@login001 ~]% ls  
batch.script data README scratch
```

To find out more details about the files, you can add **parameters** to the **ls** command to modify its behavior.

```
[ccvuser@login001 ~]% ls -al  
lrwxrwxrwx  1 ccvtest priority   27 Sep  7 12:52 batch.script -> /gpfs/home/doc/batch.script  
-rw-r--r--  1 ccvtest priority  240 Jan  6  2007 .cshrc
```

The **-a** parameter tells **ls** to list all files (including hidden files with names that begin with a dot), while the **-l** parameter lists additional details. The columns display the file's permissions, owner username, owner group, size in bytes, modification date and time, and name. Notice that batch.script is actually a **link** to a file in a different directory. You can create links with the **ln** command.

```
[ccvuser@login001 ~]% ln -s /gpfs/home/doc/batch.script batch.script
```

The **ln** command takes two **arguments**: the first file name is the existing file and the second file name is the alias. The **mv** and **cp** commands are used to move and copy files and also take two arguments, the source and the destination.

```
[ccvuser@login001 ~]% cp batch.script my.job  
[ccvuser@login001 ~]% mv my.job another.job
```

Learning More About a Command

Almost all UNIX commands accept parameters and arguments and you can find out what they do by reading the command's **man** (e.g. manual) page.

```
[ccvuser@login001 ~]% man ls
```

While reading the man page, use the **<space>** key to read more and **<q>** to quit.