Linux : Getting your feet wet

Bridge Course 2019

EE Dept IITB

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Outline

Linux is a family of open source Unix-like operating systems based on the Linux kernel, Typically packaged in a Linux distribution

Why Linux

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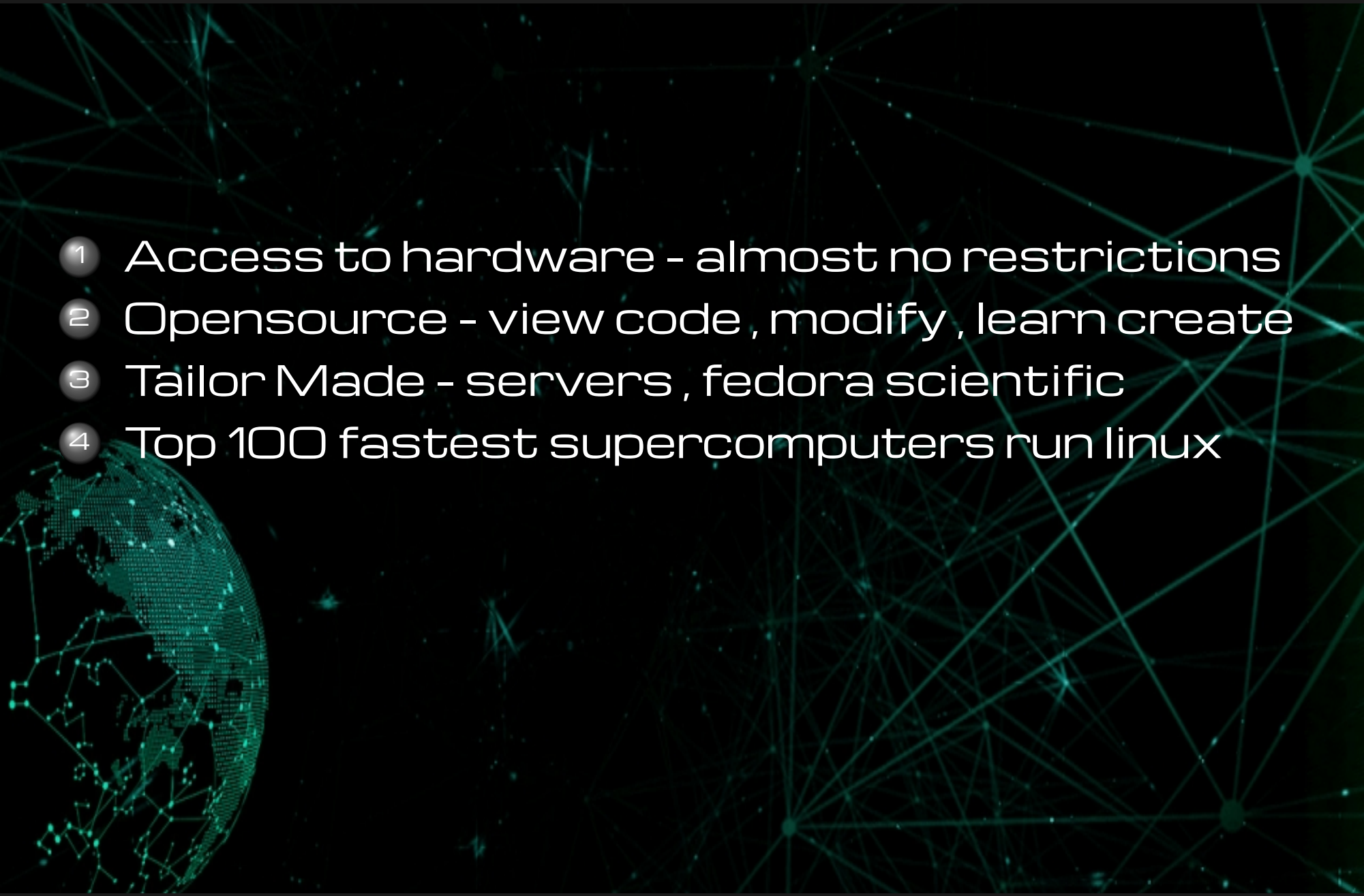

