



# **41891, 42891 – CLOUD COMPUTING**

## **LAB 1: VMWARE ESXI, BUID VMS**

**Tutor: Ngoc LE**

## Outline:



1

Some attentions for the lab

2

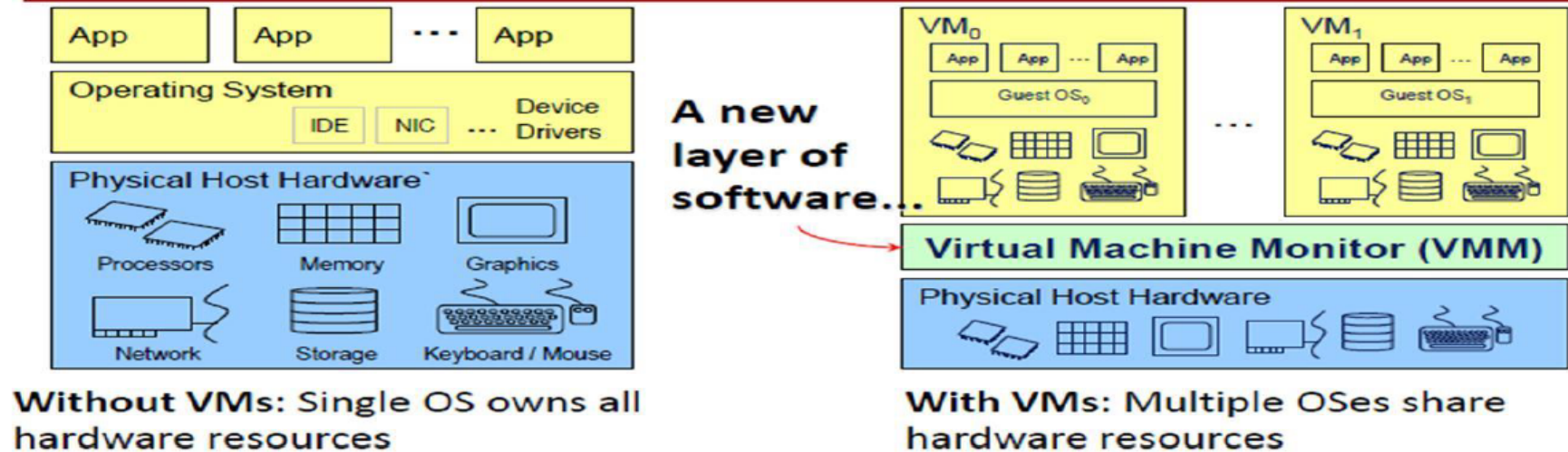
Virtualization and Hypervisor

3

The overview of Lab 1

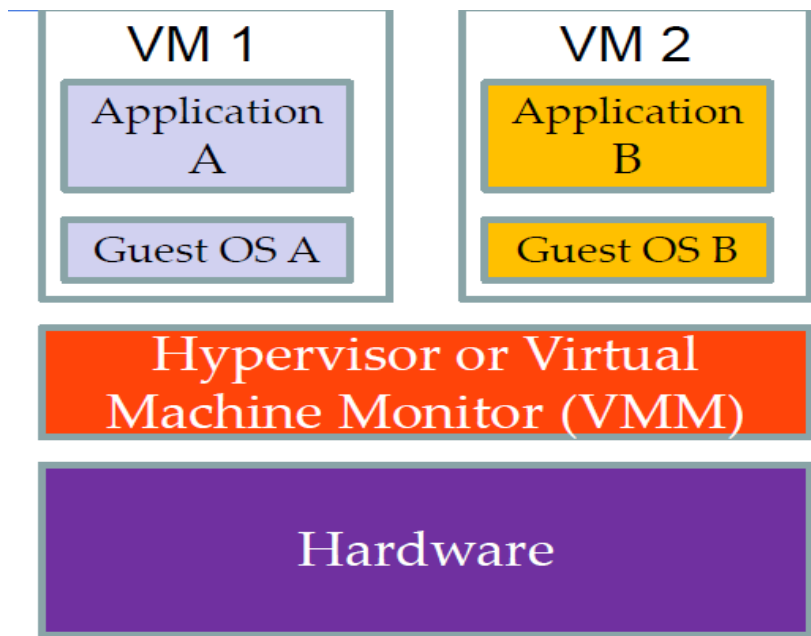
## 2. Virtualization [1]

