The technology that enables the cloud computing is Virtualization:

Virtualization is nothing but dividing a single physical server to multiple logical servers.

Once the physical server is partitioned then each server behaves as a individual server and can run independently.

They are fast cost effective and consume less time.

Virtualization is the base of the cloud computing with out which the cloud computing would not have been possible.

We can use the container technology to build light virtual machines.

There are basically types of virtualization:

Full virtualization.

Hardware assisted virtualization.

Para virtualization.

OS level virtualization.

The software used to build the container for the cloud computing is docker. It builds the containers very simple and very fast.

Full virtualization: It uses a special software called as a hypervisor which acts as a bridge between the hardware and software. There are types of hypervisor type1 and type 2. It multiplexes the hardware and the guest operating systems.

Hardware virtualization: In this the system has its own hardware and it allows the guest os to run on it.

Para virtualization: In this type of virtualization the virtual machine doesn’t simulate the hardware but offers an API that can be used by modifying the guest OS.

OS level virtualization: In this a physical sever at the OS level is virtualized. Which enables multiple isolated and secure virtualized servers to run on a single physical server.

The partitioning technology used to virtualize OS services is Solaris zone partitioning. It virtualizes the OS and provide an isolated free space to run our application. These free spaces are called as Zones.

There are two types of Zones:

Global Zones.

Local Zones.