

KOENIG SOLUTIONS • COURSE OUTLINE

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

Learn to design, deploy and maintain Exchange Server 2016/2019, from mailbox services and client access to high availability, security and hybrid deployments.

5 Days

40 HOURS

12

MODULES

39

TOPICS

38

HANDS-ON ACTIVITIES

COURSE OVERVIEW

The 20345-2B: Designing and Deploying Microsoft Exchange Server 2016/2019 course is an advanced training program aimed at IT professionals who want to learn how to design and deploy Microsoft Exchange Server 2019 and MS Exchange 2016 environments. This course covers a comprehensive range of topics, from Planning deployments, Mailbox services, and Message transport, to implementing High availability and Security measures. Learners will gain in-depth knowledge of the new features in MS Exchange 2019, how to evaluate existing messaging infrastructures, plan for virtualization, implement client access services, and ensure Messaging compliance and security. The course also addresses Hybrid Exchange Server deployments, a crucial aspect for businesses integrating on-premises server environments with cloud services. By the end of the course, participants will be equipped with the skills required to upgrade, maintain, and optimize Exchange Server 2016/2019 deployments effectively.

Who Should Attend

Target Audience for Course 20345-2B:

IT professionals responsible for the Exchange Server 2016/2019 messaging environment in an enterprise setting

Network and systems administrators tasked with planning, deploying, and managing Exchange Server deployments

Messaging architects who design and implement messaging solutions with Microsoft Exchange

IT consultants and specialists providing strategic guidance for Exchange Server infrastructure

Technical support engineers who assist with the Exchange Server implementation process

Infrastructure engineers who ensure the integration of Exchange Server with other systems

IT personnel looking to upgrade their skills from previous versions of Exchange Server to 2016/2019

Professionals preparing for Microsoft certification exams related to Exchange Server

IT managers overseeing the messaging infrastructure within their organization

Security officers responsible for maintaining the security and compliance of the Exchange Server environment

Cloud administrators who manage hybrid Exchange environments with a mix of on-premises and cloud components

LEARNING OBJECTIVES

- Plan Exchange Server deployments and gather business requirements
- Design and implement mailbox services, including virtualization and Azure
- Design message routing, transport services and transport compliance
- Plan and deploy client access services and Office Online Server
- Design and implement high availability and site resilience
- Maintain Exchange Server using Managed Availability and DSC
- Design messaging security, retention, archiving and compliance
- Plan hybrid Exchange Server deployments with Azure AD Connect

12 Modules, 39 Topics

01

3 Activities

Planning Exchange Server Deployments

This module explains the key features of Exchange Server and explains how to gather business requirements. It also explains how to plan for an Exchange Server deployment and the migration of Unified Messaging to Cloud Voicemail.

LESSONS

- 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

02

4 Activities

Planning and Deploying Exchange Server Mailbox Services

This module explains how to plan and implement Exchange Server hardware, Exchange Server virtualization, Azure integration, and public folders.

LESSONS

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

03

3 Activities

Planning Message Transport

This module explains how to plan and implement mail routing internally as well as from and to the internet. This module also describes transport-related tasks in the organization.

LESSONS

Designing message routing · Designing transport services · Designing the message-routing perimeter · Designing transport compliance

Planning and Deploying Client Access

This module explains how to plan and implement Exchange Server clients, client access, Microsoft Office Online Server, and coexistence of Microsoft SharePoint with Exchange Server. It also explains the design and implementation of external client access.

LESSONS

- 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

Designing and Implementing High Availability

This module explains how to plan and implement high availability for Exchange Server. It also explains how to plan for load balancing. Finally, it explains how to plan and implement site resilience.

LESSONS

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

Maintaining Exchange Server

This module explains how to maintain Exchange Server by using Managed Availability and DSC.

LESSONS

- Using Managed Availability to improve high availability
- Implementing DSC

Designing Messaging Security

This module explains how to plan for messaging security, and how to design and implement AD RMS and Azure RMS in an Exchange Server organization.

