
SIT706 Cloud Computing Technologies

Practical 11: Resource Scheduling and Fault Tolerance

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 vSphere Distributed Resource Scheduler, which allows VMs to be automatically migrated between physical hosts upon configured criteria being satisfied, e.g., to correct for load imbalance. We then examine vSphere Fault Tolerance, which provides the functionality to allow for replica VMs to be maintained on backup physical hosts, and upon loss of the primary physical host, vSphere will automatically transition to the backup VM.

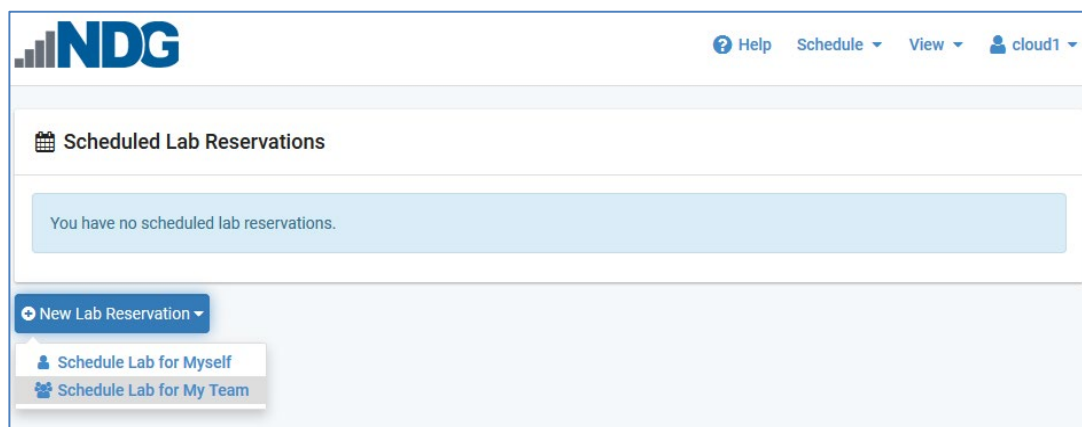
Using NetLab+ VE

In this week's practical, you are required to complete the following two labs:

- Lab 20: VMware vSphere Distributed Resource Scheduler; and
- Lab 21: Configuring VMware vSphere Fault Tolerance.

As in the previous practicals, you will use the School's NetLab infrastructure which can be accessed via <https://vmlab.it.deakin.edu.au/>

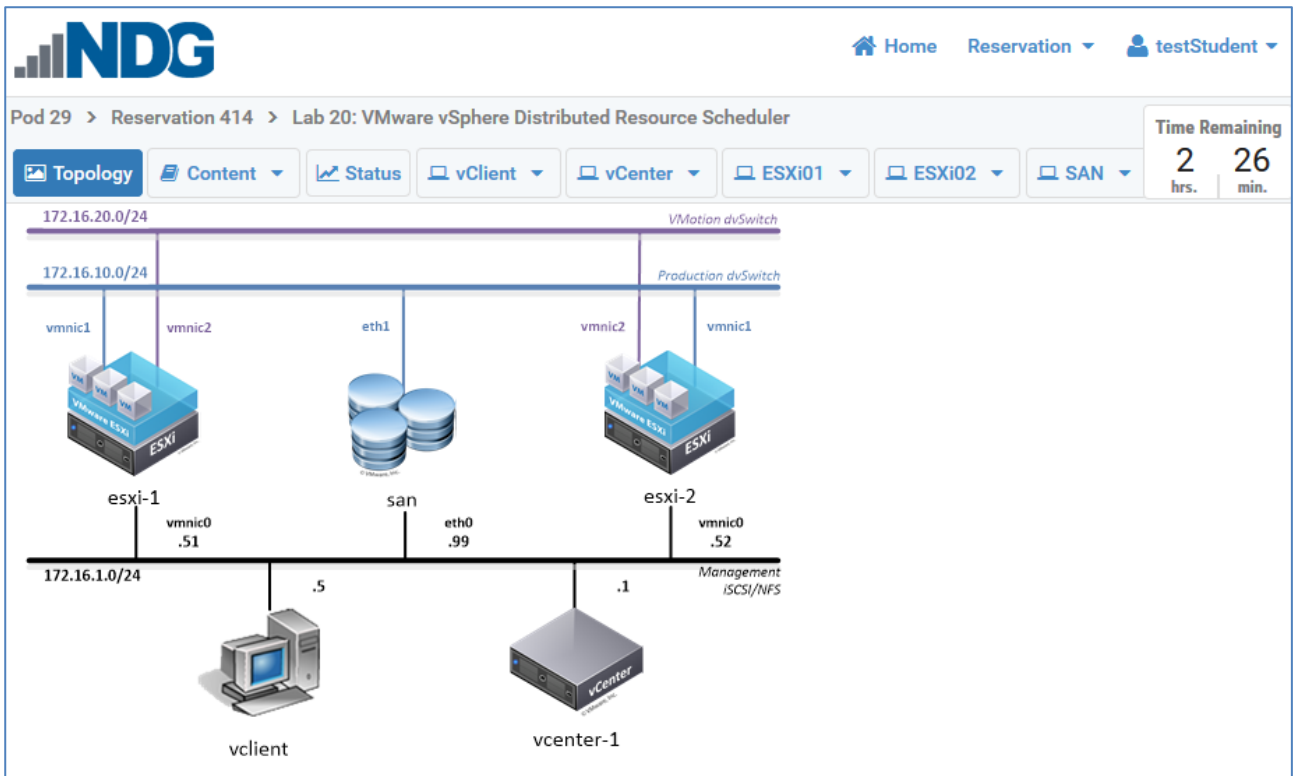
Once you have logged in, book an appropriate Pod and Lab by clicking on the **New Lab Reservation** menu and then the **Schedule Lab for Myself** menu item:



Ensure you have selected the **VMware vSphere ICM 6** topics to view the list of available labs. Using the **Action** menu, click on the **Schedule** menu-item to start a Pod booking for the lab named:

- Lab 20: VMware vSphere Distributed Resource Scheduler.

After successfully booking this lab, click on the **Enter Lab** button to begin your work. You will now be shown the topology (the virtual machines and networks) associated with this lab:



The instructions for this lab can be found by clicking on the **Content** menu.

Once you have completed work all on this Lab, ensure you click on the **Reservation > End Reservation Now** menu-item to free the Pod's resources for others to use.

As above for Lab 20, you should now complete the following lab:

- Lab 21: Configuring VMware vSphere Fault Tolerance.