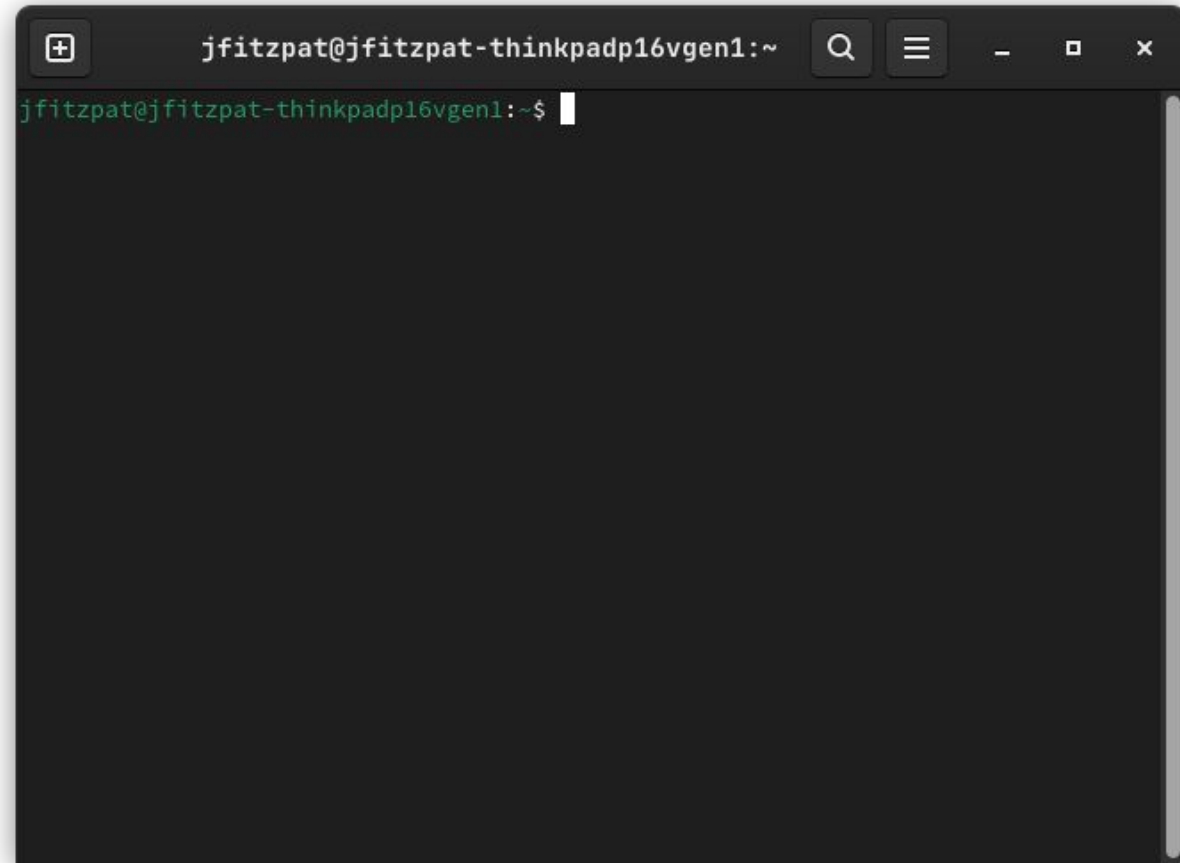**Red Hat**

Introduction to the Terminal

The black window with a blinking cursor

Introduction to the Terminal

- ▶ What is the terminal
- ▶ Launching the terminal
- ▶ What is a command
- ▶ Installing an application (Intro to sudo)
- ▶ Run the application

