Linux

Introduction to Linux

Module 1: Basic commands to survive

Basic Commands to Survive

In this module we will be working through some of the foundation commands that will allow you to navigate the file system – the basic tools you will use daily in your work.

Some Basic Linux Commands

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Command	Comments	Real Life Usage
pwd	"print working directory" – this will tell you where you currently are in the file system	Always a good check before running any kind of script or command in the environment – make sure you are in a safe place!
cd **cd /** **cd ~**	"change directory" – cd is your command to get you around the file system. We have used the / as an example here, this is the top of your file system or the root folder cd ~ will automatically take you back to the home directory of the user you are currently running as	This is how you get everywhere around the file system The / and ~ commands are extremely useful to help you quickly navigate to root and your home directory
cd ..	The .. are also helpful shortcuts to navigate the file system letting you go back one directory level	These commands mean you do not have to fully qualify a path when navigating the system
cd /home/user	This is a fully qualified path – i.e., specified from root	This will take you to the /home/user location

Some Basic Linux Commands – ls

The **ls** command is one of the most important commands you will use – and it is likely you will use several options with it. In practical terms, this is your way to list what is in a location of your choice.

ls	Listing directory contents – when run on its on it will simply list the contents of the directory where you currently are
ls –l	Now we run the command with an option here of –l – this will give us more info about the contents of the current directory (the l here stands for long listing)
ls –ltr	A combination of options for the ls command that are extremely useful. The l will give us the long listing, the t will sort by modification time (with the newest first), and r will reverse the order so that the newest appears at the bottom. Useful for large directories
ls –l /	You can also use the ls command to list the contents of another location without having to relocate to that place in the filesystem – simply specify the location after the command

Absolute and Relative Paths

Path

- File(s)
- Folder(s)
- Folder(s)/File(s)
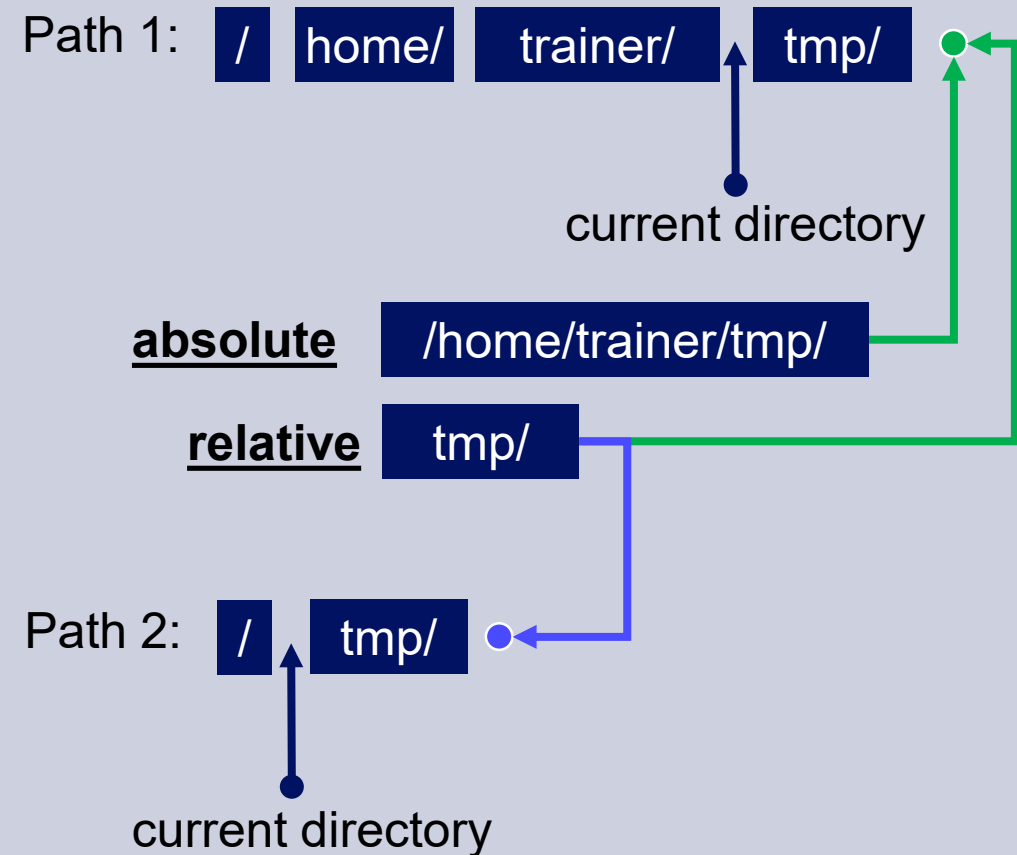
Absolute Path

Full address for the file or directory

Can be accessed from anywhere

Relative Path

Path is relative to the current location

Path changes from different locations

Path 1: | / | home/ | trainer/ | tmp/ |

current directory

absolute /home/trainer/tmp/

relative tmp/

Path 2: | / | tmp/ |

current directory

Basic Commands – man

The man command is your useful help guide located on your server – this will allow you to see what a command does, and the various options you have when running it.

Simply type **man <command>**

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Command	Comments	Real Life Usage
uname **uname -a**	uname will simply print out system information to your screen uname –a will show you all the info	Useful if you need to look up what version of the OS you are running
history	This will show you a full list of the commands (including typos!) that you have run since starting the session	Very useful if you need to go back and run something that you did previously and you do not remember the syntax – it will also help you track down any erroneous commands you might have run
<tab>	Using the tab key is a handy shortcut to get the system to finish the line for you	If you are trying to type out a pathname and want the OS to do more of the work, you can press tab and it will fill in the blank (if there is one option available)
<up>	Pressing the up key on the command prompt will let you run step by step through the recent commands you have run	Useful if you want to run commands again that you have run recently
<highlight>	Highlighting text in your PuTTY window will automatically copy it to the clipboard	This will allow you to copy things; if you wish to paste into the PuTTY window, use the right mouse button