

Designing and Deploying Microsoft Exchange Server 2016/2019

Learn via: **Classroom / Virtual Classroom / Online**

Duration: **5 Day**

Overview

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.

Prerequisites

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 operating system, including Windows Server 2012 or Windows Server 2012 R2
- Minimum of 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

Who Should Attend

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.

Please note this course is not suitable for delegates wishing to learn how to deploy a Hybrid Exchange Environment (On-Premise and Exchange Online integrated). Delegates wanting to have hands on exposure to planning and deploying a Exchange Hybrid Environment should attend the QA Deploying a Exchange Hybrid Environment course: QADEXHE.

What You Will Learn

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 2016.
- Design message security.
- Design messaging archiving and retention.
- Design messaging compliance.
- Design and implement messaging coexistence.
- Upgrade to Exchange Server 2016.
- Plan a hybrid Exchange Server deployment.

Outline

Module 1: Planning Exchange Server deployments

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

Lessons

- New features in Exchange 2016
- Gathering business requirements
- Planning for Exchange Server deployment
- Designing a Unified Messaging deployment

Lab : Planning Exchange Server deployments

- Evaluating an existing messaging infrastructure
- Identifying requirements
- Discussion: Determining suitability for Exchange Server 2016

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 folder mailboxes.

Lessons

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

Lab : Planning mailbox databases and public folder deployments

- Planning for virtualization
- Planning for mailbox databases
- Implementing mailbox databases
- Planning and implementing 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 message transport
- Modifying the routing topology
- Planning transport compliance
- Implementing 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 Office Online Server, and the coexistence of SharePoint 2016 with Exchange.

Lessons

- Planning for Exchange 2016 clients
- Planning for client access
- Planning and implementing Office Online Server
- Planning and implementing the coexistence of SharePoint 2016 with Exchange
- Designing external client access

Lab : Planning and deploying client access solutions

- Configuring certificates for the client access
- Configuring client access services options
- Planning and deploying Office Online Server
- Configuring modern attachments and eDiscovery with SharePoint 2016
- Planning and implementing reverse proxy

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 high availability

- Creating a lag database
- Recovering data from a lag database
- Implementing site resilience
- Validating site resilience

Module 6: Maintaining Exchange 2016

This module explains how to maintain Exchange Server 2016 using managed availability and desired state configuration.

Lessons

- Using managed availability to improve high availability
- Implementing desired state configuration

Lab : Maintaining Exchange 2016

- Using Windows PowerShell to investigate and configure health sets
- Using the EventLog to view managed availability configuration
- Implementing desired state configuration

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) in an Exchange organization.

Lessons

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

Lab : Designing messaging security

- Implementing AD RMS and Exchange Server

Module 8: Designing messaging archiving and retention

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

Lessons

- Messaging records management and archiving overview
- 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

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 (DLP) policies
- Designing and implementing In-Place Hold
- Designing and implementing In-Place eDiscovery

Lab : Designing and implementing messaging compliance

- Designing messaging compliance
- Implementing DLP policies
- Implementing In-Place eDiscovery
- Comparing messaging policy and compliance options

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

Module 11: Upgrading to Exchange Server 2016

This module explains how to plan and implement an upgrade from Exchange Server 2013 or Exchange Server 2010 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 2010 to Exchange Server 2016

- Documenting the Exchange Server 2010 organization
- Deploying Exchange Server 2016
- Upgrading from Exchange Server 2010 to Exchange Server 2016
- Removing Exchange Server 2010

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 : Planning a hybrid Exchange Server deployment

- Designing the integration with Microsoft Exchange Online