### System Virtual Machines (VMs)

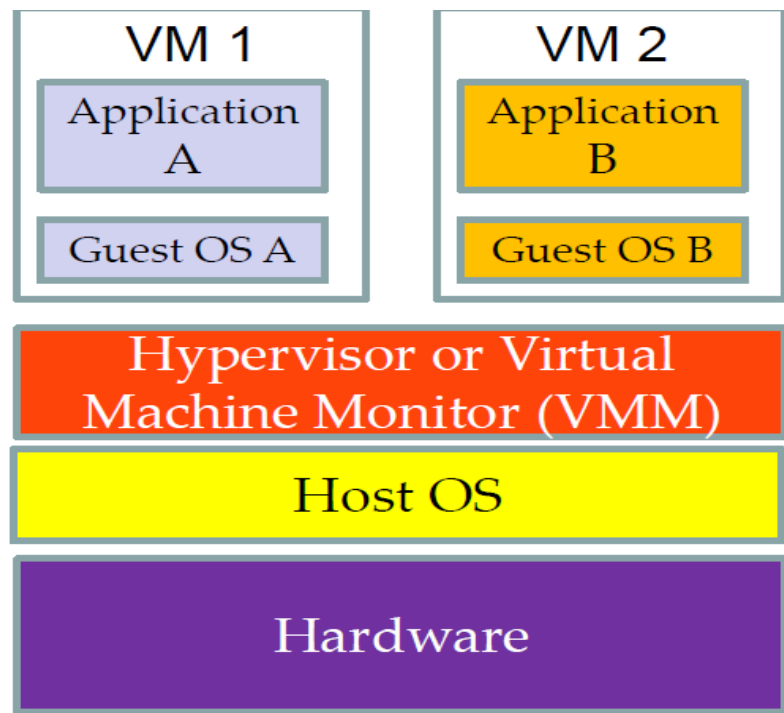


**Virtualization is a conversion process that translates unique IT hardware into Emulated and Standardized software-based copies.**

## 2. Virtualisation and Hypervisor [1]

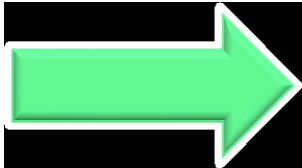














Hardware-based Virtualization



Operating System-based Virtualization

## 2. Vmware: moved or copied using for your laptop

		"I Moved It" (change?)	"I Copied It" (change?)
uuid.bios			
uuid.location			
ethernet.generatedaddress			
guestCPUID.x			
hostCPUID.x			
userCPUID.x			

[...] <https://techhead.co/vmware-esx-i-moved-it-or-i-copied-it-whats-the-difference/>

## 2. What is VMware [2]

- VMware is a virtualization and cloud computing software provider based in Palo Alto, California
- VMware products include virtualization, networking and security management tools, software-defined data center software and storage software

