

# Hypervisors

A hypervisor is software that creates and runs virtual machines (VMs).

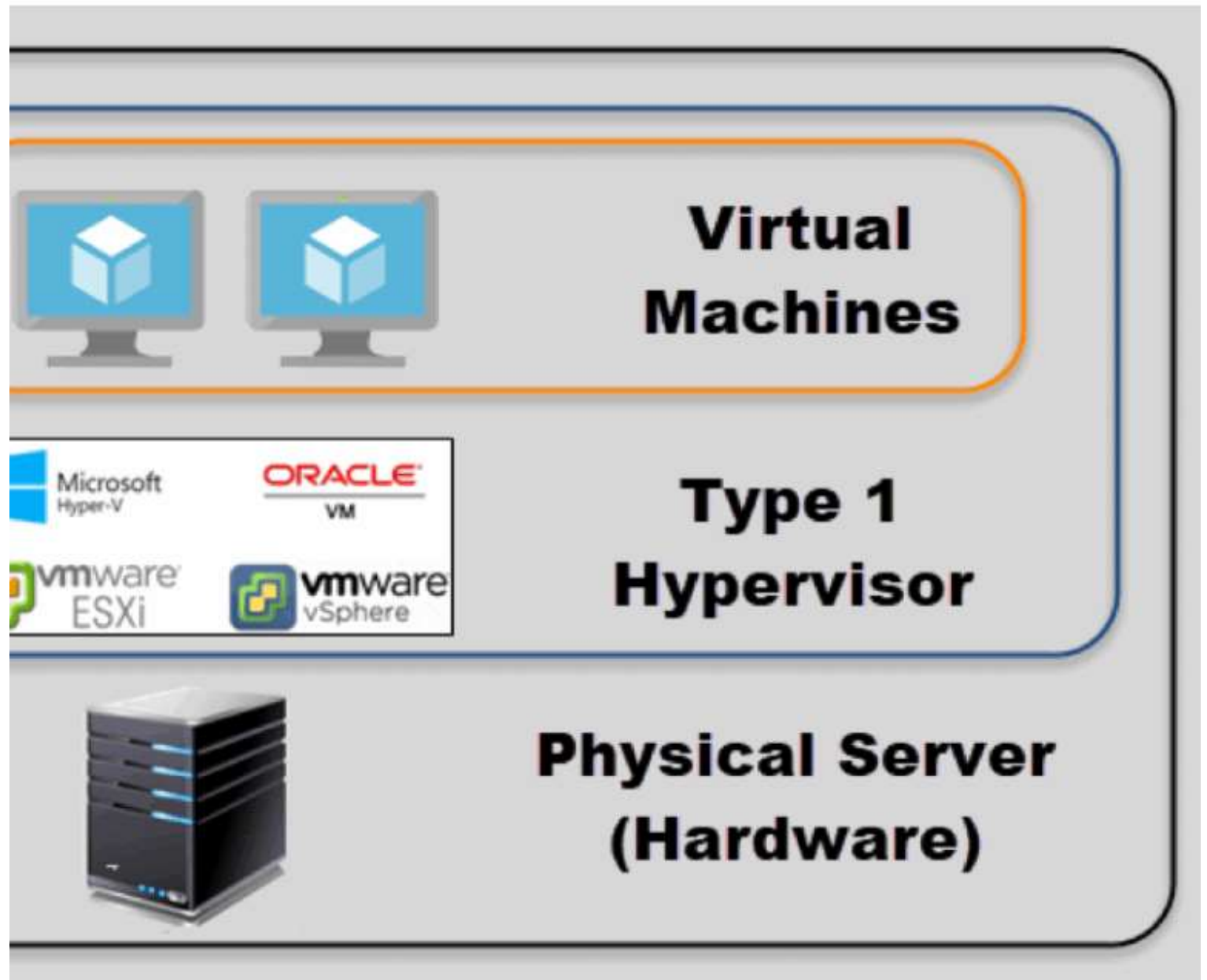
It is computer software, firmware or hardware that creates and runs virtual machines.

A computer on which a hypervisor runs one or more virtual machines is called a host machine, and each virtual machine is called a guest machine

