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MOC On-Demand

DESIGNING AND DEPLOYING MICROSOFT EXCHANGE SERVER 2016

Duration: 2 days

About this course

This course provides experienced Exchange Server administrators with the knowledge to design and implement an Exchange Server 2016 messaging environment. Students will learn how to design and configure advanced components in an Exchange Server 2016 deployment such as site resiliency, advanced security, compliance, archiving, and discovery solutions. In addition, students will learn about coexistence with other Exchange organizations or Exchange Online, and migration from previous versions of Exchange Server. The course will provide guidelines, best practices, and considerations that will help students optimize their Exchange Server deployment.

Audience and Prerequisites

The intended audience for this course is IT Pro's, before attending this course, students must have:

Before attending this course, students must have:
- A+ certification or equivalent knowledge.
- Network+ certification or equivalent knowledge.

- Completed Course 2028A, Basic Administration of Microsoft Windows 2000, or have equivalent knowledge of administrative tasks.

In addition to professional experience, students who attend this training should already have the following technical knowledge:

- Attended course 20345-1A: Administering Exchange Server 2016, or have equivalent knowledge.
- Minimum two years of experience working with any version of Exchange Server.
- Minimum of six months of experience working with Exchange Server 2013 or Exchange Server 2016.
- Minimum of two years of experience administering the Windows Server 2012 R2.
- Minimum two years of experience working with Active Directory Domain Services (AD DS).
- Minimum of two years of experience working with name resolution, including Domain Name System (DNS).
- Experience working with certificates, including public key infrastructure (PKI) certificates.
- Experience working with Windows Powershell.

Audience Profile

This course is intended for IT professionals who are experienced messaging administrators, messaging architects, or consultants. This course is designed for professionals in an enterprise environment who are responsible for designing and deploying Exchange Server 2016 solutions, including environments that contain previous versions of Exchange Server or Exchange Online. Students are expected to have experience with Exchange Server 2016 or previous versions of Exchange Server.

This course is also intended as preparation material for IT professionals who are looking to take the 70-345: Designing and Deploying Microsoft Exchange Server 2016 exam as part of the requirement for the MCSE: Microsoft Exchange Server 2016 certification.

At Course Completion

After completing this course, students will be able to:

- Plan for Exchange Server deployments.
- Plan and deploy Exchange Server 2016 Mailbox services.
- Plan and deploy message transport.
- Plan and deploy client access.
- Design and implement high availability.
- Maintain Exchange Server 2016.
- Design messaging security.
- Design and implement message retention.
- Design messaging compliance.
- Design and implement messaging coexistence.
- Upgrade to Exchange Server 2016.
- Plan a hybrid Exchange Server deployment.
- Design and deploy a hybrid Skype for Business environment.

- Plan and implement an upgrade from Lync Server to Skype for Business Server 2015.

Course Overview

Module 1- Planning Exchange Server 2016 Deployments

This module explains the requirements and considerations for planning an Exchange Server deployment.

Lessons
- New features in Exchange Server 2016
- Gathering business requirements for an Exchange Server 2016 deployment
- Planning for an Exchange Server deployment
- Designing a Unified Messaging (UM) deployment

Lab : Planning Exchange Server 2016 deployments
- Evaluating an existing messaging infrastructure
- Identifying requirements
- Discussion: Deployment design for Exchange Server 2016

After completing this module, students will be able to:
- Describe the new features in Exchange Server 2016.
- Describe how to gather business requirements for an Exchange Server 2016 deployment.
- Plan for an Exchange Server 2016 deployment.
- Design a UM deployment.

Module 2- Planning and Deploying Exchange Server 2016 Mailbox Services

This module explains how to plan and deploy Exchange Server hardware, virtualization, mailbox databases, and public folders.

Lessons
- Planning Exchange Server hardware requirements
- Planning Exchange Server for virtualization and Microsoft Azure integration
- Planning and implementing public folders

Lab : Planning and implementing Exchange virtualization, mailbox databases, and public folders
- Planning for virtualization
- Planning for mailbox databases
- Implementing mailbox databases
- Planning and implementing public folders

After completing this module, students will be able to:
- Plan for the Exchange Server hardware requirements.
- Plan Exchange Server for virtualization and Azure integration.
- Plan and implement public folders.

Module 3- Planning and Deploying Message Transport

This module explains how to plan and implement mail routing internally from and to the Internet, and transport-related tasks in the organization.

Lessons
- Designing message routing
- Designing transport services
- Designing the message-routing perimeter
- Designing and implementing transport compliance

Lab : Planning and deploying message transport
- Planning for a redundant and secure message transport
- Planning for transport compliance
- Implementing transport compliance

After completing this module, students will be able to:
- Design message routing.
- Design transport services.
- Design message routing in a perimeter network.
- Design and implement transport compliance.

Module 4- Planning and Deploying Client Access

This module explains how to plan for client connectivity and client access in Exchange Server 2016. This module also describes how to implement Microsoft Office Online Server, and the coexistence of SharePoint 2016 with Exchange.Lessons
- Planning for Exchange Server 2016 clients
- Planning for client access
- Planning and implementing Office Online Server
- Planning and implementing coexistence of SharePoint 2016 with Exchange
- Designing external client access

Lab : Planning and deploying client access solutions
- Planning and configuring namespaces
- Planning and configuring client access services options
- Planning and deploying Office Online Server
- Planning and implementing reverse proxy

After completing this module, students will be able to:
- Plan for Exchange 2016 Server clients.

