

*VMware vSphere: Fast Track [V5.5]
Class Configuration Sheet – Student A*

Your instructor will assign you a Cloud Labs username during class. Fill out the details in the fields below for easy reference.

Your Global Knowledge Cloud Labs platform credentials

Cloud Labs Username: _____@gklabs *This is the account you will use when connecting to the Global Knowledge Cloud Labs platform from your classroom. Your instructor will provide you with an account.*

Cloud Labs Password: _____

Your credentials to access your assigned lab equipment

Assigned desktop system name	Student 1 Desktop	<i>Shortcuts to the desktop systems for you and your partner are automatically created on your desktop.</i>
Your Desktop system username	desktop01\administrator	<i>This is the account you will use to access your Student Desktop once you have connected to the Cloud Labs platform.</i>
Your Desktop system password	vmware1!	

Connecting to the Cloud Labs Platform

Open Internet Explorer and browse to <https://gw1.labs.globalknowledge.net> and login using your assigned **Cloud Labs** user account that your instructor provided to you (NB You **must** login using the username@domain format as shown in the table).

On the Remote Desktop configuration screen, click the **Connect** button. If any warning dialog appear, ignore by clicking **Connect**

On the first **Windows Security** dialog screen, enter your **Cloud Labs** credentials again, remembering to use the same username@domain format.

You may be prompted again by the **Windows Security** dialog screen to re-enter your credentials, this is because your connection needs to authenticate to two different systems (the RD Gateway and the Remote Desktop session host). If you are prompted again, re-enter your **Cloud Labs** credentials.

Accessing your assigned Lab Systems

Once you have connected to the Cloud Labs platform using your assigned credentials above, a **Welcome Screen** is displayed and will automatically finish the preparation of your lab equipment (if necessary). Once the automated preparation completes, the wizard will create shortcut icons to the Student Desktop systems available in your lab kit. Your assigned student desktop system is named **Student 1 Desktop**. The remaining shortcut on your desktop is for your partner's desktop system. **Do NOT** access your partner's system unless told to do so in the Lab Guide or if your instructor has permitted it.

If required, you can manage your assigned Virtual Training Pod by opening Internet Explorer and logging into the vCloud Director Interface using your **Cloud Labs** User credentials. The vCloud Director user interface provides console and power management capabilities to your Virtual Machines. You can login to vCloud Director by visiting <https://cloud.gklabs.net/cloud/org/vmwarelabs> from within your **Student Desktop** system. Use your **Cloud Labs** credential to login to vCloud Director, but *do not* include the @gklabs domain. Always consult with your lab partner before making any changes that could affect your vApp workspace!

Lab 1 – Installing VMware vSphere GUIs

Preparing for the Lab

Student desktop password	vmware1!
Location of the installation software	LabFiles\vmCenter GA Installer on Desktop
Setup language	English
Your VMware vSphere® ESXi™ host name	esxi01.vclass.local
ESXi host username	root
ESXi host root password	vmware1!

Lab 2 – Configuring VMware ESXi

Preparing for the Lab

Your VMware vSphere® ESXi™ host name	esxi01.vclass.local
ESXi host root password	vmware1!
Network Time Protocol (NTP) server	172.20.10.1
Preferred DNS server	172.20.10.10
VMkernel default gateway	172.20.10.1
Domain name	vclass.local
Domain administrator username	esxi-admin1
Domain administrator password	vmware1!

Lab 3 – Working with Virtual Machines

Preparing for the Lab

Your VMware vSphere® ESXi™ host name	esxi01.vclass.local
ESXi host root password	vmware1!
Virtual machine datastore	datastore1
Guest operating system version	Microsoft Windows Server 2003 (32-bit)
ISO images location	[datastore1] ISOImages
Guest Installation ISO	win2k3srvsp2.iso
Virtual machine Administrator password	<i>*No password is configured*</i>