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What is the Terminal?
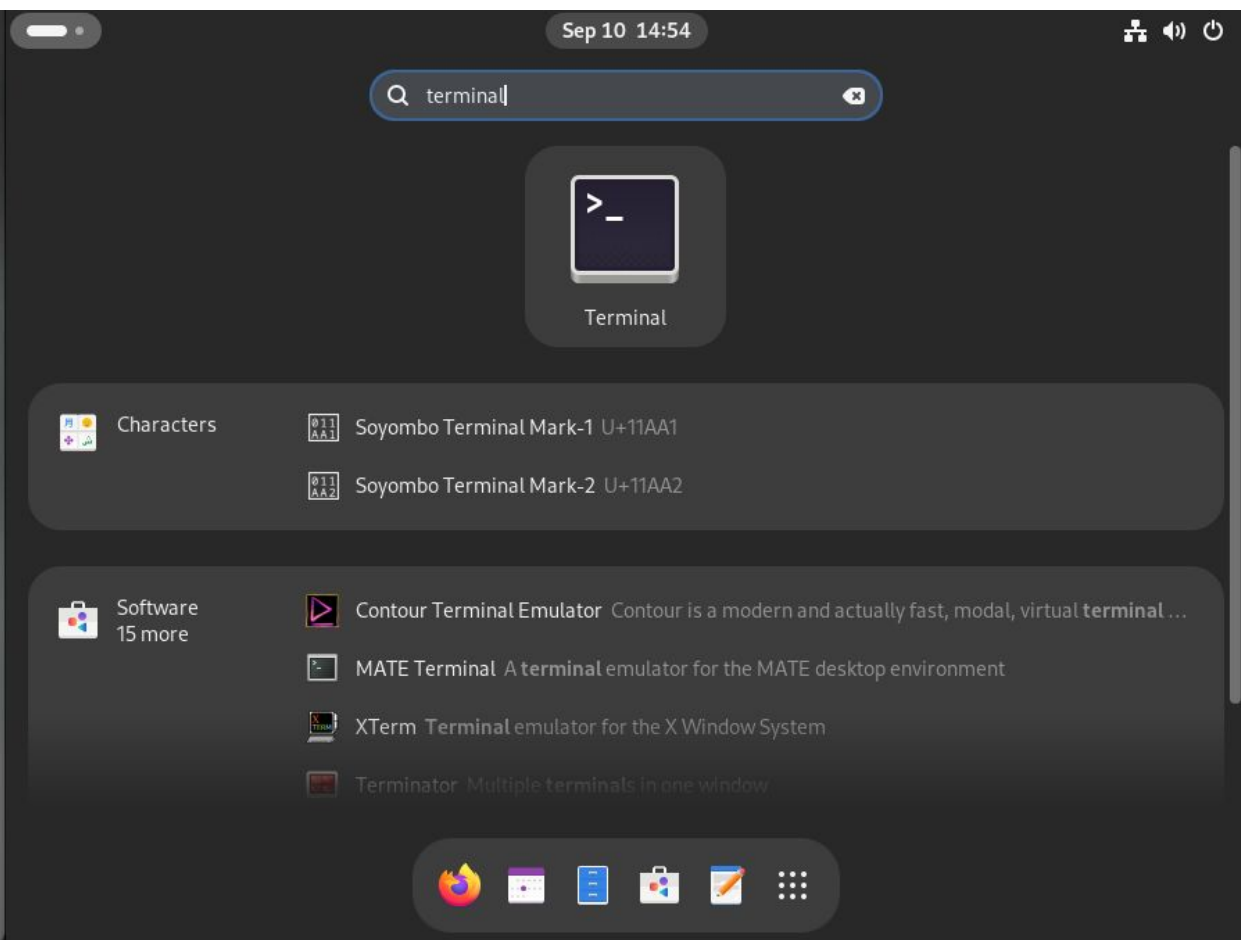
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What is the Terminal?

The Terminal is a text based interface to the operating system. It has a number of advantages over a graphical user interface.

