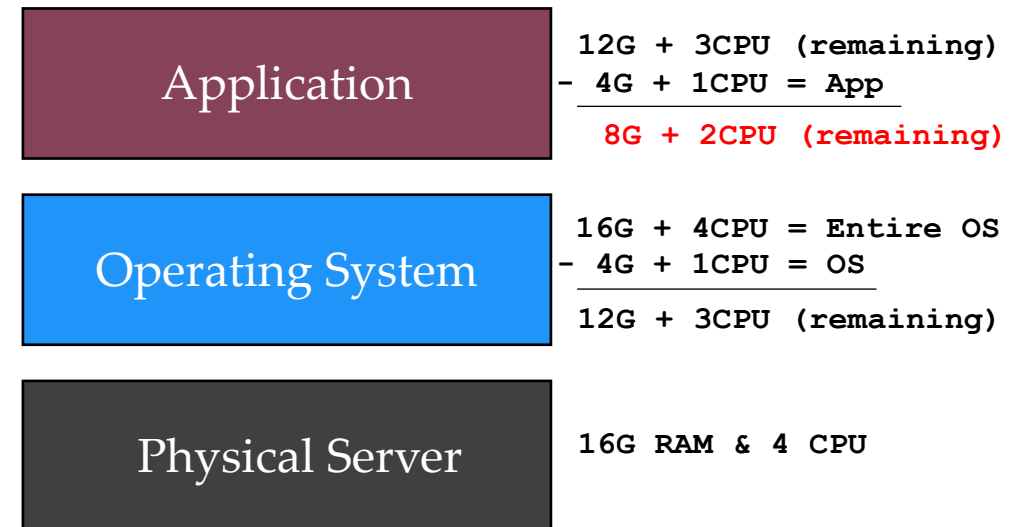
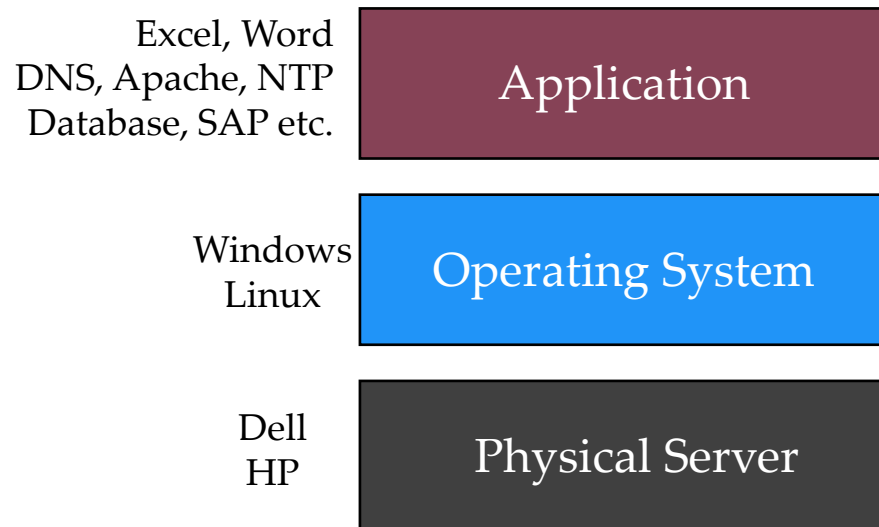


