

KOENIG SOLUTIONS • COURSE OUTLINE

Supporting and Troubleshooting Windows 11

Learn to diagnose and resolve startup, network, security, application and performance issues in Windows 11.

11

MODULES

64

TOPICS

23

HANDS-ON ACTIVITIES

COURSE OVERVIEW

This course covers Windows 11 features, architecture and troubleshooting tools, followed by remote administration using Windows Admin Center, Remote Desktop, Quick Assist and PowerShell. It addresses startup and recovery, device and driver problems, network connectivity, and Group Policy application. It also covers security settings such as Credential Guard and Windows Hello, user state configuration, resource access, application troubleshooting, and ongoing maintenance including Windows Update.

WHO THIS COURSE IS FOR

Desktop Support Technicians

System Administrators

IT Support Engineers

Help Desk Technicians

Network Administrators

LEARNING OBJECTIVES

- Describe new features and architecture changes in Windows 11
- Apply troubleshooting tools such as Task Manager and Resource Monitor
- Administer Windows 11 remotely using PowerShell and Windows Admin Center
- Resolve startup issues and perform system recovery
- Troubleshoot hardware devices and device drivers
- Diagnose network connectivity, name resolution and VPN issues
- Configure and troubleshoot security settings including Windows Hello
- Troubleshoot user state, resource access and application issues

11 Modules, 64 Topics

01

Introducing Windows 11

This module describes the new Windows 11 operating system features and devices, with a particular focus on what's changed since Windows 10. The module also describes the process of developing and applying a Windows 11 troubleshooting methodology.

TOPICS

- Overview of Windows 11
- New features in Windows 11
- Highlight significant changes from Windows 10
- Brief overview of UI changes
- Includes overview of system architecture, including both Linux and Android subsystems
- Troubleshooting installation and deployment
- Overview of required hardware, identifying differences from Windows 10
- Describe common reasons why devices cannot upgrade to Windows 11
- Recommendations for typical troubleshooting procedures
- Introduction to troubleshooting tools
- Task Manager
- Resource Monitor
- Performance Monitor
- Review of revised Settings app

02

2 Activities

Administering Windows 11 Remotely

This module describes how to use the various remote administration tools in Windows 11 to resolve issues. It describes the features and functionalities of tools such as Windows Admin Center, Remote Desktop, Quick Assist, and Windows PowerShell.

TOPICS

- | | |
|--------------------------------------|------------------------------------|
| ■ Overview of administration tools | ■ Remoting with Windows PowerShell |
| ■ Using Remote Desktop | ■ Enabling PowerShell Remoting |
| ■ Using Quick Assist | ■ Trusted hosts |
| ■ Using Windows Admin Center | ■ Introduction to provisioning |
| ■ Introduction to Windows PowerShell | |

Troubleshooting Startup and Performing System Recovery

This module describes potential problems that can cause startup issues in Windows 11. It also provides an overview of the Windows startup process, including the Windows Recovery Environment (Windows RE) and Boot Configuration Data (BCD). It also describes how to resolve issues related to operating system services and how to recover a computer.

TOPICS

- Overview of the Windows 11 Recovery Environment
- Configuring the Registry
- Troubleshooting startup settings
- Recovering BitLocker-protected drives
- Troubleshooting OS service Issues
- Recovering a computer

Troubleshooting Devices and Device Drivers

This module explores how to troubleshoot issues related to hardware devices and device drivers.

TOPICS

- Overview of hardware troubleshooting
- Group Policy settings that can control/inhibit hardware installation
- Troubleshooting device driver failures

Configuring and Troubleshooting Network Connectivity

This module describes how to identify network settings and troubleshoot issues related to network connectivity in wired and wireless networks, IPv4 and IPv6 connectivity, and name resolution. This module also provides an overview of Remote Access and describes how to troubleshoot issues with VPN connectivity.

TOPICS

- Identifying incorrectly configured network and TCP/IP settings
- Overview of IPv4 subnet addressing to help identify incorrectly configured devices
- Determining Network Settings
- Troubleshooting network connectivity
- Troubleshooting name resolution
- Overview of remote access
- Troubleshooting issues with VPN connectivity

Troubleshooting Group Policy

This module provides an overview of Group Policy application and describes how to resolve issues in client configuration GPO application.