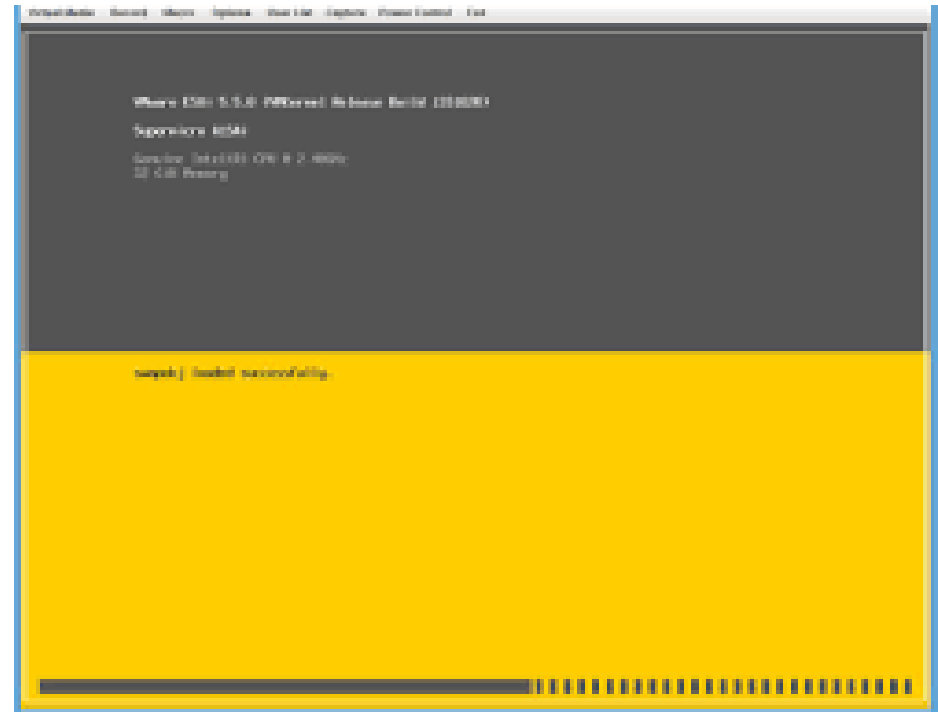


[2] <https://searchvmware.techtarget.com/definition/VMware>

## 2. What is ESXi [3]

- VMware ESXi **Server** is computer **virtualization software** developed by VMware
- ESXi can **be used** to facilitate centralized management **for enterprise desktops and data center applications**

[3] <https://www.vmware.com/content/>



## 2. What is DC [3]

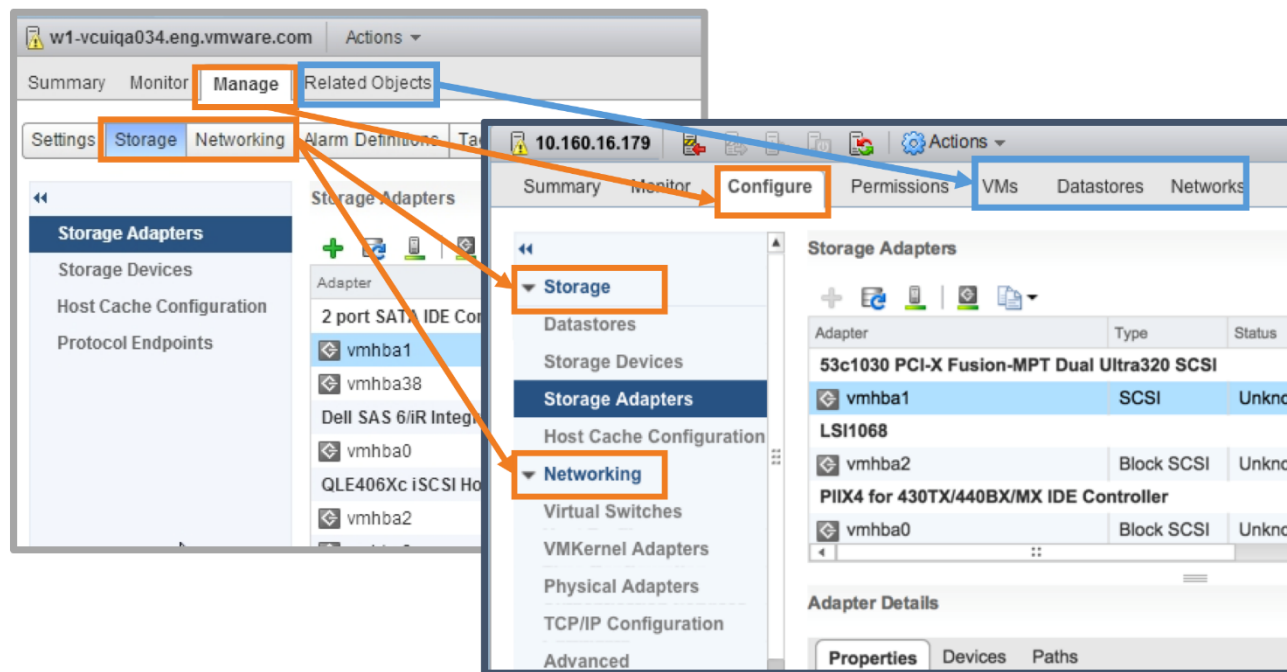
- The Domain Controller provide DNS (required) services to domain members.
- The Domain Controller will act as a router and provide Internet access, so it also needs a path to the physical network, e.g. via NAT.

[3] <https://www.vmware.com/content/>



## 2. What is Vsphere Client dt [4]

- vSphere Desktop can be used only to host a desktop virtualization environment or desktop management and monitoring tools.



