20345-2: Designing and Deploying Microsoft® Exchange Server 2016/2019

Duration: 5 Days
Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This course provides participants with the knowledge to design and implement an Exchange Server messaging environment. It covers how to design and configure advanced components in an Exchange Server deployment such as site resiliency, advanced security, compliance, archiving and discovery solutions, coexistence with other Exchange organizations or Exchange Online, and migration from previous versions of Exchange Server. The course also provides guidelines, best practices, and considerations that will help optimize Exchange Server deployments.

Target Audience

This course is intended for:
- IT Professionals who are experienced messaging administrators, messaging architects, or consultants.
- Persons in an enterprise environment who are responsible for designing and deploying Exchange Server solutions, including environments that contain previous versions of Exchange Server or Exchange Online.

Prerequisites

In addition to their professional experience, candidates who would like to attend this training must already have the following technical knowledge:
- Completed the *20345-1: Administering Microsoft Exchange Server 2016/2019* course or have equivalent knowledge.
- Minimum of six months of experience working with Exchange Server 2013/2016.
- Minimum of two years of experience:
  o Working with any version of Exchange Server.
  o Administering the Windows Server® operating system, including Windows Server 2016/2019.
  o Working with Active Directory® Domain Services (AD DS).
  o Working with name resolution, including Domain Name System (DNS)
- Experience working with certificates, including public key infrastructure (PKI) certificates.
- Experience working with Windows® PowerShell®.

Course Objectives

Upon successful completion of this course, attendees will be able to:

- Plan for Exchange Server deployments.
- Plan and deploy Exchange Server hardware, virtualization, mailbox databases, and public folders.
- Plan message transport in Exchange Server.
- Plan and deploy Client Access services in Exchange Server.
- Design and implement a highly available Exchange Server environment.
- Maintain Exchange Server by using Managed Availability and Desired State Configuration (DSC).
- Plan for messaging security and design and implement Active Directory Rights Management Services (AD RMS) and Microsoft Azure® RMS in Exchange Server.
- Design and implement message retention and archiving.
- Design and implement data loss prevention policies, In-Place Hold, and eDiscovery.
- Design and implement messaging coexistence among Exchange Server organizations.
- Plan and implement the upgrade from previous versions of Exchange Server to Exchange Server 2019.
- Plan a hybrid Exchange deployment.

Course Topics

Module 1: Planning Exchange Server Deployments

- New features in Exchange Server 2019
- Gathering Business Requirements for an Exchange Server Deployment
- Planning for an Exchange Server Deployment
- Planning the Migration of Unified Messaging to Cloud Voicemail

Module 2: Planning and Deploying Exchange Server Mailbox Services

- Planning Exchange Server Hardware Requirements
- Planning Exchange Server for Virtualization and Microsoft Azure Integration
- Planning and Implementing Public Folders

Module 3: Planning Message Transport

- Designing Message Routing
- Designing Transport Services
- Designing the Message-Routing Perimeter
- Designing Transport Compliance

Course Topics *Continued*

Module 4: Planning and Deploying Client Access

- Planning for Exchange Server Clients
- Planning for Client Access
- Planning and Implementing Office Online Server
- Planning and Implementing Coexistence of SharePoint 2019 with Exchange Server 2019
- Designing External Client Access

Module 5: Designing and Implementing High Availability

- Planning High Availability for Exchange Server
- Planning for Load Balancing
- Planning for Site Resilience

Module 6: Maintaining Exchange Server

- Using Managed Availability to Improve High Availability
- Implementing DSC

Module 7: Designing Messaging Security

- Planning Messaging Security
- Designing and Implementing AD RMS and Azure RMS

Module 8: Designing and Implementing Message Retention and Archiving

- Overview of Archiving and Messaging Records Management
- Designing In-Place Archiving
- Designing and Implementing Message Retention

Module 9: Designing and Implementing Messaging Compliance

- Designing and Implementing Data Loss Prevention Policies
- Designing and Implementing In-Place Hold
- Designing and Implementing In-Place eDiscovery

Module 10: Designing and Implementing Messaging Coexistence

- Designing and Implementing Federation
- Designing Coexistence Between Exchange Organizations
- Designing and Implementing Cross-Forest Mailbox Moves

Module 11: Upgrading to Exchange Server 2019

- Planning an Upgrade from Previous Exchange Server Versions
- Implementing the Upgrade from Previous Exchange Server Versions

Module 12: Planning a Hybrid Exchange Server Deployment

- Basics of a Hybrid Deployment
- Planning and Implementing a Hybrid Deployment
- Implementing Azure AD Connect
- Implementing a Hybrid Deployment
- Implementing Advanced Functionality for Hybrid Deployments

LABS INCLUDED