

3. Types of virtualization

1. Hardware virtualization

- Hardware or platform virtualization means creation of VM that act like real computer.
- Example, computer running Microsoft windows 7 may host the virtual machine look like a ubuntu.
- Hardware virtualization is known as server virtualization.
- The hardware virtualization resource allocation is done by the hypervisor.

Types of Hardware virtualization

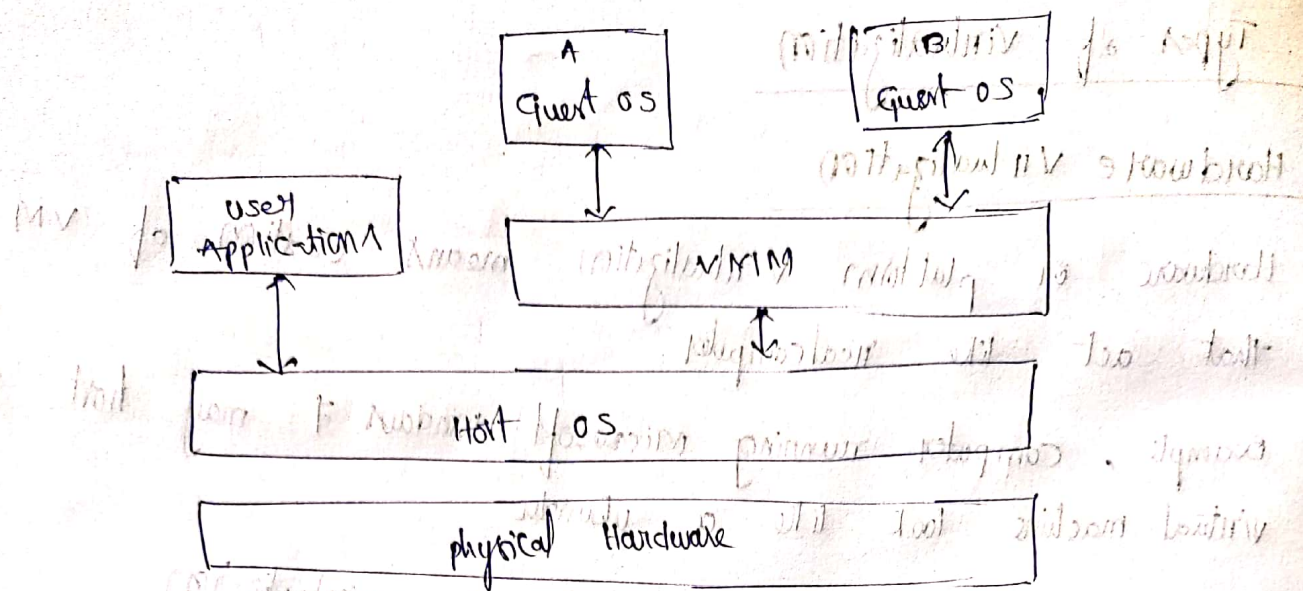
1. Full virtualization
2. Partial virtualization
3. Partial virtualization

2. Software virtualization

- The ability to computer to run and create one or more virtual environments.
- It is used to enable a computer system in order to allow a guest OS to run.

Types

1. OS virtualization
2. Application virtualization
3. Service virtualization



3. Network virtualization

- it refers to the management and monitoring of a computer network as a single managerial entity from a single software-based administrator's console.
- Multiple sub-networks can be created on the same physical network.
- it allows network of data transfer, scalability, reliability, flexibility and security.

Types

1. Internal NV

2. External NV

4. storage virtualization

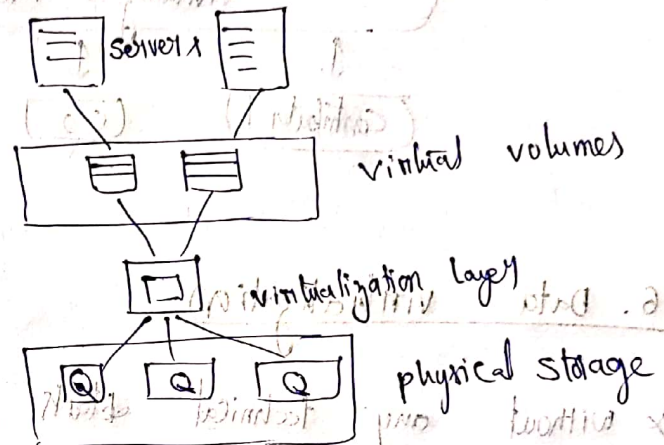
Multiple physical storage devices are grouped together, which look like a single storage device.

Eg: partitioning our hard drive into multiple partitions.

Types

1. Block sv

2. file sv



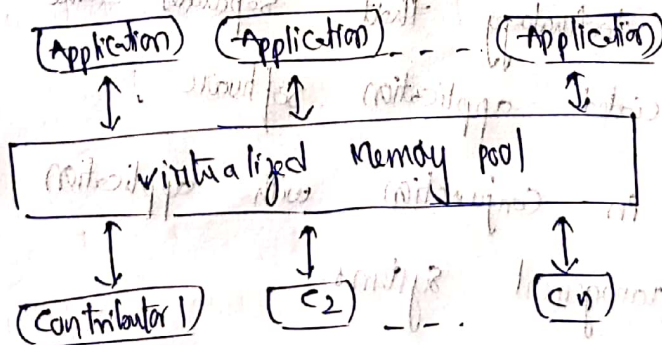
5. Memory virtualization

The way to decouple memory from the server to provide a shared, distributed or networked function.

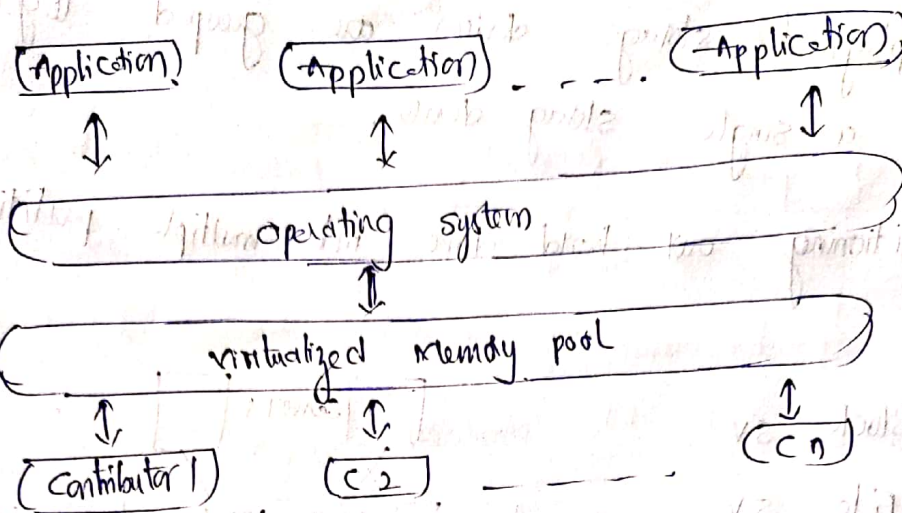
It enhances performance by providing greater memory capacity without any addition to the main memory.

Types

1. Application-level integration



2. OS level Integration



6. Data virtualization

- without any technical details, we can easily manipulate data and know how it is formatted or where it is physically located.
- it decreases the data errors and workload.
- it provides the work convenience and security.
- it provides a lot of flexibility for employees to work from home or on the go.

7. Desktop virtualization

- DV is a software technology that separates the desktop environment and associated application software.
- DV can be used in conjunction with application virtualization and user profile management systems.