Welcome to Module 2

Understanding Virtualization

Virtualization

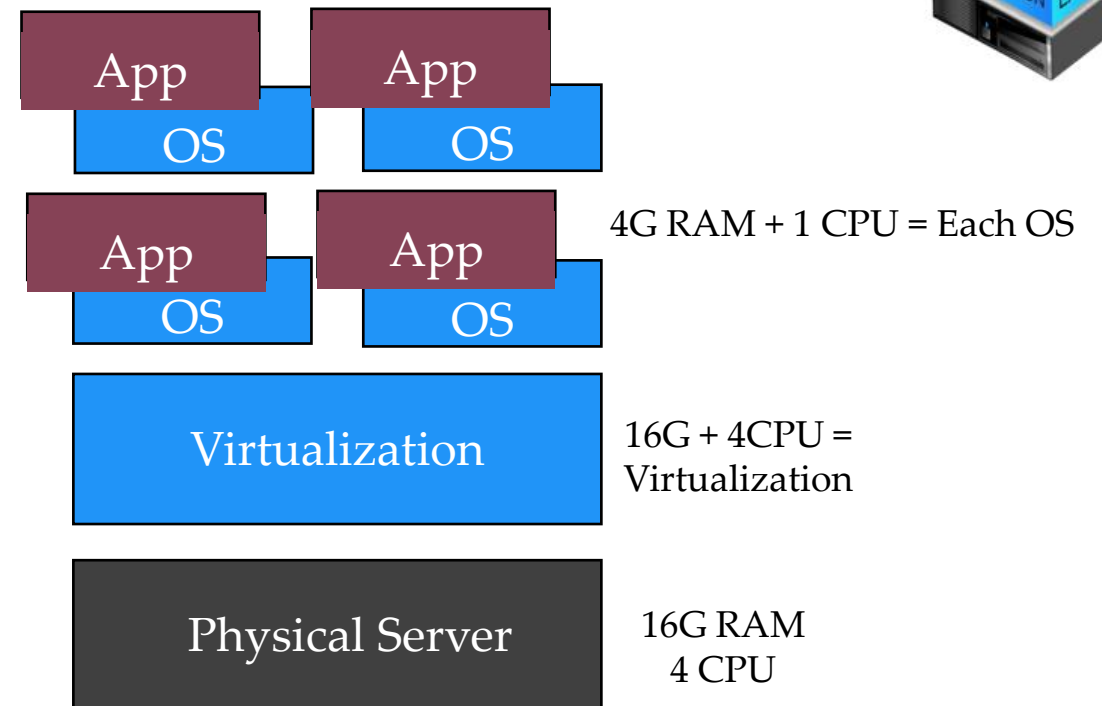
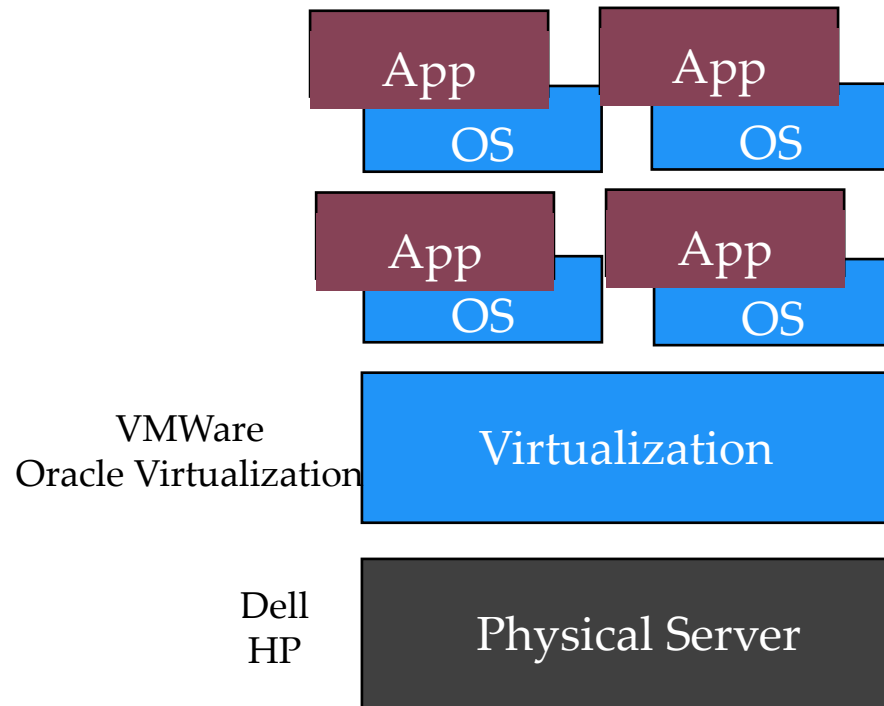
- What is Virtualization?
 - Let's understand the physical system configuration



