

Microsoft Private Cloud Project Outline

Project objective: To demonstrate the student's ability to build, monitor and deploy System Center applications in order to build a Cloud environment.

Students will build a Microsoft based private cloud using System Center Applications, including Operations Manager, Service Manager, and Virtual Machine Manager. They will be challenged to resolve issues in the deployment and day to day management of a private cloud.

Your task: Build an infrastructure for a private cloud.

In your groups, you should:

- Configure an isolated network with 5 physical computers (Hosts).
- Install Server 2012 R2 on all Hosts.
- Install Virtual Machine Manager on all Hosts.
- Configure 2 Hosts into a Windows Failover Cluster (FOC).
- Configure a Server 2012 R2 as a Storage server for the FOC with iSCSI.
- Create Management VM for AD -DNS -DHCP -etc.
- Create System Center VM's
- Install and configure the other System Center Applications (Operations Manager, Service Manager, etc.) and Management Software (AD, DNS, DHCP, etc.) on the other 2 hosts and if needed on the iSCSI server
- Create templates for Service and VM for a IIS Web server.
- User should be able to launch web server service from Service Manager Portal.

Students will demonstrate a working environment on the lab computers.

Grading - Configure an isolated network. – 10 Points
 Install Server 2012 R2. – 10 Points
 Install Virtual Machine Manager on all Hosts. – 10 Points
 Configure 2 Hosts into a Windows Failover Cluster (FOC). – 10 Points
 Configure a Server 2012 R as a Storage server for the FOC with iSCSI. – 10 Points
 Install and configure the other System Center Applications. – 20 points
 Install and configure the Management Applications. – 10 Points
 Create templates for Service and VM for an IIS Web server. – 10 Points
 Launch web server service from Service Manager Portal. – 10 Points