TOPICS

- Overview of Group Policy
- Resolving client-configuration failures and GPO application issues

Configuring and Troubleshooting Security Settings

This module describes various security settings in Windows 11, including Credential Guard, Exploit Guard, and Application Guard. Windows Hello authentication is also covered, in addition to common sign-in issues, how to detect them, and how to troubleshoot these issues. The module also explains ways to secure the startup environment, including Secure Boot and related technologies.

OVERVIEW OF:

- Secure Boot, Trusted Boot, Measured Boot
- UEFI settings
- TPM requirements
- Implementing network security with Windows Defender Firewall and Windows Defender Firewall with Advanced Security
- Implementing Credential Guard, Exploit Guard, and Application Guard
- Configuring Windows Hello
- Troubleshooting sign-in issues

Configuring and Troubleshooting User State

This module provides guidance on configuring and troubleshooting user state synchronization in an on-premises network. This includes managing roaming profiles, UE-V, and folder redirection.

TOPICS

- Troubleshooting the application of user settings
- Configuring and troubleshooting UE-V
- Configuring and troubleshooting Folder Redirection

Configuring and Troubleshooting Resource Access

This module describes how to troubleshoot issues with file permissions and printer access. It also describes how to configure and manage file recovery in Windows 11.

TOPICS

Troubleshooting file permissions issues · Troubleshooting issues with printers · Performing File Recovery in Windows 11

Troubleshooting Applications

This module explains how to troubleshoot common desktop application operations issues. It also describes the Universal Windows apps and the Microsoft Store. The module also explains how to resolve issues related to Application Control and AppLocker policies. Finally, the module covers how to enable and configure Kiosk mode.

TOPICS

- Troubleshooting desktop apps
- Managing Universal Windows apps
- Overview of Application Control
- Troubleshooting AppLocker Policy application
- Troubleshooting application compatibility Issues
- Configuring Kiosk mode

Maintaining Windows 11

This module describes how to identify performance issues in Windows 11. It also explains how to manage and troubleshoot Windows updates.

TOPICS

- Monitoring and troubleshooting Computer Performance
- Overview of Windows Update
- Configuring Windows Update for Business
- Troubleshooting Windows updates

Practise What You Learn

#	MODULE	ACTIVITY
01	Introducing Windows 11	Lab 1: Using Windows 11 Troubleshooting Tools: Use Windows 11 troubleshooting tools
02	Administering Windows 11 Remotely	LAB 1: ADMINISTERING WINDOWS 11 REMOTELY ■ Implement Remote Desktop ■ Manage remote computers using Windows PowerShell
03	Troubleshooting Startup and Performing System Recovery	LAB 1: TROUBLESHOOTING STARTUP AND PERFORMING SYSTEM RECOVERY ■ Explore Windows RE ■ Resolve a startup issue ■ Configure and recover BitLocker ■ Recover a computer after failure
04	Troubleshooting Devices and Device Drivers	LAB 1: TROUBLESHOOTING DEVICES AND DEVICE DRIVERS ■ Troubleshoot missing drivers ■ Resolve a hardware issue
05	Configuring and Troubleshooting Network Connectivity	LAB 1: CONFIGURING AND TROUBLESHOOTING NETWORK CONNECTIVITY ■ Troubleshoot a network connectivity issue ■ Troubleshoot name resolution ■ Troubleshoot remote access
06	Troubleshooting Group Policy	Lab 1: Troubleshooting Group Policy: Troubleshoot the application of GPOs on client devices
07	Configuring and Troubleshooting Security Settings	Lab 1: Configuring and Troubleshooting Security Settings: Resolve a sign-in issue
08	Configuring and Troubleshooting User State	LAB 1: CONFIGURING AND TROUBLESHOOTING USER STATE ■ Configure UE/V ■ Configure Folder Redirection ■ Troubleshoot Folder Redirection
09	Configuring and Troubleshooting Resource Access	LAB 1: CONFIGURING AND TROUBLESHOOTING RESOURCE ACCESS ■ Resolve a file access issue ■ Troubleshoot printing ■ Recover files
10	Troubleshooting Applications	LAB 1: TROUBLESHOOTING APPLICATIONS ■ Troubleshoot AppLocker ■ Provision a kiosk device
11	Maintaining Windows 11	LAB 1: MAINTAINING WINDOWS 11 ■ Review computer performance ■ Configure Windows Update

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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Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

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