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2. Opensource - view code , modify , learn create
3. Tailor Made - servers , fedora scientific
4. Top 100 fastest supercomputers run linux
5. Almost all tech giants funds linux development

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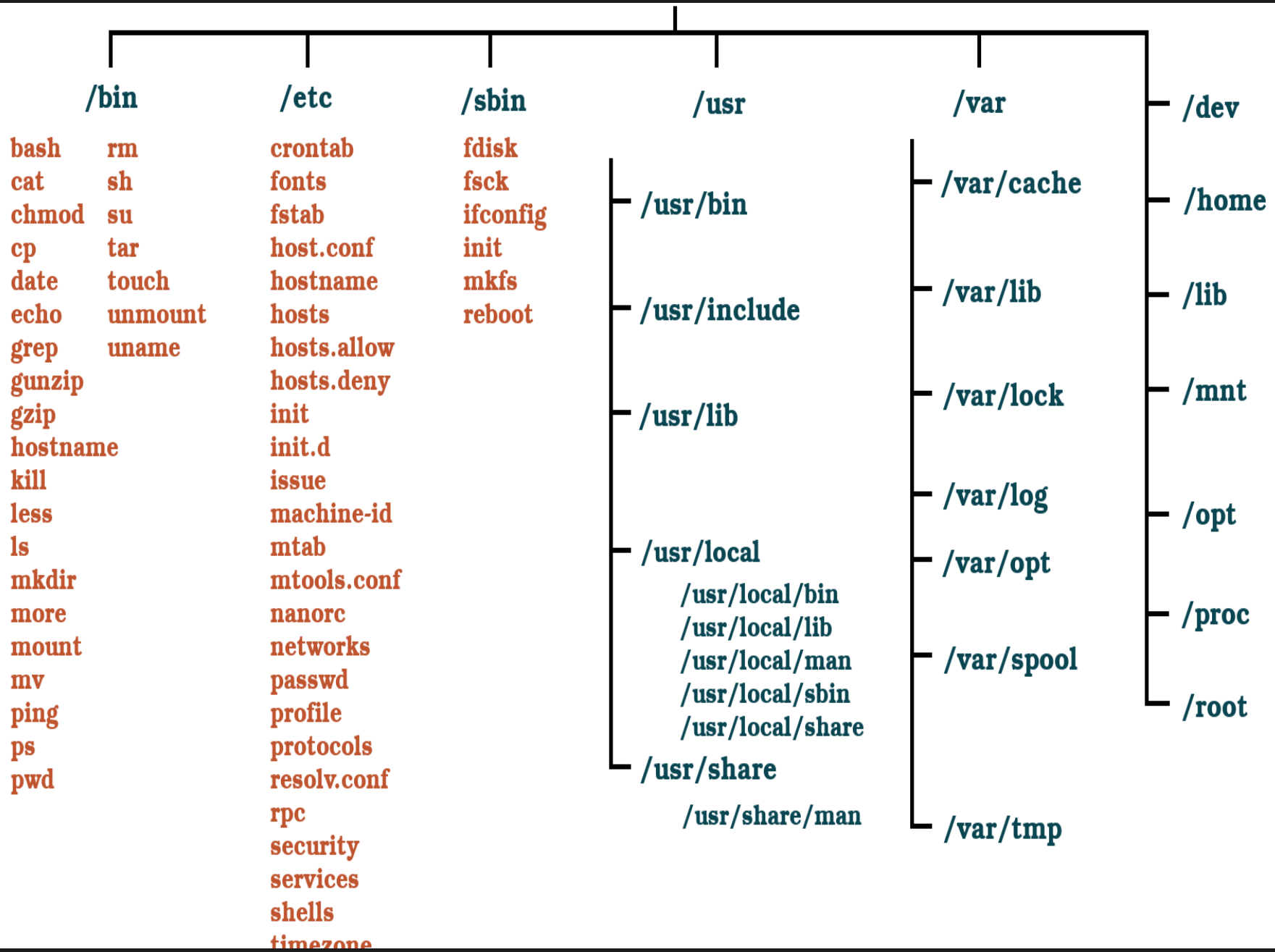
4. Microsoft gives you windows. Linux gives you whole house

File System Hierarchy



Linux File System: Basic commands

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Linux File System: Basic commands