- ▸ Quick access to a wide range of applications

- ▸ Complex actions can be done in a small number of steps

- ▸ History and shareability

- ▸ Chainability

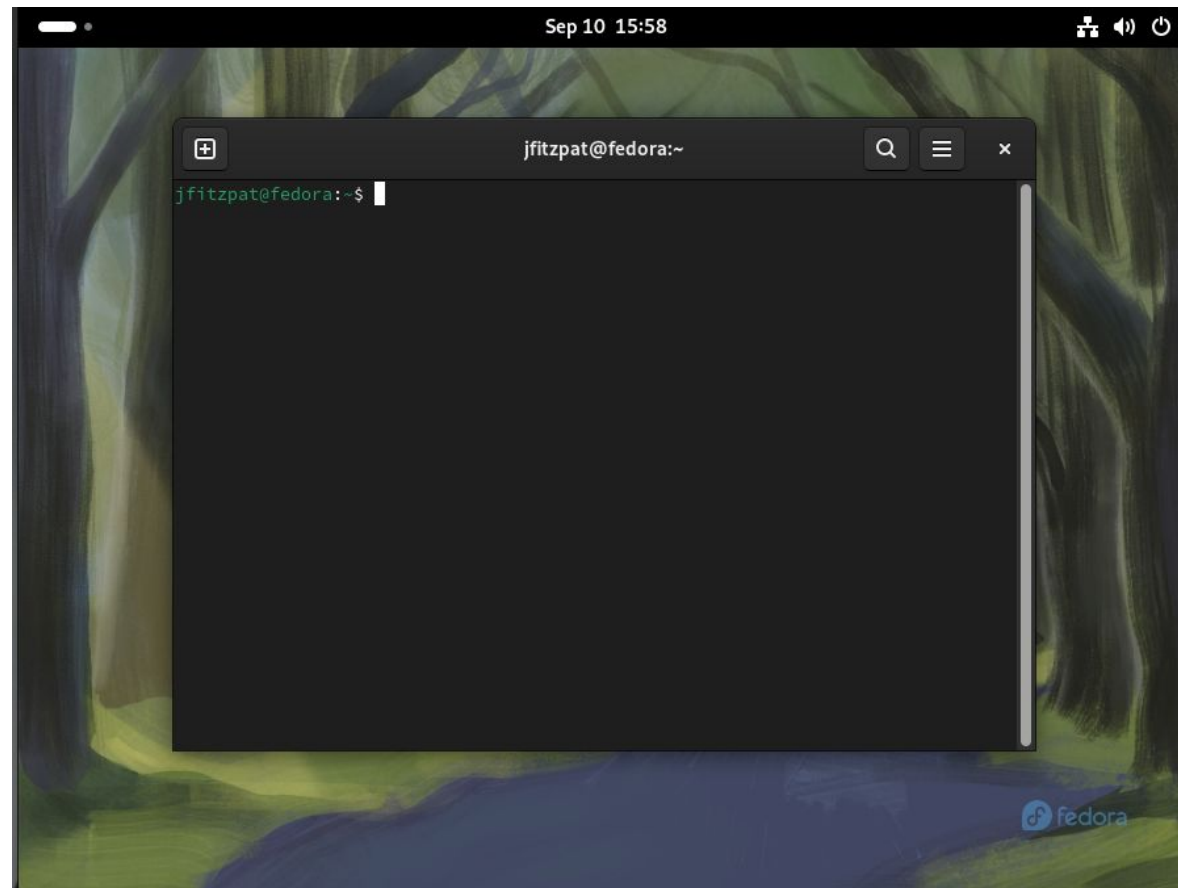- ▸ It is your space

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Launching the terminal

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Launching the terminal

- Open the applications menu with the windows key or by the pager in the top left of the screen

- Search for "terminal"

- Select the "terminal" to launch it.

Launching the terminal

What is a command

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What is a command

The command is a general term for the action that you wish the terminal to perform. A command can be simple or more complex with the use of flags and arguments.

firefox --new-window www.redhat.com

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firefox --new-window www.redhat.com

The first component, "firefox", is the command to run. The command can be an application or an alias.

Flags come after the the command. These will have one or two dashes "-" in front. For single dashes normal it is a one letter flag and two dashes are in front of a word. "--new-window" is the flag in the example. You can use many flags at one time.

Arguments are text added to the command or flags. In this case it is the Red Hat url for the --new-window flag. An argument must contain no space or not it is two arguments. Putting string in quotes is one way to allow spaces in the argument.

