



# **41891, 42891 – CLOUD COMPUTING**

## **LAB 2: ISCSI AND NFS ON ESXI**

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## Outline:



**1**

Using resources

**2**

Network design of the lab

**3**

The overview of Lab 2

# 1. Using lab resources

**CB11.09.405 has strong servers but limited, so:**

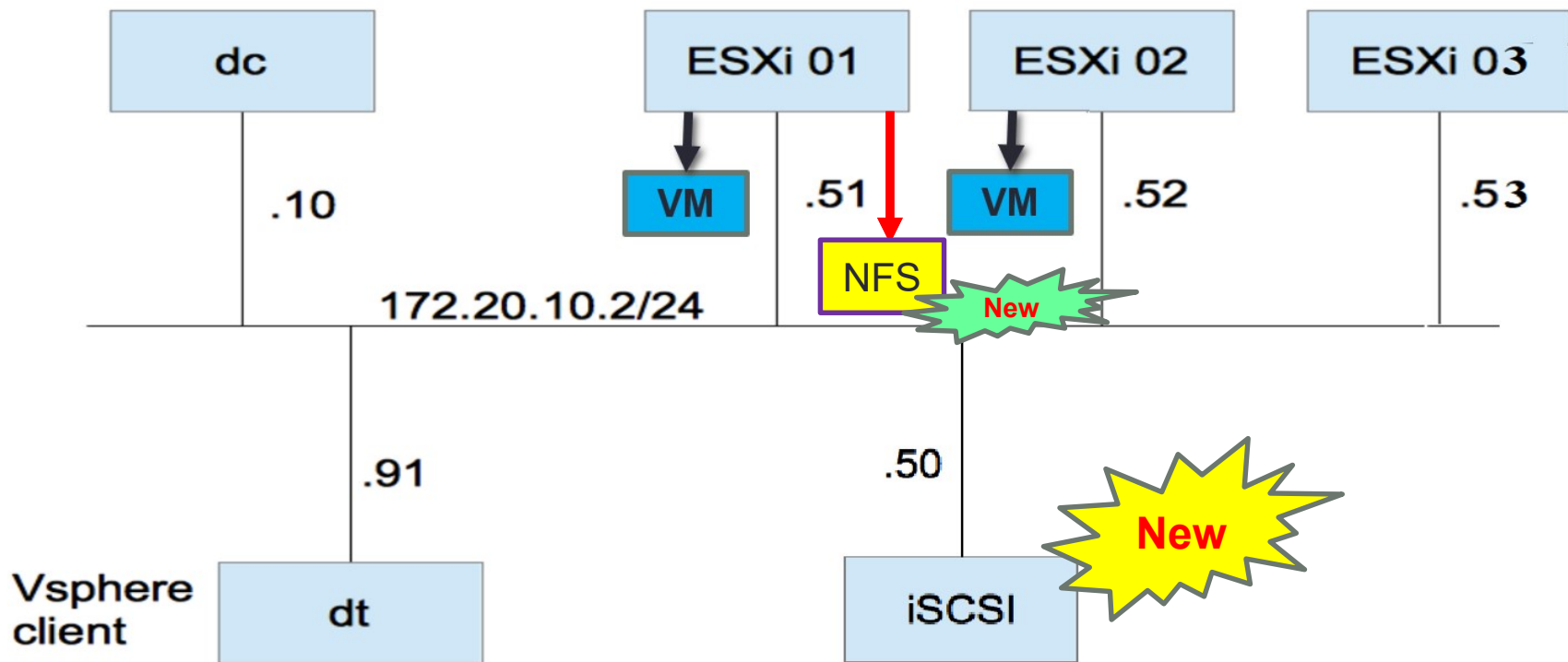
- Please do not leave not necessary data in the desktop or your home directory on ABLE or CAIN server.
- Please use virtual machines in appropriate ways

