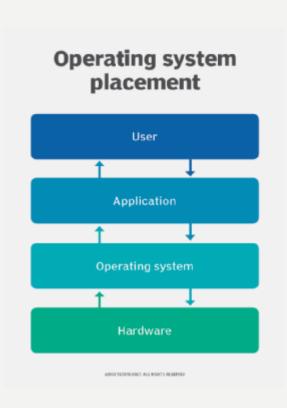
OS FUNDAMENTALS

BY
PREETHI DOVALA

AGENDA

- What is OS?
- Linux for Devops
- Virtualisation and Virtual Machines
- What is cloud?

WHAT IS AN OS?



An Operating System (OS) is a software that acts as an interface between computer hardware components and the user. Every computer system must have at least one operating system to run other programs. Applications like Browsers, MS Office, Notepad Games, etc., need some environment

to run and perform its tasks.

WHAT IS KERNEL?

- The kernel is the central component of a computer operating systems. It makes the communication between the hardware and software possible
- Linux uses the monolithic kernel which consumes more running space whereas Windows uses the micro-kernel which takes less space but lowers the system running efficiency than Linux.

LINUX VS WINDOWS

r. No.	Key	Linux	Windows
1	-	Linux is Open Source and is free to use.	Windows is not open source and is not free to use.
2	Case sensit ivity	Linux file system is case sensitive.	Windows file system is case insensitive.
3	kerne l type	Linux uses monolithic kernel.	Windows uses micro kernel.
4	Effici ency	Linux is more efficient in operations as compared to Windows.	Windows is less efficient in operations.
5	Path Seper ator	Linux uses forward slash as path seperator between directorioes.	Windows uses backward slash as a path seperator.
6	Secur ity	Linux is highly secure as compared to Windows.	Windows provides less security as compared to Linux.

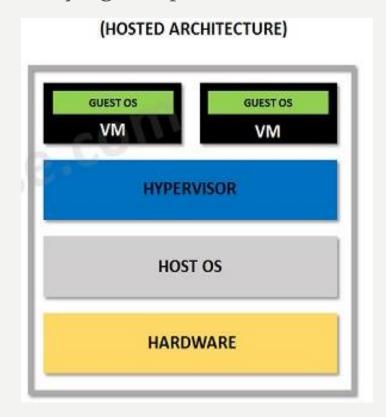
LINUX FOR DEVOPS

VIRTUALISATION

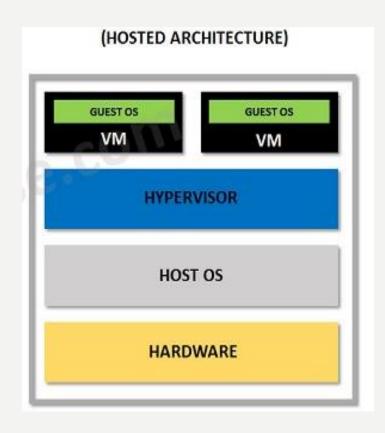
• Virtualization uses software to create an abstraction layer over computer hardware that allows the hardware elements of a single computer—processors, memory, storage and more—to be divided into multiple virtual computers, commonly called virtual machines (VMs).

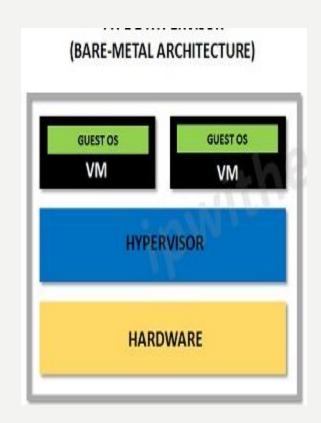
VIRTUAL MACHINES

• Each VM runs its own operating system (OS) and behaves like an independent computer, even though it is running on just a portion of the actual underlying computer hardware.



VIRTUAL MACHINES





WHAT IS CLOUD?

- On demand computing resources delivered to us over interenet is called cloud
- Self service
- Metered

WHY AWS?