8G RAM and 2CPUs are under utilized

Virtualization

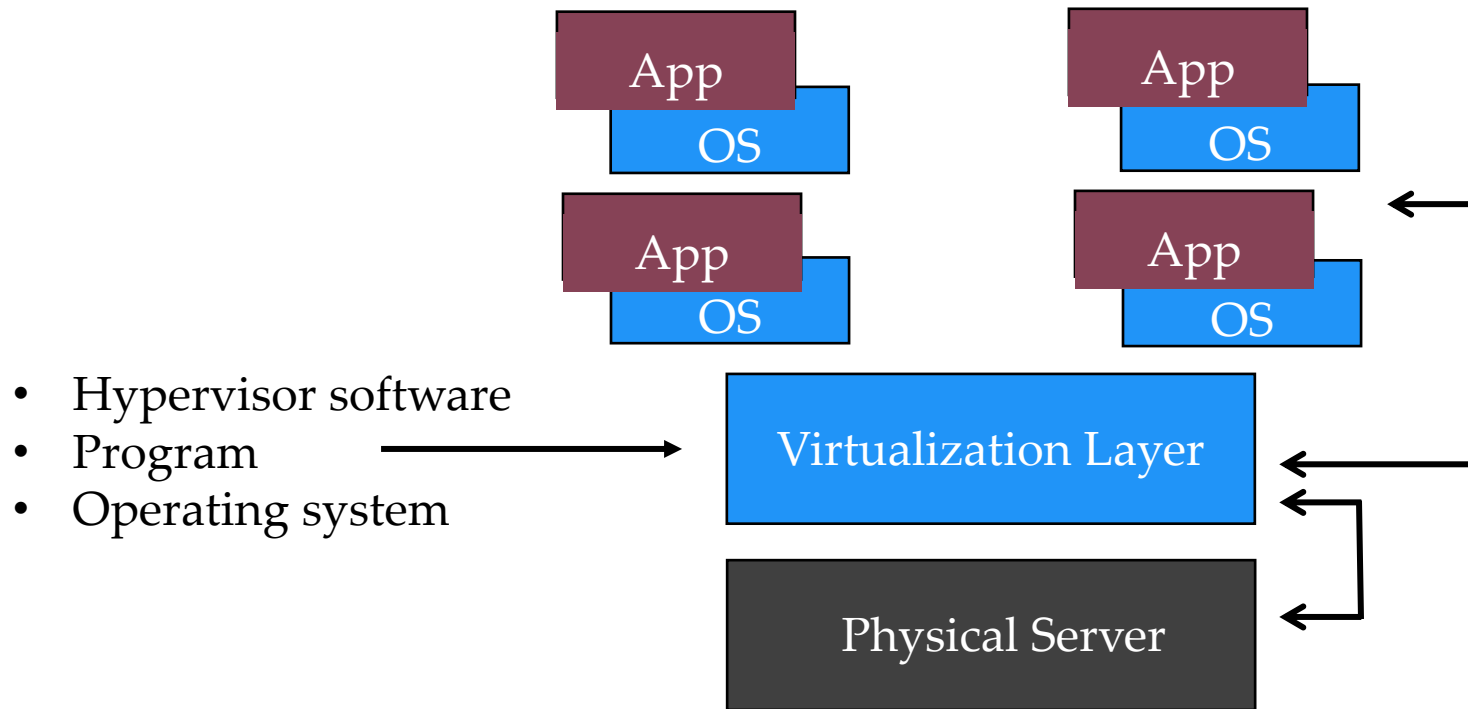
- Now let's look at virtualization



All resources are fully utilized

Virtualization Software

- How virtualization works?