Lab 4 – Configuring VMware vCenter Server Appliance

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server Appliance root password	vmware1!
Your VMware vSphere® ESXi™ host name	esxi01.vclass.local
ESXi host root password	vmware1!
Preferred DNS server	172.20.10.10
Enterprise Plus license key	Licenses can be obtained from http://extras.gklabs.net/vSphere-Licenses/eval-licenses.txt
vCenter Server license key	http://extras.gklabs.net/vSphere-Licenses/eval-licenses.txt

Lab 5 – Using the VMware vSphere Web Client

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server Appliance password	vmware1!
Local datastore name	datastore1

Lab 6 – Configuring VMware vCenter Single Sign-On

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server Appliance password	vmware1!
vCenter Server Appliance SSO administrator username	administrator@vsphere.local
vCenter Server Appliance SSO administrator password	vmware
Windows Domain	vclass.local
Domain Alias	vclass
Windows Domain Administrator username	esxi-admin1@vclass.local
Windows Domain Administrator password	vmware1!
Fully Qualified Domain Name	vclass.local
Primary server URL	ldap://vclass.local:389
Base DN for users	CN=Users,DC=vclass,DC=local
Base DN for groups	CN=Users,DC=vclass,DC=local

Lab 7 – Creating Folders in VMware vCenter Server

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server Appliance password	vmware1!

Lab 8 – Standard Switches

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
Your VMware vSphere® ESXi™ host name	esxi01.vclass.local
vmnics to use for the Production virtual switch	vmnic1, vmnic3
Virtual machine Administrator password	<i>*No password is configured*</i>

Lab 9 – Accessing iSCSI Storage

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
VMkernel port IP address / subnet mask	172.20.10.61 / 255.255.255.0
VMkernel default gateway	172.20.10.1
Your ESXi iSCSI Qualified Name (iQN)	<i>*Not Required*</i>
Name of the iSCSI target	iscsi.vclass.local

Lab 10 – Accessing NFS Storage

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
NFS server host name	nfs.vclass.local
Your NFS folder	/folder1

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
Your VMware vSphere® ESXi™ host name	esxi01.vclass.local
Shared storage type used in this lab environment	iSCSI
Your local datastore	datastore1
First assigned LUN ID	vdisk.share01
Second assigned LUN ID	vdisk.share02

For task 3 pre-step

First shared volume device name	vdisk.share01
Second shared volume device name	vdisk.share02
Your private shared volume device name	vdisk.lun01

Pre-step for Task 3: Create a VMFS Datastore

Change the SCSI LUN Display Name for your assigned iSCSI volumes

Objective: Assign friendly names to iSCSI volumes

In these supplement steps; you will perform the following:

1. Identify your assigned iSCSI volumes.
2. Change the SCSI LUN Display name for your devices.

Modern iSCSI volumes can usually only be identified by their Target Name/Path ID fields, neither of which are visible during the **New Datastore** wizard. To make it easier to identify your volumes, it is possible to rename the generated SCSI LUN Display Names to something more suitable.

Each student should perform these steps individually. Use the information provided in the “Preparing for the Lab” Section of your student supplement worksheet to help match your assigned iSCSI volumes.

Task 1: Identify your assigned iSCSI volumes

Display advanced information about your iSCSI provided volumes.

1. Select **vCenter** -> **Hosts and Clusters** -> **Lab Servers** -> *Your_ESXi_hostname*.
2. Click the **Manage** tab and click **Storage**.
3. Click **Storage Devices**. All storage devices visible to your ESXI host are listed. Click the **Name** or **Transport** column to sort the table so that you can see the iSCSI volumes.


Task 2: Change the SCSI LUN Display Name for your assigned devices

1. Select an iSCSI volume in the list, and then select the **Paths** tab under **Device Details**.
2. Expand the **Target** column until you can see the entire IQN name for the selected volume. The friendly name assigned by the array is situated between two colons (:). The sample IQN below highlights the array assigned friendly name:

iqn.2006-06.com.quadstor:**vdisk.share01**:172.20.10.14:3260

NOTE

The device list shows any volume that is visible to your ESXi host, including the shared iSCSI volumes that your partner is going to configure. If the selected device does not belong to you, select another device in the list until you identify one of your own.

