

Common UNIX Commands

man

The command `man` gives you access to an on-line manual containing a complete description of every command available on this system. `man` can also provide you with one line descriptions of commands specified by name; or for all commands whose description contains any of a set of keywords.

To view the manual page for a command enter:

`man name_of_command`

The content of every `man` page is organized under a number of headings.

To check what a command does:

`whatisname_of_command`

This displays the description for the command that is given in its online manual page. The command `man -k keyword` displays a one line synopsis of each command that has "keyword" in its description.

Enclose a "phrase" in single quotes to search for it. `man -k phrase_to_search_for`

apropos

The command `apropos` locate commands by keyword lookup. It displays the man page name, section number, and a short description for each man page whose name line contains the keyword.

logging in

Before you can begin to use the system you will need to have been given a username and a password. To get a username and password for the ra system go [here](#).

To login to your account:

login: **bulldog**

Password:

This logs in the person who has been given the username `bulldog` on this system. UNIX is case sensitive. If your username is "bulldog", do not enter `BULLDOG` or `Bulldog`. Your password is never displayed on the screen. If it were, other users might see it!

If you get the following message while logging in:

```
login incorrect  
login:
```

Either you made a typing error while entering your username or password or the <Caps Lock> key is on and everything is being sent to the system in uppercase letters.

logout

To finish using a UNIX system you must go through a process known as “logging out”. To logout enter the command **logout** or **exit**. If this does not work press **Ctrl-D**.

passwd

To change your password:

passwd

Old password: enter your current password

New password: enter your new password

Retype new password: re-enter your new password

Enter the command **passwd** and then respond to the prompts by entering your old password followed by your new one. You are then asked to confirm your new password.

The passwords will not appear on the screen as you type, to prevent other people from seeing them. If you make a mistake, the message **Mismatch - password unchanged**. is displayed and your password remains unchanged. Try again.

ls

You can use the **ls** command to list the files in a directory:

```
ls [option] directory_name
```

By combining different command options you can display as little or as much information about each file as you need. The command **ls -a** lists all the “hidden” files that begin with a ‘.’ (dot). All other files and directories are also listed.

This type of file is often created by you, the user, to hold commands that customise how a particular program is to work. These files are usually held together in your home directory. Every directory has two dot files, ‘.’ and ‘..’ which can be used in a shorthand way to refer to the current directory ‘.’ (dot) and the parent directory of the current directory ‘..’ (dot dot).

To get more information about each file and directory, use the command: **ls -l**

This gives you a long listing about each file and directory, giving information about its access permissions, number of links, owner, size and date and time last modified.

mkdir

To make a directory use the command: **mkdir directory_name**

To move files and directories from one place to another use the mv (move) command:

mv [option] filename1 filename2
directory1 directory2
filename directory

You can also change the name of a file or directory by moving it.

To remove a directory use the command: **rmdir directory_name**

The directory must be empty before you can delete it. You will need to remove any files and subdirectories that it contains.

To remove a directory that contains files use the command:

rm -r directory_name. This deletes all the contents of the directory including any subdirectories.

cd

To move down one level to a subdirectory: **cd projectone**

This moves you down one level from your current directory to the subdirectory project.

To move up one level of the directory tree: **cd ..**

To move to another directory using a relative pathname: **cd ../secondproject**

This moves you up one level in the directory tree and then moves you into the subdirectory secondproject.

To move to a directory using a full pathname: **cd /home/bu/bulldog/projectthree**

This moves you to the directory projectthree which is in the home directory of the user bulldog.

To go directly to your home directory: **cd**

chmod

Before we get into changing the access permissions of a file or directory using **chmod**, let us briefly go over the basics of access permissions.

There are three types of permissions:

- r** read the file or directory
- w** write to the file or directory
- x** execute the file or search the directory

Each of these permissions can be set for any one of three types of user:

- u** the user who owns the file (usually you)
- g** members of the group to which the owner belongs
- all other users

The access permissions for all three types of user can be given as a string of nine characters:

user group others
r w x r w x r w x

To display the access permissions of a file or directory use the command:

ls -l filename(directory)

This displays a one line summary for each file or directory. For example:

```
-rwxr-xr-x 1 erpl08 staff 3649 Feb 22 15:51 my.html
```

This first item **-rwxr-xr-x** represents the access permissions on this file.

The following items represent the number of links to it; the username of the person owning it; the name of the group which owns it; its size; the time and date it was last changed, and finally, its name.

To change the access permissions for a file or directory use the command

chmod mode filename

chmod mode directory_name

The “mode” consists of three parts: who the permissions apply to, how the permissions are set and which permissions to set.

Who the permission applies to is given as one of:

- u** (user) the owner of the file
- g** (group) the group to which the owner belongs
- o** (other) everyone else
- a** (all) u, g
- and **o** (the world)

How the permissions are set is given as one of:

- + add the specified permission**
- subtract the specified permission**
- = assign the specified permission, ignoring whatever may have been set before.**

Which permissions are set is specified by one or more from:

- r read**
- w write**
- x execute**

Never set write permission for all other users on a file or directory which is in your home directory. If you do other users will be able to change its content. This can represent a serious security risk.

rm

To remove a file use the command:

rm [option] filename

To remove a directory use the command:

rmdir directory_name

or

rm -r directory_name

You cannot retrieve a file or directory that has been removed; it has been removed permanently.

quota

The command quota displays a user's ufs file system disk quota and usage.

This command will give you the amount of your disk space allocated to you and how much of it has been used.

To use the command type:

quota -v

telnet

telnet enables you to connect your terminal to another remote system. To login to your account on a remote system use the command:

telnet remote_system_name

You are prompted for your username and password for your account on the remote system. Once you are logged in, you can begin to issue commands on the remote system.

Contact Information:

Voice: 325-0631

E-mail: helpdesk@msstate.edu

Web: www.its.msstate.edu