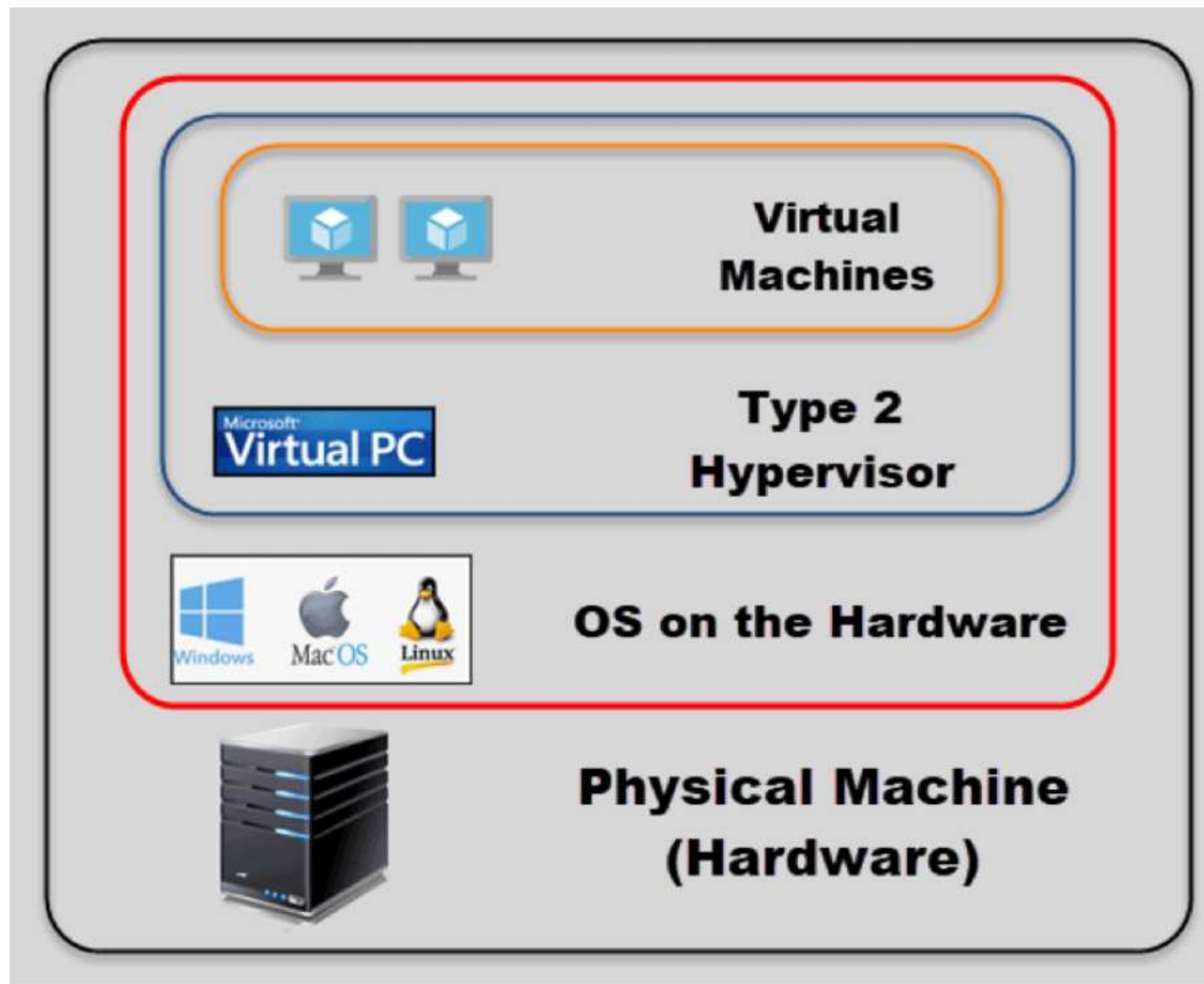
Type of Hypervisor

- Type 1 - is a layer of software we install directly on top of a physical server and its underlying hardware.
- Type 2 - This type of hypervisor runs inside of an operating system of a physical host machine.

# Type 1 Hypervisor



# Type 2 Hypervisor



# Resources required for a Linux VM in LAB

RAM 2GB is enough

Hard disk - 20 GB

Authentic Link to download ISOs for CentOS machines is as follows:

<https://www.centos.org/download/>

What Is an ISO File?

An ISO file, often called an ISO image, is a single file that's a perfect representation of an entire CD or DVD of any Operating System.

# SHELL in Linux

SHELL is a program which provides the interface between the user and an operating system. When the user logs in OS starts a shell for user.

Command to check shell

```
echo $SHELL
```

# Bash Prompt In Linux

We see the following default prompt in Linux environment: `[username@machinename <current dir>]$`

For example: `[tom@localhost Desktop]$`

## Difference between \$ and #

The dollar sign \$ means the current user is a regular user.

A root user would be identified with a hash sign #.

For example: `[root@localhost ~]#`

# - requires given linux commands to be executed with root privileges either directly as a root user or by use of sudo command

\$ - requires given linux commands to be executed as a regular non-privileged user

# User add on the Linux Box

```
[root@localhost ~]# useradd <username>
```

```
[root@localhost ~]# passwd <username>
```

To verify if the user has been added or not – check the contents of the file which contains the user information i.e /etc/passwd

```
[root@localhost ~]# cat /etc/passwd
```

This will display the contents of /etc/passwd file and it should contain the information about the newly added user

**Note:** cat is used to see the contents of a file