3. Once you have identified the friendly name of the current volume, click the **Rename Device** icon: 
4. Replace the original Display Name text with the friendly name, and then click **OK**.
5. Repeat steps 1-4 for your remaining assigned iSCSI volumes.

Lab 12 – Using Templates and Clones

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
Guest operating system version	Microsoft Windows Server 2003 (32-bit)
Location of Windows Sysprep files	C:\Users\Public\Desktop\Lab Files\Sysprep-files-svr2003
Sysprep files target folder	/etc/vmware-vpx/sysprep/svr2003
Shared VMFS datastore for virtual machines	VMFS-01
Local VMFS datastore for virtual machines	Local-ESXi01
Windows product key	HQKF9-VRBW8-4KMYP-FKWYR-Y3RDY
Virtual machine Administrator password	vmware1!
Time zone	(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

Task 1: Copy Sysprep Files to vCenter Server Appliance

NOTE

Step 6: The Sysprep folder is not on *your* desktop, it is on the Public user Desktop (See Location of Sysprep files above)

Lab 13 – Modifying a Virtual Machine

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
Virtual machine Administrator password	vmware1!
Your raw logical unit number (LUN) ID	vdisk.lun01

Lab 14 – Migrating Virtual Machines

Preparing for the Lab

ESXi host to migrate virtual machines to	esxi02.vclass.local
vCenter Server appliance root password	vmware1!
vmnic for the VMware vSphere® vMotion® network	vmnic2
vMotion IP address	172.20.12.51
vMotion subnet mask	255.255.255.0
Shared datastore for virtual machines	VMFS-01
Local datastore name	Local-ESXi02
Virtual machine administrator password	vmware1!

Lab 15 – Managing Virtual Machines

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
Virtual machine Administrator password	vmware1!
Third-party software ISO image location	[Local-ESXi01] ISOImages/Classfiles-vSphere.iso

Lab 16 – Managing VMware vSphere vApps

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!

Lab 17 – User Permissions

Preparing for the Lab

VMware® vCenter™ Server Appliance™ name	vcva01.vclass.local
vCenter Server root password	vmware1!
Your VMware vSphere® ESXi™ host name	esxi01.vclass.local
Guest operating system	Microsoft Windows Server 2003 (32-bit)
Your non-privileged domain account name	vclass.local\esxi-user1
Your non-privileged domain account password	vmware1!
Datastore for domain users	NFS-<your_name>
Active Directory Domain	VCLASS.LOCAL

Lab 18 – Resource Pools

Preparing for the Lab

Team VMware® vCenter Server™ system name	vcva01.vclass.local
Team vCenter Server root password	vmware1!

Lab 19 – Monitoring Virtual Machine Performance

Preparing for the Lab

Team VMware® vCenter Server™ system name	vcva01.vclass.local
Team vCenter Server root password	vmware1!

Lab 20 – Using Alarms

Preparing for the Lab

Team VMware® vCenter Server™ system name	vcva01.vclass.local
Team vCenter Server root password	vmware1!

Lab 21 – Using VMware vSphere High Availability

Preparing for the Lab

Team VMware® vCenter Server™ system name	vcva01.vclass.local
Team vCenter Server root password	vmware1!
VMware vSphere® ESXi™ host to partner with	esxi02.vclass.local

Lab 23 –VMware vSphere Fault Tolerance

Preparing for the Lab

Team VMware® vCenter Server™ system name	vcva01.vclass.local
Team vCenter Server root password	vmware1!
VMware vSphere® ESXi™ host to partner with	esxi02.vclass.local

NOTE

This lab *is* supported on our environment!

Lab 24 –VMware vSphere Distributed Switches

Preparing for the Lab

VMware vSphere® administrator username	administrator
Standard lab password	vmware1!
Production network DHCP range	172.20.11.0/24

Task 7: Complete the Network Migration

Step 3: Type the following commands to renew the DHCP config:

```
dhclient -r
dhclient -v
```

Lab 25 – Port Mirroring

Preparing for the Lab

VMware vSphere® administrator username	administrator
Standard lab password	vmware1!