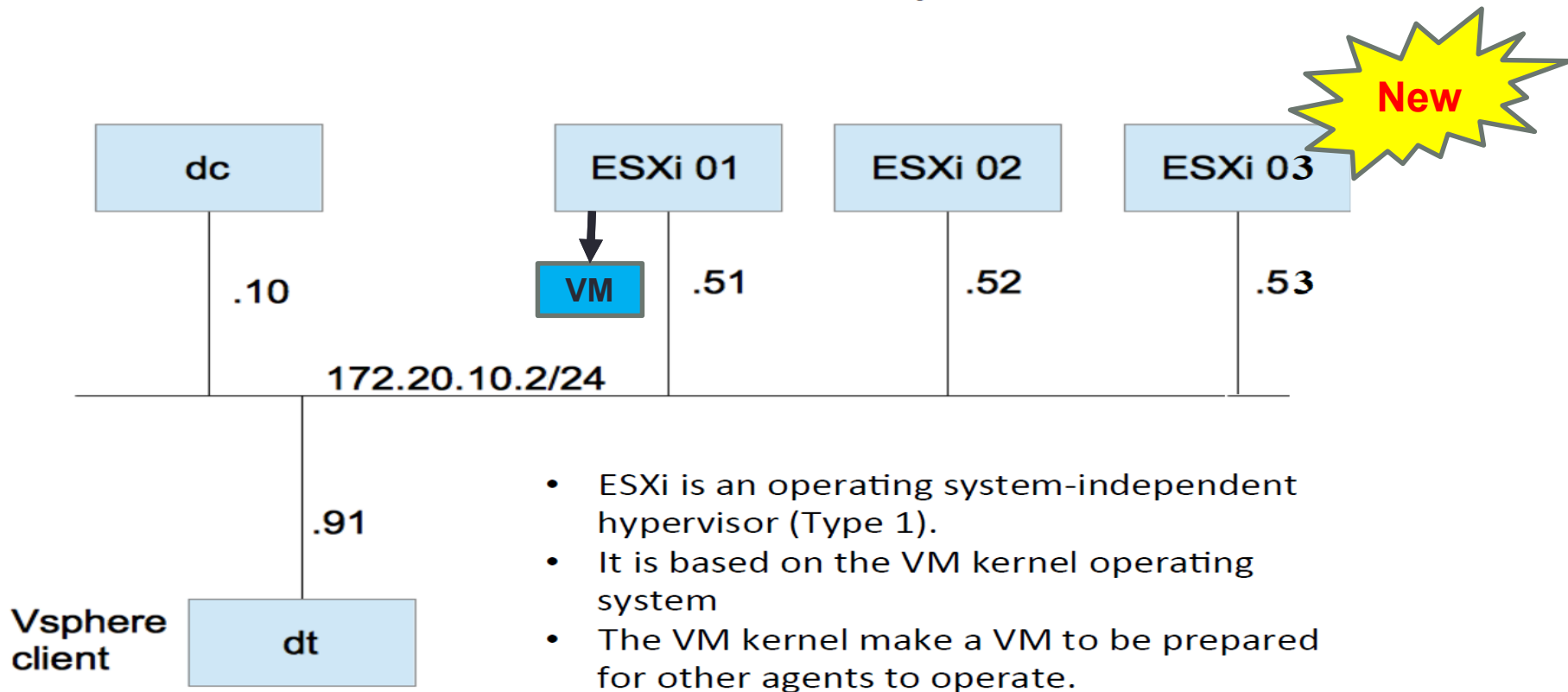
## 3. Over view of Lab 1

- ✓ **Task 1:** Clone all VMs (linked snapshot) slow but sure
- ✓ **Task 2:** Power on dc and dt VMs
- ✓ **Task 3:** Power on and Ip configure for ESXi-01 and ESXi-02
- ✓ **Task 4:** Vsphere client connect to ESXi-01, 02
- ✓ **Task 5:** Create new VMs on ESXi via Vsphere
- ✓ **Task 6:** Create a new ESXi-03 (as a VM)

**Note: do not rush, you can do task 5 and 6 in the lab 2**

### 3. Network design for lab 1 (Week 2)

#### Week 2: VMware ESXi, Build VMs



**THANK YOU!**

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**Question & Answer**