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Installing an application

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Installing an application

Installing applications from the terminal requires the use of a package manager. For this we use dnf. There are three commands that we will look at.

- ▶ dnf search

- ▶ dnf install

- ▶ dnf remove

Searching for applications

dnf search <APPLICATION>

Running the command show a list of applications that match for the search.

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Elephant in the room

sudo

Sudo is an administrative command that is used to allow your user do more in the system. Caution should be taken when using sudo. With great power comes great responsibility.

- ▸ Gives elevated permissions
- ▸ Temporary permissions, per command
- ▸ Requires a password

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Install an application

```
┌───────────────────────────────────────────────────────────────┐
│ ⊞                        jfitzpat@fedora:~              🔍  ☰  ✕ │
├───────────────────────────────────────────────────────────────┤
│ jfitzpat@fedora:~$ sudo dnf install cowsay                      │
│ [sudo] password for jfitzpat:                                   │
│ Last metadata expiration check: 0:01:23 ago on Thu 26 Sep 2024 09:43:35. │
│ Dependencies resolved.                                          │
│ ===============================================================│
│  Package         Architecture   Version            Repository       Size │
│ ===============================================================│
│ Installing:                                                     │
│  cowsay          noarch         3.8.3-1.fc40        updates          53 k │
│                                                                 │
│ Transaction Summary                                             │
│ ===============================================================│
│ Install  1 Package                                              │
│                                                                 │
│ Total download size: 53 k                                       │
│ Installed size: 79 k                                            │
│ Is this ok [y/N]: y                                             │
│ Downloading Packages:                                           │
│ cowsay-3.8.3-1.fc40.noarch.rpm            227 kB/s |  53 kB    00:00 │
│ ---------------------------------------------------------------│
│ Total                                     117 kB/s |  53 kB    00:00 │
│ Running transaction check                                       │
│ Transaction check succeeded.                                    │
│ Running transaction test                                        │
│ Transaction test succeeded.                                     │
│ Running transaction                                             │
│   Preparing        :                                   1/1      │
│   Installing      : cowsay-3.8.3-1.fc40.noarch          1/1     │
│   Running scriptlet: cowsay-3.8.3-1.fc40.noarch         1/1     │
│                                                                 │
│ Installed:                                                      │
│   cowsay-3.8.3-1.fc40.noarch                                    │
│                                                                 │
│ Complete!                                                       │
│ jfitzpat@fedora:~$ █                                            │
└───────────────────────────────────────────────────────────────┘
```

sudo dnf install <APPLICATION>

- ▶ sudo allows increased permission
- ▶ The <APPLICATION> name must be a full match
- ▶ Need to confirm the install

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Removing an application

```
jfitzpat@fedora:~
jfitzpat@fedora:~$ sudo dnf remove cowsay
[sudo] password for jfitzpat:
Dependencies resolved.
=====================================================================
 Package          Architecture     Version              Repository        Size
=====================================================================
Removing:
 cowsay           noarch           3.8.3-1.fc40         @updates          79 k

Transaction Summary
=====================================================================
Remove  1 Package

Freed space: 79 k
Is this ok [y/N]: y
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :                                        1/1
  Erasing          : cowsay-3.8.3-1.fc40.noarch             1/1
  Running scriptlet: cowsay-3.8.3-1.fc40.noarch             1/1

Removed:
  cowsay-3.8.3-1.fc40.noarch

Complete!
jfitzpat@fedora:~$
```

sudo dnf remove <APPLICATION>

- ▶ sudo allows increased permission
- ▶ The <APPLICATION> name must be a full match
- ▶ Need to confirm the install

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Running the application

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Running the application

cowsay <INPUT>

- ▸ Dnf is also an application
- ▸ All applications are launched in the same way
- ▸ Learning the commands of an application takes time and tools like help and man can be used

Recap

- ▸ What is the terminal

- ▸ Launching the terminal

- ▸ What is a command

- ▸ Installing an application (Intro to sudo)

- ▸ Run the application

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Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.

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