**The storage for Cloud now is about 700GB, because:**

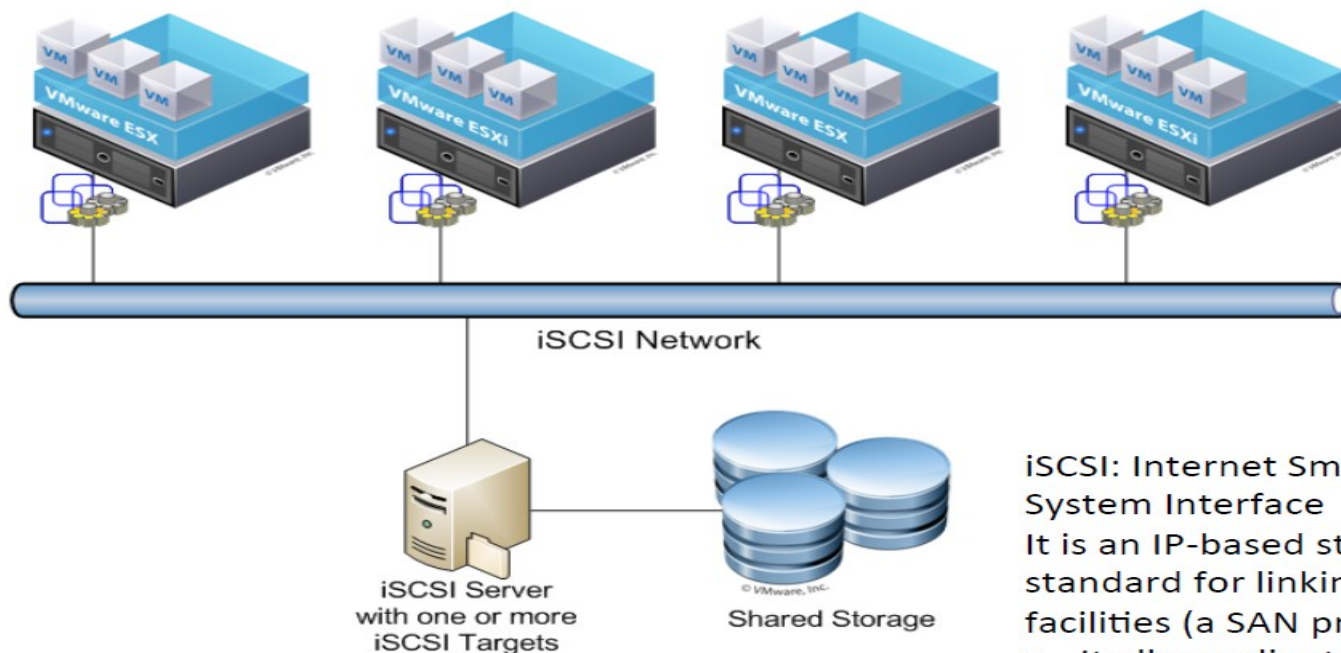
- Several students may copy (or full clone) from master to your home directory.
- Please do the linked clone as **Step 1** from the **Lab 1**

**Thank you for your cooperation!**

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



## 2. What is iSCSI

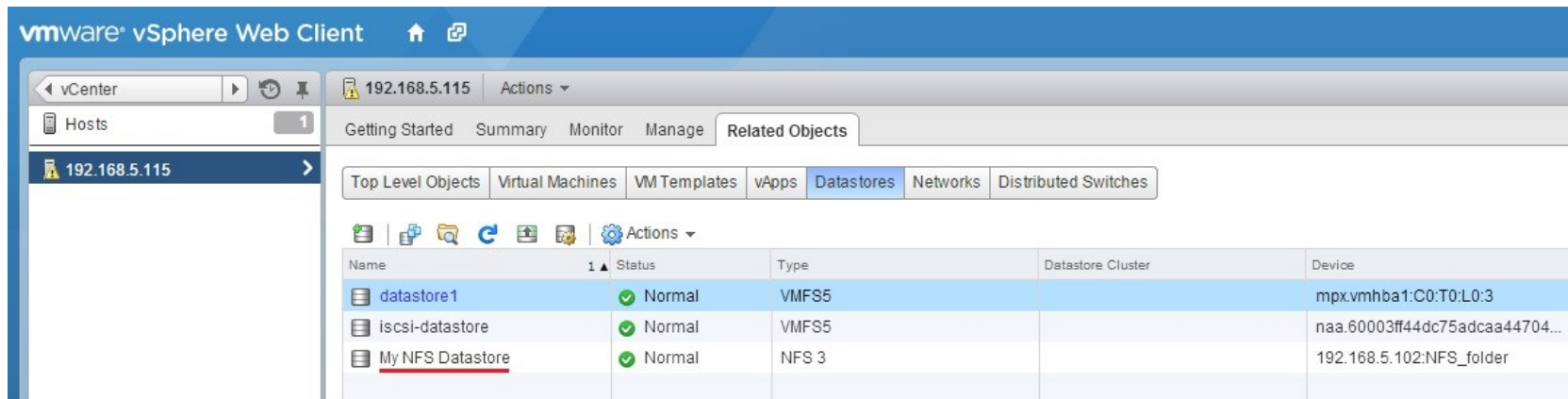


iSCSI: Internet Small Computer System Interface  
It is an IP-based storage networking standard for linking data storage facilities (a SAN protocol)

- It allows clients (initiators) to send SCSI commands to SCSI storage devices (targets)
- iSCSI can be run over long distances using existing network infrastructure

## 2. What is NFS [1]

- **NFS** (Network File System) is a file-sharing protocol used by ESXi hosts to communicate with a NAS (Network Attached Storage) device over a standard TCP/IP network... They can hold virtual machine files, templates, ISO images, and other data. An **NFS** volume supports advanced **vSphere** features such as vMotion, DRS, and HA.



[1] <https://geek-university.com/vmware-esxi/nfs-network-file-system-overview/>

## 3. Over view of Lab 2

- ✓ **Task 1:** Prepare for the lab with installing VMs for ESXi-01, 02
- ✓ **Task 2:** Check and record datastores for the VMs
- ✓ **Task 3:** Setup iSCSI connections for both hosts
- ✓ **Task 4:** Verify iSCSI and create a datastore
- ✓ **Task 5:** Connect NFS
- ✓ **Task 6:** Clean you home directory and tidy up



**THANK YOU!**

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**Question & Answer**