

Getting Started

Module 3

Overview

•In this module:

- Command Structure
- Displaying Files – cat
- Change Directory – cd
- Print Working Directory – pwd
- Listing Files and Directories - ls

Command Structure

```
[peter@server1 ~]$ ls -al /bin /sbin /usr/sbin
```

- First word is always the command
- Subsequent words are 'arguments'
- Many commands take 'options'
- Modify how command works

Displaying Output - echo

•Simply 'echoes' its arguments:

```
[peter@server1 ~]$ echo hello there  
hello there  
[peter@server1 ~]$
```

•To omit the newline:

```
[peter@server1 ~]$ echo -n hello there  
hello there[peter@server1 ~]$
```

Displaying the Date & Time - date

•The 'date' command:

```
[peter@server1 ~]$ date  
Mon Apr 16 12:36:16 IST 2012  
[peter@server1 ~]$
```

Listing Who is Logged In - who

•List who's on:

```
[peter@server1 ~]$ who
peter      pts/0          2012-04-16 13:38  (109.77.78.106)
dave       pts/1          2012-04-16 13:40  (126.43.2.141)
bob        pts/2          2012-04-16 11:06  (171.22.150.8)
george     pts/3          2012-04-16 08:19  (148.13.46.51)
[peter@server1 ~]$
```

Displaying Files - cat

•Display a README file:

```
[peter@server1 ~]$ cat README
```

```
                Apache HTTP Server
```

```
What is it?
```

```
-----
```

```
The Apache HTTP Server is a powerful and flexible HTTP/1.1  
compliant
```

```
web server.  Originally designed as a replacement for the  
NCSA HTTP
```

```
[peter@server1 ~]$
```

Change Directory - cd

Print Working Directory - pwd

•Change Directory

•With an argument: changes to directory given

```
[peter@server1 ~]$ cd /etc  
[peter@server1 /etc]$ pwd  
/etc  
[peter@server1 /etc]$
```

•Without an argument: changes to home directory

```
[peter@server1 /tmp]$ cd  
[peter@server1 ~]$
```


Listing Directories - ls

- Without arguments

- Lists current directory

```
[peter@server1 ~]$ ls
file1 file2 file3
[peter@server1 ~]$
```

```
[peter@server1 ~]$ cd /usr
[peter@server1 /usr]$ ls
bin  games      java  libexec  sbin  src
etc  include    lib   local    share tmp
[peter@server1 /usr]$
```

Listing Directories - ls

- With arguments

- Lists specified files or directories

```
[peter@server1 ~]$ ls  
file1 file2 file3  
[peter@server1 ~]$
```

```
[peter@server1 ~]$ ls /usr  
bin  games      java  libexec  sbin  src  
etc  include  lib   local    share tmp  
[peter@server1 ~]$
```

```
[peter@server1 ~]$ ls /etc/passwd  
/etc/passwd  
[peter@server1 ~]$
```

Listing Directories - ls

- Options modify how 'ls' works:

- No options:

```
[peter@server1 ~]$ ls  
file1 file2 file3  
[peter@server1 ~]$
```

- All (-a) option:

```
[peter@server1 ~]$ ls -a  
.  ..  file1  file2  file3  
[peter@server1 ~]$
```

Aside: 'Hidden' Files

- Files starting with a dot (‘.’)
- normally configuration files (or directory entries ‘.’ and ‘..’)
- hidden by convention
- Command-line utilities that respect this:
 - the ‘ls’ command
 - the shell

Listing Directories - ls

Further Options

•Long Listing

```
[peter@server1 ~]$ ls -l
total 12
-rw-rw-r--. 1 peter peter 2395 Apr 16 16:20 file1
-rw-rw-r--. 1 peter peter   17 Apr 16 16:20 file2
-rw-rw-r--. 1 peter peter   14 Apr 16 16:20 file3
[peter@server1 ~]$
```

•Show Directory entry itself (not its contents)

```
[peter@server1 ~]$ ls -ld /usr
drwxr-xr-x. 13 root root 4096 Nov  6 10:31 /usr
[peter@server1 ~]$
```

Using Options

.Options come before arguments:

```
[peter@server1 ~]$ ls -ld /usr
drwxr-xr-x. 13 root root 4096 Nov  6 10:31 /usr
[peter@server1 ~]$
```

.Options can be bunched together

```
[peter@server1 ~]$ ls -l -d /usr
drwxr-xr-x. 13 root root 4096 Nov  6 10:31 /usr
[peter@server1 ~]$ ls -d -l /usr
drwxr-xr-x. 13 root root 4096 Nov  6 10:31 /usr
[peter@server1 ~]$ ls -ld /usr
drwxr-xr-x. 13 root root 4096 Nov  6 10:31 /usr
[peter@server1 ~]$
```

Specifying Multiple Arguments

- 'ls' lists all files or directories specified:

```
[peter@server1 ~]$ ls /usr /sys /usr/local /etc/passwd
/etc/passwd

/sys:
block  class  devices  fs      module
bus    dev    firmware kernel  power

/usr:
bin  games  java  libexec  sbin  src
etc  include lib  local  share tmp

/usr/local:
bin      etc  include  lib      sbin  src
Brother  games info  libexec  share ssl
[peter@server1 ~]$
```