

KOENIG SOLUTIONS • COURSE OUTLINE

Implementing and Managing Windows 11 (55345)

Learn to install, configure, secure and troubleshoot Windows 11 devices in an on-premises Active Directory domain environment.

5 Days

DURATION

10

MODULES

106

TOPICS

26

HANDS-ON LABS

COURSE OVERVIEW

This is a 5-day ILT course designed to provide you with the knowledge and skills required to install and configure Windows 11 desktops and devices in an on-premises Windows Server Active Directory domain environment. The skills you gain by attending this course include: Learning how to install and customize Windows 11 operating systems and apps; Configuring local and remote network connectivity and storage. You'll also learn how to: Configure data security, device security, and network security; Maintain, update, and recover Windows 11.

WHO THIS COURSE IS FOR

This course is aimed at IT professionals who support Windows 11 desktops, devices, users, and associated network and security resources

The secondary audience for this course is Desktop/Device Support Technicians (DSTs) who provide Tier 2 support to users with computers that are running the Windows 11 operating system (OS) in a on-premises environment

LEARNING OBJECTIVES

- Describe Windows 11 features, editions and installation options
- Manage upgrades, migrations and Windows updates
- Configure Windows 11 devices using Settings, Control Panel and PowerShell
- Configure network connectivity, name resolution and remote access
- Manage storage, disks, partitions and Storage Spaces
- Manage file access, shared folders and printers
- Deploy and configure apps and Microsoft Edge settings
- Implement security features such as BitLocker and Windows Defender Firewall

10 Modules, 106 Topics

01

Lab

Installing Windows 11

This module describes the new features of Windows 11. The module also lists the hardware requirements for Windows 11 and describes the interactive installation process. The module then goes on to explain the various deployment options that could also be used in larger networks. The module also includes a review of the new user interface.

TOPICS

- Introducing Windows 11
- Choosing an edition of Windows 11
- What's new in Windows 11 since Windows 10?
- Navigating the user interface

OVERVIEW OF INSTALLATION OPTIONS

- What is OOBÉ?
- Provisioning packages during OOBÉ
- Autopilot
- Local interactive installation
- Deployment options:
- Windows ADK
- MDT
- Configuration Manager
- Installing Windows 11
- Hardware requirements
- Licensing and activation options

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe Windows 11 features
- Choose an appropriate Windows 11 edition
- Describe important new features in Windows 11
- Navigate the user interface
- Describe installation and deployment options

02

3 Labs

Upgrading and Updating Windows 11

This module describes the various upgrade and migration options available for installers. It also discusses how to migrate user state following an upgrade or migration. In the second half of the module, students learn how to manage Windows 11 updates.

UPGRADING TO WINDOWS 11

In-place upgrades · Side-by-side migration · Wipe and load migration

Migrating user state

MANAGING WINDOWS 11 UPDATES

Overview of Windows Update · Configuring Windows Update for Business · Troubleshooting Windows updates

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

Compare upgrade and migration · Migrate user state · Manage Windows 11 updates

Configuring Windows 11 Devices

This module explains how to complete typical post-installation configuration options for Windows 11. Students also learn how to use both the Settings app and Control Panel to complete typical installation tasks.

OVERVIEW OF WINDOWS 11 CONFIGURATION TOOLS:

- The Settings app and Control Panel
- **Remote options, including:** Quick Assist, Windows Admin Center and Windows PowerShell
- Common configuration options
- Managing activation

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Select the appropriate configuration tool
- Perform common configuration tasks
- Manage activation

Configuring Network Connectivity

This module provides guidance on configuring network settings, including how to set up and manage a VPN.

TOPICS

- Configuring IP network connectivity, including an overview of subnet addressing
- Implementing name resolution
- Managing wired and wireless networks
- Overview of Remote Access

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Configure network settings
- Implement name resolution
- Describe remote access options

Managing Storage

This module describes a typical disk configuration for a Windows 11 computer. The module then provides guidance on how to manage both local storage, and how to configure access to remote storage, such as OneDrive. Students also learn how to enable and configure Storage Spaces.

TOPICS

- Overview of local storage and network storage options

DESCRIPTION OF A TYPICAL DISK CONFIGURATION

- **Single SSD with three partitions:** EFI System, Boot, and Windows Recovery
- Explanation as to when additional storage might be added, such as managing memory sticks
- Overview of Microsoft terminology relating to disks, partitions, and volumes
- Using Disk Management and Diskpart.exe
- Managing Storage Spaces

ACCESSING REMOTE STORAGE:

- Shared folders on on-premises file servers
- OneDrive for Business

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe typical storage configurations
- Manage disks, volumes, and partitions
- Create a storage space
- Access shared folders

Managing Files and Printers

This module provides an overview of supported file systems, and explains use-case scenarios for each. Students then learn how to configure and manage access to shared files, how to implement file synchronization using Work Folders, and how to manage printer access.

