Course 20414A: Implementing an Advanced Server Infrastructure
Exam Code: 70-414
Duration: 40 Hrs

Course Outline

Module 1: Planning and Implementing a Server Virtualization Strategy

This module explains how to plan and implement a server virtualization strategy using Microsoft System Center 2012.

Lessons
- Overview of System Center 2012 Components
- Integrating System Center 2012 and Server Virtualization
- Planning and Implementing a Server Virtualization Host Environment

Lab: Planning and Implementing a Server Virtualization Strategy
- Planning the Hyper-V Host Deployment
- Configuring Hyper-V Host Groups
- Configuring VMM Libraries

Module 2: Planning and Implementing Networks and Storage for Virtualization

This module explains how to plan a storage infrastructure for a Hyper-V server virtualization deployment.

Lessons
- Planning a Storage Infrastructure for Virtualization
- Implementing a Storage Infrastructure for Virtualization
- Planning and Implementing a Network Infrastructure for Virtualization
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Lab : Planning and Implementing Virtualization Networks and Storage
- Planning a Storage Infrastructure for Virtualization
- Planning a Network Infrastructure for Virtualization
- Implementing a Storage Infrastructure for Virtualization
- Implementing a Network Infrastructure for Virtualization

Module 3: Planning and Deploying Virtual Machines

This module explains how to plan and deploy virtual machines on Windows Hyper-V.

Lessons
- Planning Virtual Machine Configuration
- Preparing for Virtual Machine Deployments with VMM
- Deploying Virtual Machines

Lab: Planning and Implementing a Virtual Machine Deployment and Management Strategy
- Planning Physical to Virtual Server Conversions
- Planning Virtual Machine and Service Templates
- Configuring VMM Profiles and Templates

Module 4: Planning and Implementing a Virtualization Administration Solution

This module explains how to plan and implement a virtualization administration solution by using System

Center 2012.

Lessons
- Planning and Implementing Microsoft System Center Administration
- Planning and Implementing Self-Service with System Center
- Planning and Implementing Automation with System Center

Lab : Planning and Implementing a Virtualization Administration Solution
- Planning Administrative Delegation and Self-Service in System Center 2012
- Configuring Delegated Administration and Self-Service in VMM
- Configuring Process Automation in System Center 2012

Module 5: Planning and Implementing a Server Monitoring Strategy

This module explains how to plan and implement a server monitoring strategy using the Windows Server 2012

tools and using Microsoft System Center 2012 - Operations Manager (Operations Manager).

Lessons
- Planning Monitoring in Windows Server 2012
- Overview of System Center Operations Manager
- Planning and Configuring Monitoring Components
- Configuring Integration with VMM

Lab : Implementing a Server Monitoring Strategy
- Configuring Server Monitoring Using Windows Server 2012
- Implementing Operations Manager Monitoring
- Configuring the Operations Manager Monitoring Components
- Monitoring Virtual Machines and Host Machines

Module 6: Planning and Implementing High Availability for File Services and Applications

This module explains how to plan and implement an application and file services infrastructure that is highly

available.

Lessons

- Planning and Implementing Storage Spaces
- Planning and Implementing DFS
- Planning and Implementing Network Load Balancing

Lab : Planning and Implementing High Availability for File Services and Applications
- Planning a High Availability Strategy for File Services
- Planning a High Availability Strategy for Web Applications
- Implementing a High Availability Solution for File Storage
- Implementing a High Availability Solution Using Network Load Balancing

Module 7: Planning and Implementing a Highly Available Infrastructure Using Failover Clustering

This module explains how to plan and implement a highly available server infrastructure by using the failover clustering features in Windows Server 2012.

Lessons
- Planning a Failover Clustering Infrastructure
- Implementing Failover Clustering
- Integrating Failover Clustering with Server Virtualization
- Planning a Multi-Site Failover Cluster

Lab: Planning and Implementing a Highly Available Infrastructure Using Failover Clustering
- Designing Highly Available Server Roles
- Implement Hyper-V Replica
- Deploy a Failover Cluster
- Implement a Scale-Out File Server
- Implement Highly Available Virtual Machines
- Implement Operations Manager and VMM Integration

Module 8: Planning and Implementing an Server Updates Infrastructure

This module explains how to plan and implement an infrastructure for updating Windows Servers and virtual machines.

Lessons
- Planning and Implementing a Windows Server Update Services (WSUS) Deployment
- Planning Software Updates with System Center 2012 Configuration Manager
- Planning and Implementing Updates in a Server Virtualization Infrastructure

Lab : Planning and Implementing an Update Remediation Infrastructure
- Implement Host Updating in VMM
- Configuring Cluster-Aware Updating
- Planning a WSUS Deployment
- Deploying a Replica Server
- Configure and Validate the WSUS Server Deployment

Module 9: Planning and Implementing a Business Continuity Strategy

This module explains how to plan and implement a business continuity strategy in a Windows Server 2012 environment.

Lessons
- Overview of Business Continuity Planning
- Planning and Implementing Backup Strategies
- Planning and Implementing Recovery
- Planning and Implementing Virtual Machine Backup and Recovery

Lab : Implementing a Virtual Machine Backup Strategy with Data Protection Manager
- Configuring Data Protection Manager
- Implementing Backup and Restore for Virtual Machine Data
- Implementing Virtual Machine Backup and Recovery using Data Protection Manager

Module 10: Planning and Implementing an Public Key Infrastructure

This module explains how to plan and implement a PKI deployment, and plan and implement a certificate management solution.

Lessons
- Planning and Implementing a Certification Authority Deployment
- Planning and Implementing Certificate Templates
- Planning and Implementing Certificate Distribution and Revocation
- Planning and Implementing Key Archival and Recovery

Lab : Planning and Implementing an Active Directory Certificate Services (AD CS) Infrastructure
- Planning the AD CS Deployment
- Deploying the Certificate Authority (CA) Infrastructure
- Implementing Certificate Templates
- Implementing Certificate Revocation and Distribution

Module 11: Planning and Implementing an Identity Federation Infrastructure

This module explains how to plan and implement an AD FS server deployment and claims aware application access.

Lessons
- Planning and Implementing an AD FS Server Infrastructure
- Planning and Implementing AD FS Claim Providers and Relying Parties
- Planning and Implementing AD FS Claims and Claim Rules

Lab : Planning and Implementing an Active Directory Federation Services (AD FS) Infrastructure
- Designing the AD FS Deployment
- Configuring Prerequisite Components for AD FS
- Deploying AD FS for Internal Users
- Deploying AD FS for a Partner Organization

Module 12: Planning and Implementing an Information Rights Management Infrastructure

This module describes how to plan and implement an Active Directory Rights Management Services (AD RMS) deployment, plan and manage AD RMS templates and access, and plan and implement external access to AD RMS services.

Lessons
- Planning and Implementing an AD RMS Cluster
- Planning and Implementing AD RMS Templates and Policies
- Planning and Implementing External Access to AD RMS Services
- Planning and Implementing AD RMS Integration with Dynamic Access Control (DAC)

Lab : Planning and Implementing an AD RMS Infrastructure
- Planning the AD RMS Deployment
- Deploy the AD RMS Infrastructure for Internal Users
- Implement AD RMS Integration with DAC
- Implement AD RMS Integration with External Users