- Plan for client access.
- Plan and implement Office Online Server.
- Plan and implement SharePoint 2016 and with Exchange Server 2016 coexistence.
- Design external client access.

Module 5- Designing and Implementing High Availability

This module explains how to design and implement a highly available solution for Exchange Server 2016.

Lessons
- Planning high availability for Exchange Server 2016
- Planning for load balancing
- Planning for site resilience

Lab : Designing and implementing site resiliency
- Creating a lag database copy
- Recovering data from a lagged database copy
- Implementing site resilience
- Validating site resilience

After completing this module, students will be able to:
- Plan high availability for an Exchange Server 2016 deployment.
- Plan for load balancing in an Exchange Server 2016 deployment.
- Plan for site resilience in an Exchange Server 2016 deployment.

Module 6- Maintaining Exchange Server 2016

This module explains how to maintain Exchange Server 2016 using Managed Availability and Desired State Configuration (DSC).

Lessons
- Using Managed Availability to improve high availability
- Implementing DSC

Lab : Maintaining Exchange Server 2016
- Using Windows PowerShell to investigate and configure Managed Availability
- Implementing DSC

After completing this module, students will be able to:
- Describe and configure Managed Availability in Exchange Server 2016.
- Describe and implement DSC in Exchange Server 2016.

Module 7- Designing Messaging Security

This module explains how to plan for messaging security and design and implement Active Directory Rights Management Services (AD RMS) and Azure RMS in an Exchange Server organization.

Lessons
- Planning messaging security
- Designing and implementing AD RMS and Azure RMS integration

Lab : Designing messaging security
- Implementing AD RMS
- Integrating AD RMS with Exchange Server
- Creating a message transport rule to protect email
- Proteccting an email with AD RMS

After completing this module, students will be able to:
- Plan messaging security.

- Design and implement AD RMS and Azure RMS integration.

Module 8 – Designing and Implementing Message Retention

This module explains how to plan for archiving and message retention.

Lessons
- Overview of messaging records management and archiving
- Designing In-Place Archiving
- Designing and implementing message retention

Lab : Designing and implementing message retention
- Designing message retention and archiving
- Implementing message retention and archiving

After completing this module, students will be able to:
- Describe messaging records management and archiving.
- Design In-Place Achiving.
- Design and implement message retention.
- Configure external access policies and security.

- Configure external access network and certificates.

- Configure reverse proxy.

- Configure Skype for Business Server 2015 for mobile clients.

- Design and configure federation in Skype for Business Server.

Module 9 – Designing Messaging Compliance

This module explains how to plan for and implement several Exchange features to help minimize data loss and monitor email traffic and content.

Lessons
- Designing and implementing data loss prevention
- Designing and implementing In-Place Hold
- Designing and implementing In-Place eDiscovery

Lab : Designing and implementing messaging compliance
- Designing messaging compliance
- Implementing data los prevention
- Implementing In-Place eDiscovery
- Comparing messaging policy and compliance options

After completing this module, students will be able to:
- Design and implement data los prevention.
- Design and implement In-Place Hold.
- Design and implement In-Place eDiscovery.

Module 10 – Designing and Implementing Messaging Coexistence

This module explains how to plan and implement federation, design coexistence between Exchange organizations, and design and move mailboxes between different forests and Exchange organizations.

Lessons
- Designing and implementing federation
- Designing coexistence between Exchange organizations
- Designing and implementing cross-forest mailbox moves

Lab : Implementing messaging coexistence
- Implementing message-routing coexistence
- Migrating user mailboxes

After completing this module, students will be able to:
- Design and implement federation.
- Design the coexistence between Exchange Server organizations.
- Design and implement cross-forest mailbox moves.
- Design and implement a high-availability solution for Back End Servers in a Skype for Business Server environment.

- Design and implement a high-availability solution for file stores, Edge Servers, Mediation Servers, Office Online Server farms, and reverse proxy servers in a Skype for Business Server environment.

Module 11– Upgrading to Exchange Server 2016

This module explains how to plan and implement an upgrade from previous Exchange Server 2013 or Exchange Server versions to Exchange Server 2016.

Lessons
- Planning an upgrade from previous Exchange Server versions
- Implementing the upgrade from previous Exchange Server versions

Lab : Upgrading from Exchange Server 2013 to Exchange Server 2016
- Documenting the Exchange Server 2013 organization
- Deploying Exchange Server 2016
- Upgrading from Exchange Server 2013 to Exchange Server 2016
- Removing Exchange Server 2013

After completing this module, students will be able to:
- Plan an upgrade to Exchange Server 2016.
- Implement the upgrade to Exchange Server 2016

Module 12– Planning a Hybrid Exchange Server Deployment

This module explains how to plan and implement a hybrid deployment for Exchange Server 2016.

Lessons
- Basics of a hybrid deployment
- Planning and implementing a hybrid deployment
- Implementing advanced functionality for hybrid deployments

Lab : Designing the integration with Exchange Online
- Designing the integration with Exchange Online

After completing this module, students will be able to:
- Describe the basics of a hybrid deployment.
- Plan and implement a hybrid deployment.
- Implement advanced functionality for hybrid deployments.