



5 Days

20414: Implementing an Advanced Server Infrastructure

The 5-days Microsoft 20414C Implementing an Advanced Server Infrastructure training course is part 1 in the series of 2 courses to qualify MCSE: Server Infrastructure that delivers requisite skills to plan and implement a highly available and secure server infrastructure on public key infrastructure (PKI), Active Directory Federation Service (AD FS), and Active Directory Rights Management Services (AD RMS).

The professionals also learn to deploy self-service and automated virtual machines and implement monitoring strategies.

NOTE: Labs in this course are based on Windows Server 2012 R2 and System Center 2012 R2.

Course Details

Course Outline

Module 1: Overview of Management in an Enterprise Data Center

This module describes the enterprise data center and how to use System Center 2012 to manage the enterprise data center.

Lessons

- Enterprise Data Center Overview
- Microsoft System Center 2012 R2 Components Overview

Module 2: Planning and Implementing a Server Virtualization Strategy

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

Lessons

- Planning and Implementing a Server Virtualization Host Environment
- Planning a VMM Deployment

Module 3: Planning and Implementing Networks and Storage for Virtualization

This module explains how to plan and implement the network and storage infrastructure to deploy a virtualized server infrastructure.

Lessons

• Planning and Implementing a Network Infrastructure for Virtualization

- Planning a Storage Infrastructure for Virtualization
- Planning and Implementing Network Virtualization
- Implementing a Storage Infrastructure for Virtualization

Module 4: Planning and Deploying Virtual Machines

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

Lessons

- · Preparing for Virtual Machine Deployments with VMM
- Planning a Virtual Machine Configuration
- Planning and Implementing Hyper-V Replica
- · Deploying Virtual Machines

Module 5: 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 Automation with System Center 2012
- Planning and Implementing Self-Service Options in System Center 2012
- Planning and Implementing System Center 2012 Administration
- Planning and Implementing Updates in a Server Virtualization Infrastructure

Module 6: Planning and Implementing a Server Monitoring Strategy

In this module, students will be able to plan and implement a server monitoring strategy using the Windows Server 2012 tools and using Operations Manager.

Lessons

- Operations Manager Overview
- · Configuring Integration with VMM
- Planning Monitoring in Windows Server 2012
- Planning and Configuring Monitoring Components

Module 7: Planning and Implementing High Availability for File Services and Applications

This module explains how to plan and implement an application and highly available file services infrastructure.

Lessons

- Planning and Implementing NLB
- Planning and Implementing Storage Spaces
- · Planning and Implementing a DFS

Module 8: Planning and Implementing a High Availability Infrastructure Using Failover Clustering

This module explains how to plan and implement a high availability server infrastructure by deploying the failover clustering features in Windows

Lessons

- · Integrating Failover Clustering with Server Virtualization
- Implementing Failover Clustering
- · Planning a Multisite Failover Cluster
- Planning and Implementing Updates for Failover Clusters
- Planning an Infrastructure for Failover Clustering

Module 9: Planning and Implementing a Business Continuity Strategy

This module explains planning and implementation of a business continuity strategy in a Windows Server 2012 environment.

Lessons

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

Module 10: Planning and Implementing a Public Key Infrastructure

In this Module, students will be able to plan and implement a certificate management solution and a PKI deployment.

Lessons

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

Module 11: Plan and Implement 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 Web Application Proxy
- Planning and Implementing AD FS Claim Providers and Relying Parties
- Planning and Implementing AD FS Claims and Claim Rules
- Planning and Implementing an AD FS Server Infrastructure

Module 12: Planning and Implementing Data Access for Users and Devices

This module explains how to plan and implement Dynamic Access Control (DAC), Workplace Join and Work Folders.

Lessons

- Planning Work Folders
- Planning Workplace Join

Planning and Implementing DAC

Module 13: Planning and Implementing an Information Rights Management Infrastructure

This module explains how to plan and implement an AD RMS deployment, plan and manage AD RMS templates and access, and plan and implement external access to AD RMS services.

Lessons

- AD RMS Overview
- Planning and Implementing External Access to AD RMS Services
- · Planning and Implementing AD RMS Integration with Dynamic Access Control
- · Planning and Implementing an AD RMS Cluster

Who Should Attend

This course is intended for IT professionals who operate on a physical and a logical Windows Server 2012 enterprise Active Directory® Domain Services (AD DS) infrastructure.

Pre Requisite

The candidates should good knowledge of Windows client and server operating system and basic AD DS and networking experience in an enterprise/small business (SMB) environment.

In addition to their professional experience, candidates who attend this training should already carry the following technical knowledge:

- · Good know-how of Transmission Control Protocol/Internet Protocol (TCP/IP) fundamentals and networking concepts.
- Good know-how of both Windows Server 2012 R2 and Active Directory® Domain Services (AD DS).
- · Basic understanding of both scripts and batch files.
- Foundational knowledge of security concepts, such as authentication and authorization.
- Knowledge equivalent to Windows 2012 R2 MCSA.

Exams

Microsoft Certified Professional (MCP) [70-414]