Cloud Computing

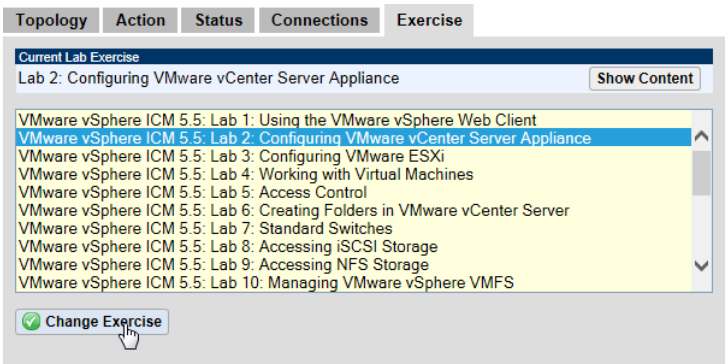
Practical 5:
Controlling and Using Storage Resources

Aims and Objectives

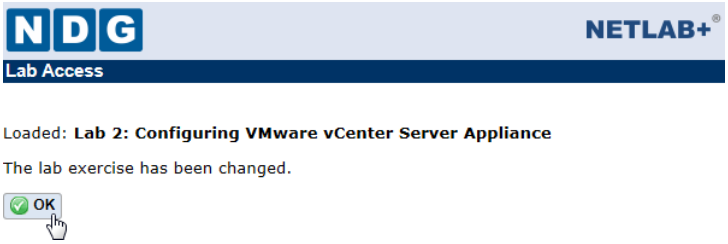
In this week's practical we continue examining how to construct cloud infrastructure, working with the VMware virtualization systems and completing practical tasks aligned with the VMware vSphere Install, Configure, and Manage certification curriculum. This week we examine the use of two different types of storage protocols, iSCSI and NFS. Both of these are network protocols for communicating storage data over a network. The NFS protocol has been in use on the Internet for many years, first developed by Sun Microsystems in the 1980s with a focus on file sharing and access. The iSCSI protocol was developed in the 2000s, extending SCSI disk access (a high performance alternative to SATA common on server infrastructure) to allow such devices to be accessed over a common network infrastructure and form Storage Area Networks (SANs).

Changing Exercises in NetLab

If you complete the work for a lab task, you can change exercise using the Exercise tab indicated above. Changing on the Exercise tab will show you a list of available exercises for that particular POD:



Select the lab task that you wish to switch to, then click on the **Change Exercise** button. The system will then perform any necessary reconfiguration before displaying a confirmation message:



Clicking the **OK** button will return you to the topology to begin the new lab task.

Lab Tasks

In this week's practical, you are required to complete the first two lab tasks:

- Lab 8: Accessing iSCSI Storage; and
- Lab 9: Accessing NFS Storage.
  Note that the last part of this lab is to 'View iSCSI and NFS Storage Information', however the provided instructions only cover NFS. Regardless, upon completing the instructions, you should be able to determine on your own how to view the information about the iSCSI storage device on the screen at the end of the lab.

Following the instructions above, start by booking in a POD to complete Lab 8. The instructions for the lab tasks can be found by clicking on the **Show Lab Content** button as explained in Practical 2.

If you wish to complete multiple labs in one session, you can switch between labs using the steps shown above. Instructions for how to proceed with the next lab task can be found in the "problems" section below.

Make sure you follow the lab steps very carefully, otherwise you will encounter problems and be unable to complete the lab tasks.