Lab 26 –VMware vSphere Distributed Resource Scheduler

Preparing for the Lab

Team VMware® vCenter Server™ system name	vcva01.vclass.local
Team vCenter Server root password	vmware1!
VMware vSphere® ESXi™ host to partner with	esxi02.vclass.local

Lab 27 – Host Profiles

Preparing for the Lab

VMware vSphere® administrator username	administrator
Standard lab password	vmware1!

Lab 28 – Policy Based Storage

Preparing for the Lab

VMware vSphere® administrator username	administrator
Standard lab password	vmware1!

Task 4: Run vSphere Storage DRS and Apply Migration Recommendations

Task 5b: If you do not get any Storage DRS recommendations, it is because the Local-ESXi##-Gold datastore is not yet 50% utilized. To remedy this, add an extra thick-provisioned hard disk to one of the Win VMs. You will need to give the hard disk enough space to consume approximately 50% of the total datastore capacity.

Lab 29 – Managing Datastore Clusters

Preparing for the Lab

VMware vSphere® administrator username	administrator
Standard lab password	vmware1!

Lab 30 – VMware vSphere Update Manager

Preparing for the Lab

Update Manager Server installation target host name	Your student desktop system
Team VMware® vCenter Server™ system name	vcva01.vclass.local
vCenter Server root password	vmware1!
Setup language	English
vCenter Server database: Local or Remote?	Local
SQL Server authentication method	N/A
ODBC data source name (DSN)	N/A
SQL Server to connect to	N/A
Your default database	N/A
UNC username	N/A
UNC user password	N/A
Location of installation software	LabFiles\ vCenter GA Installer folder on Desktop
Patch bundle	LabFiles\update-from-esxi5.5-5.5_update01.zip

Lab 31 – Using VMware vSphere Management Assistant

Preparing for the Lab

VMware vSphere® administrator username	administrator
Standard lab password	vmware1!
VMware® vCenter™ fully qualified domain name (FQDN)	vcva01.vclass.local
ESXi01 FQDN	esxi01.vclass.local
ESXi02 FQDN	esxi02.vclass.local
VMX file path	/vmfs/volumes/VMFS-StudentA-Silver/Win01-A/Win01-A.vmx

Lab 32 – (Optional) Installing the VMware vCenter Server components

Preparing for the Lab

Windows vCenter Server system name	desktop02.vclass.local
vCenter Server password	vmware1!
Location of the vCenter Server installation folder	LabFiles\vmCenter GA Installer folder on Desktop
Setup language	N/A
SSO administrator password	VMware1!

NOTE

The vCenter Server components will consume most of the memory on your desktop systems and therefore is recommended that this lab be performed last.

Lab 33 – Using VMware vSphere Auto Deploy on VMware vCenter Server Appliance

Preparing for the Lab

VMware vSphere® administrator username	administrator
Standard lab password	vmware1!
vCenter Server system fully qualified domain name (FQDN)	vcva01.vclass.local
vSphere administrator user name	root
vCenter Server IP address	172.20.10.94
Auto Deploy DHCP scope name	Scope [172.20.10.0] Management Network
Auto Deploy reservation IP	172.20.10.200

Task 8: Configure DHCP

Step 6: A shortcut to the DHCP management tool has been created on your desktop. Ignore Steps 6 and 7!

Task 11: Prepare to Monitor ESXi Bootup During the AutoDeploy process

To access the console of your ESXi hosts, perform the following steps.

1. From your Desktop System, open Internet Explorer and navigate to <https://cloud.gklabs.net/cloud/org/vmwarelabs>
2. Login using your **Cloud Labs** username and password that you recorded on the first page of this Class Configuration Sheet, but do not include the @gklabs domain. For instance, if your username is w0101-student1-1@gklabs, input only w0101-student1-1.
3. Continue with the lab, starting from Task 11, Step 6.

Ignore any future tasks or steps that ask you to restore RDP connections to a Control Center VM!