

Linux Navigation Guide

Navigation is essential—much like using a mouse in Windows. It allows us to move across the system, work within directories and files, and retrieve exactly what we need. Using a combination of commands and tools, we can efficiently explore and manage our Linux environment.

Current Directory: `pwd`

To find out where you are in the system:

```
cry011t3@htb[~]$ pwd
/home/cry011t3
```

Listing Directory Contents: `ls`

To list the contents of the current directory:

```
cry011t3@htb[~]$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos
```

Long Listing Format: `ls -l`

```
cry011t3@htb[~]$ ls -l
```

Example Output:

```
drwxr-xr-x 2 cry011t3 htbacademy 4096 Nov 13 17:37 Desktop
```

Column	Description
<code>drwxr-xr-x</code>	Type and permissions
<code>2</code>	Number of hard links
<code>cry011t3</code>	Owner
<code>htbacademy</code>	Group
<code>4096</code>	Size (in bytes or blocks)

Column	Description
Nov 13 17:37	Last modified date/time
Desktop	Directory/File name

🔍 Showing Hidden Files: `ls -la`

```
cry011t3@htb[~]$ ls -la
```

This displays **all** files, including hidden ones starting with `.` like `.bashrc`.

📁 Listing a Specific Path

You don't have to be inside a directory to list its contents:

```
cry011t3@htb[~]$ ls -l /var/
```

🚶 Changing Directories: `cd`

You can move to a directory by specifying its name or full path:

```
cry011t3@htb[~]$ cd /dev/shm
```



Return to Previous Directory

```
cry011t3@htb[/dev/shm]$ cd -
```

⚡ Auto-completion with [TAB]

Using the `[TAB]` key helps auto-complete paths:

```
cry011t3@htb[~]$ cd /dev/s[TAB][TAB]  
shm/ snd/
```

Type more letters to narrow it down:

```
cd /dev/shm
```

Special Directory Entries

Inside a directory:

```
cry011t3@htb[/dev/shm]$ ls -la
```

You'll often see:

- `.` → current directory
- `..` → parent directory

Move to Parent Directory

```
cry011t3@htb[/dev/shm]$ cd ..
```

Cleaning Up: `clear`

Return to `/dev/shm` and clean the terminal:

```
cry011t3@htb[/dev]$ cd shm && clear
```

Shortcut

Use `[Ctrl] + [L]` to clear the terminal screen.

Command History

- Use `↑` and `↓` arrows to scroll through command history.
- Use `[Ctrl] + [R]` to **search** through command history.

Tips

- Experiment often to get comfortable with commands.
- Use a **snapshot** of your VM before major changes.
- Explore different flags and options with commands like `ls`, `cd`, etc.

Summary Commands

Command	Description
<code>pwd</code>	Show current directory
<code>ls</code>	List contents
<code>ls -l</code>	Long list format
<code>ls -la</code>	Show all, including hidden
<code>cd <dir></code>	Change directory
<code>cd -</code>	Return to previous directory
<code>cd ..</code>	Move to parent directory
<code>clear</code>	Clear terminal screen
<code>[Ctrl] + [L]</code>	Clear terminal screen (shortcut)
<code>[Ctrl] + [R]</code>	Search command history
<code>[TAB]</code>	Auto-complete paths/files

▣ Practice makes perfect. Keep exploring, and don't be afraid to try new things.