LESSONS

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

Designing and Implementing Message Retention and Archiving

This module explains the purpose of archiving and messaging records management. It also explains how to design and implement In-Place archiving and message retention.

LESSONS

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

Designing and Implementing Messaging Compliance

This module explains how to design and implement data loss prevention policies, In-Place Hold, and In-Place eDiscovery.

LESSONS

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

Designing and Implementing Messaging Coexistence

This module explains how to design and implement federation. It also explains how to design coexistence between Exchange Server organizations. Finally, it explains how to design and implement cross-forest mailbox moves.

LESSONS

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

Upgrading to Exchange Server 2019

This module provides an overview of the options you have when choosing to implement Exchange Server 2019, and provides details on how to upgrade an existing Exchange Server 2013 or Exchange Server 2016 organization to Exchange Server 2019.

LESSONS

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

Planning a Hybrid Exchange Server Deployment

This module explains the basics of a hybrid deployment and how to plan for authentication in a hybrid deployment. It also explains how to implement Microsoft Azure Active Directory (Azure AD) Connect, a hybrid development, and advanced functionality for hybrid deployments.

LESSONS

- 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

HANDS-ON ACTIVITIES

Practise What You Learn

#	MODULE	ACTIVITY
01	Planning Exchange Server Deployments	LAB: PLANNING EXCHANGE SERVER 2019 DEPLOYMENTS ■ Evaluating an existing messaging infrastructure ■ Identifying requirements ■ Discussion: Deployment design for Exchange Server 2019
02	Planning and Deploying Exchange Server Mailbox Services	LAB: PLANNING AND IMPLEMENTING EXCHANGE SERVER MAILBOX SERVERS, DATABASES, AND PUBLIC FOLDERS ■ Planning mailbox server configuration and location ■ Planning for mailbox databases ■ Implementing mailbox databases ■ Planning and implementing public folders
03	Planning Message Transport	LAB: PLANNING MESSAGE TRANSPORT ■ Planning for a redundant and secure message transport ■ Planning for transport compliance ■ Implementing transport compliance
04	Planning and Deploying 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

#	MODULE	ACTIVITY
05	Designing and Implementing High Availability	LAB: DESIGNING AND IMPLEMENTING HIGH AVAILABILITY ■ Planning high availability and site resilience ■ Creating a site-resilient DAG ■ Validating site resilience ■ Creating a lagged database copy ■ Recovering data from a lagged database copy
06	Maintaining Exchange Server	LAB: MAINTAINING EXCHANGE SERVER ■ Using Windows PowerShell to investigate and configure Managed Availability ■ Implementing DSC
07	Designing Messaging Security	LAB: DESIGNING MESSAGING SECURITY ■ Planning messaging security ■ Implementing AD RMS ■ Integrating AD RMS with Exchange Server ■ Creating a message transport rule to protect email
08	Designing and Implementing Message Retention and Archiving	LAB: DESIGNING AND IMPLEMENTING MESSAGE RETENTION AND ARCHIVING ■ Designing message retention and archiving ■ Implementing message retention and archiving
09	Designing and Implementing Messaging Compliance	LAB: DESIGNING AND IMPLEMENTING MESSAGING COMPLIANCE ■ Designing messaging compliance ■ Implementing data loss prevention ■ Implementing In-Place eDiscovery ■ Comparing messaging policy and compliance options
10	Designing and Implementing Messaging Coexistence	LAB: IMPLEMENTING MESSAGING COEXISTENCE ■ Implementing message-routing coexistence ■ Migrating user mailboxes
11	Upgrading to Exchange Server 2019	LAB: UPGRADING FROM EXCHANGE SERVER 2013 TO EXCHANGE SERVER 2019 ■ Documenting the Exchange Server 2013 organization ■ Deploying Exchange Server 2019 ■ Upgrading from Exchange Server 2013 to Exchange Server 2019 ■ Removing Exchange Server 2013
12	Planning a Hybrid Exchange Server Deployment	Lab: Planning a Hybrid Exchange Deployment: Creating a plan for hybrid Exchange deployment

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

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Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

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