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4. mkdir <dir_name> - create a directory

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Linux File System: Basic commands

1. ls - list the files the current directory
2. pwd - print the working directory
3. touch <file_name> - create an empty file
4. mkdir <dir_name> - create a directory
5. cd - change directory

Note

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Users, Group and Permissions

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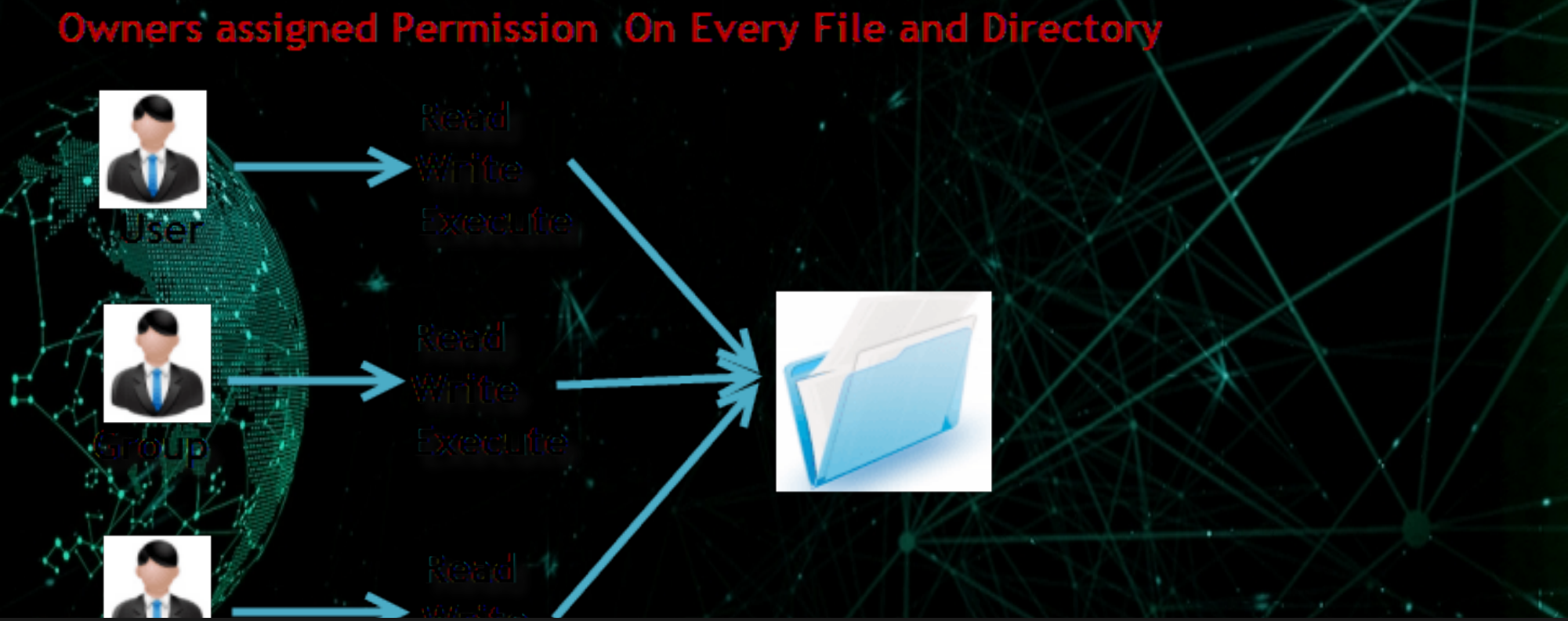
For each file, linux assigns a set of attributes , some of these decides which users can Read , Write and (if possible)Execute the file. These attributes are called the file permissions.
For each file, permissions are given in three categories .



Tables and Figures

- Use `tabular` for basic tables – see Table 1, for example.
- You can upload a figure (JPEG, PNG or PDF) using the files menu.
- To include it in your document, use the `includegraphics` command (see the comment below in the source code).

Item	Quantity
Widgets	42
Gadgets	13

Table 1: An example table.

Readable Mathematics

Let $X_1, X_2, \ldots, X_n$ be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $Var[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \cdots + X_n}{n} = \frac{1}{n}\sum_{i}^{n} X_i$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.