Benefits of Virtualization

- Cost \$\$\$
- Real estate
- Electricity
- Ease of management
- Redundancy (lesser downtime)
- Faster deployment of machines
- Resource availability
- Better testing and performance
- Licensing

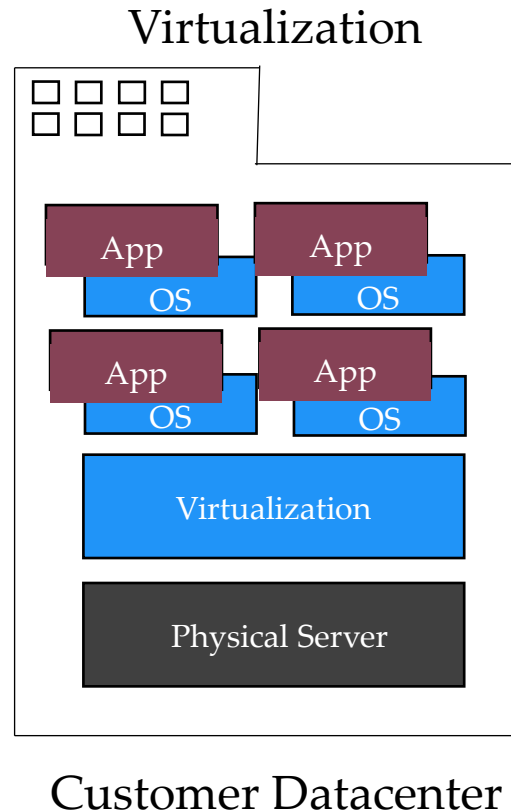


Virtualization Basic Terms

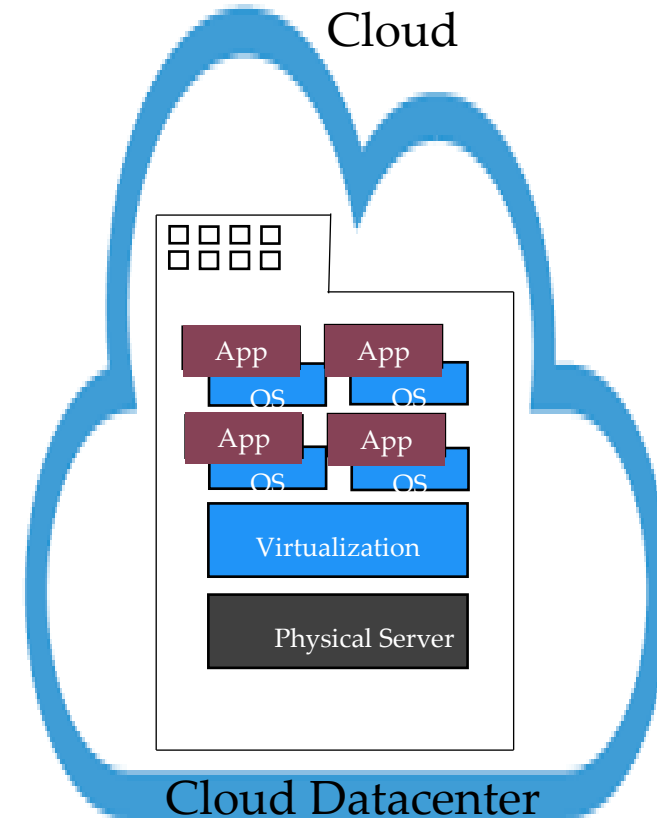
- Bare-metal server = Physical server with NO OS
- Hypervisor = Host or Virtual server
- Virtual Machine = VM, Guest, Instance
- Virtualization Manager = vCenter, OVM manager etc.
- Virtual Desktop = VDI
- P2V = Physical to virtual
- V2V = Virtual to virtual
- VM template
- Snapshot
- Clone or cloning.

Difference Between Virtualization and Cloud

- Virtualization is a technology whereas cloud is a remote location which utilizes virtualization technology



- Datacenter
- Hardware
- Operating System
- Provide on-going support
- Manage apps



- Datacenter
- Hardware
- Operating System
- Provide on-going support
- **DO NOT** manage apps

Virtualization Companies

<u>Company</u>	<u>Hypervisor</u>	<u>Cloud Technology</u>
• VMWare	(ESXi)	vCloud
• VMWare player		
• Oracle	(OVM or OLVM)	OCI
• Oracle Virtualbox		
• Microsoft	(Hyper-V)	Azure
• Citrix	(Xen Server)	Citrix cloud services
• Redhat	(KVM)	Redhat Cloud Suite
• Amazon		AWS
• Google		Google Cloud platform.