PowerShell is a task automation and configuration management system developed by Microsoft. It is made up of a command language interpreter (shell) and scripting language built on the .NET Framework.

**Installing PowerShell In Linux**

To install PowerShell Core 6.0 in Linux, we will use official Microsoft Ubuntu repository that will allows us to install through most popular Linux package management tools such as apt-get and yum.

First register the Microsoft RedHat repository in YUM package manager repository list and install PowerShell:

$ sudo curl https://packages.microsoft.com/config/rhel/7/prod.repo > /etc/yum.repos.d/microsoft.repo

$ sudo yum install -y powershell

Now, we will have a brief introduction to PowerShell; where we will see how to start PowerShell, run some basic commands, look at how to work with files, directories and processes. Then later dive into how to list all available commands, show command help and aliases.

To start PowerShell, type:

$ powershell

We can check the PowerShell version with the command below:

$PSVersionTable

Running some basic PowerShell commands on Linux.

get-date [# Display current date]

get-uptime [# Display server uptime]

get-location [# Display present working directory]

**Working with Files and Directories in PowerShell:**

**1.** Create a new empty file using the two methods below:

new-item tecmint.tex

Then add content to it and view the file content:

set-content tecmint.tex -value "TecMint Linux How Tos Guides"

get-content tecmint.tex

**2.** Delete a file in powershell:

remove-item tecmint.tex

get-content tecmint.tex

**3.** Create a new directory:

mkdir tecmint-files

cd tecmint-files

“”>domains.list

ls

**4.** View all running processes on your system:

get-process

**5.** To know more, get a list of all Powershell commands for different tasks:

get-command

**6**. Display command history (list of commands you had run previously):

history

**Bash**

Bash is a Unix shell and command language written by Brian Fox for the GNU Project as a free software replacement for the Bourne shell.

**Syntax of Bash Shell in Linux**

bash -option filename

**List of Option :**

* -c
* -i
* -l
* -r
* -s
* -D
* —

**Advantages of Bash Shell**

* Writing a shell script is faster and quicker.
* Quick start
* Interactive debugging is available
* TIMESTAMP FOR EACH TOPIC:
* -----------------------------------------------------------------------------------------
* [4:22](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=262s):- Installing PowerShell in Linux
* [7:52](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=472s):- Creating a Directory
* [8:26](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=506s):- Extracting the directory
* [8:47](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=527s):- Entering into the Created Directory
* [9:39](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=579s):- Getting date in PowerShell
* [11:25](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=685s):- About Verb-noun in PowerShell
* [13:43](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=823s):- Finding All the Commands in PowerShell
* [14:43](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=883s):- Command for getting all the Verbs in PowerShell
* [15:50](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=950s):- Get Process Command
* [16:40](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=1000s):- Checking the Version Of PowerShell
* [18:03](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=1083s):- Getting help For Various Processes
* [26:03](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=1563s):- Top Head
* [27:57](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=1677s):- Getting first 5 top consuming Processes using bash script
* [42:23](https://www.youtube.com/watch?v=9pFT9XpWBSM&t=2543s):- Solving Queries
* **PowerShell**