OVERVIEW OF FILE SYSTEMS:

- FAT, NTFS, and ReFS

CONFIGURING AND MANAGING FILE ACCESS

- File and folder permissions
- Effective access

CONFIGURING AND MANAGING SHARED FOLDERS

- Combining shared folder and local NTFS permissions

- Implementing Work Folders
- Managing printers

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe file systems
- Manage file access
- Manage shared folders
- Implement Work Folders
- Manage printers

Managing Apps in Windows 11

This module describes how to deploy apps to Windows 11 devices. Students also learn how to troubleshoot apps. Finally, the module also discusses how to configure Microsoft Edge browser settings.

OVERVIEW OF METHODS USED TO PROVIDE APPS TO USERS:

Deploy as part of image · Deploy with Configuration Manager · Deploy using Intune

THE MICROSOFT STORE

Enabling/restricting access

CONFIGURING MICROSOFT EDGE SETTINGS

Sync settings · Extensions

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

Choose how to deploy apps to user devices · Configure access to the Microsoft Store · Configure Microsoft Edge settings

Implementing and Managing Security

This module outlines common security threats and available mitigations. Students then learn to configure user and group accounts and User Account Control (UAC) settings. The module also discusses data security issues, and then provides a description of available technologies that can help mitigate those threats, including Credential Guard, Exploit Guard, and BitLocker. Finally, the module explores ways that students can help secure network traffic.

MANAGING USER ACCOUNTS

- **Types of accounts:** local, domain, online
- Groups, including built-in and strategies for using Global, Universal, and Domain Local groups
- Configuring User Account Control
- Overview of data-related security threats
- Implementing and managing BitLocker
- Windows Security app

USING SECURITY SETTINGS TO MITIGATE THREATS:

- Overview of Credential Guard, Exploit Guard

OVERVIEW OF NETWORK-RELATED SECURITY THREATS AND MITIGATIONS

- Windows Defender Firewall
- Connection Security Rules

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Manage local accounts
- Configure UAC
- Implement BitLocker
- Describe Windows 11 security settings and features
- Describe common security threats and available mitigations

Monitoring Windows 11

This module helps students identify performance-related problems with Windows 11 computers. Students also learn how to implement monitoring, including how to access and interpret event log data.

TOPICS

- Monitoring Windows 11
- Overview of performance monitoring tools
- Optimizing performance

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe available monitoring options in Windows 11
- Describe how to identify performance problems
- Manage workloads and computer resources to optimize performance

Troubleshooting Windows 11

This module explores how to troubleshoot issues related to hardware devices and device drivers. It also covers how to recover Windows 11 computers that won't start, or start with errors. Students also learn how to recover files.

TOPICS

Managing Windows 11 startup · Recovering Windows 11 · Managing devices and drivers · Understanding the registry · Recovering files

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

Describe Windows 11 startup · Explain how to recover Windows 11 computers · Describe devices and device drivers · Configure the Windows 11 registry · Recover files

NOTES

- This course is also backwards compatible with Windows 10 as many of the technologies and principles remain the same.
- Labs available from go deploy.

Practise What You Learn

#	MODULE	ACTIVITY
01	Installing Windows 11	Install Windows 11
02	Upgrading and Updating Windows 11	■ Perform an upgrade from Windows 10 ■ Migrate user state from Windows 10 ■ Configure and manage Windows 11 updates
03	Configuring Windows 11 Devices	■ Configure Windows 11 devices with Windows Admin Center ■ Configure Windows 11 devices with Windows PowerShell
04	Configuring Network Connectivity	■ Configure IPv4 settings ■ Configure and test name resolution ■ Configure a VPN
05	Managing Storage	Create a storage space
06	Managing Files and Printers	■ Manage files and folders ■ Configure file permissions ■ Share folders ■ Implement Work Folders ■ Manage printers
07	Managing Apps in Windows 11	■ Restrict access to the Microsoft Store ■ Configure Edge browser settings
08	Implementing and Managing Security	■ Create local user and group accounts ■ Configure local security policy settings ■ Implement BitLocker ■ Configure Windows Defender Firewall rules and Connection Security Rules
09	Monitoring Windows 11	Use Performance Monitor and Resource Monitor
10	Troubleshooting Windows 11	■ Use Windows RE to check the startup environment ■ Perform a System Restore from within Windows RE ■ Roll back a driver ■ Recover deleted files

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.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

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