# 10982-E: Supporting and Troubleshooting Windows 10

Course outline

Module 1: Implementing a Troubleshooting Methodology

This module describes the new Windows 10 operating system features and devices; it also describes the process of developing and applying a Windows 10 troubleshooting methodology.

*Lessons*

- Overview of Windows 10
- Introduction to the EDST Job Role
- Overview of the Troubleshooting Steps
- Troubleshooting Tools

*Lab : Using Troubleshooting Tools*

After completing this module, you will be able to:

- Describe the Windows 10 operating system, devices it supports, and the Windows 10 architecture.
- Explain the troubleshooting methodology for Windows 10.
- Describe Windows 10 troubleshooting tools

Module 2: Troubleshooting Startup Issues

This module describes how to identify and troubleshoot startup issues that affect—and problematic services that run on—a Windows 10 operating system. This module introduces potential problems that can cause startup issues in Windows 10. It also provides an overview of the Windows startup process, including the Windows Recovery Environment (Windows RE) and Boot Configuration Data (BCD).

*Lessons*

- Overview of the Windows 10 Startup Recovery Environment
- Configuring the Registry
- Troubleshooting Startup Settings
- Recovering BitLocker-Protected Drives

*Lab : Troubleshooting Startup Issues*

- Exploring Windows RE
- Resolving a Startup Issue

*Lab : Recovering BitLocker-Encrypted Drives*

- Recovering a BitLocker-Encrypted Drive
- Creating a New BitLocker Password

After completing this module, you will be able to:

- Describe how to configure the registry.
- Explain how to troubleshoot startup settings.
- Recover drives encrypted with Windows BitLocker Drive Encryption

Module 3: Performing System Recovery

This module describes how to resolve issues related to operating system services and how to recover a computer.

*Lessons*

- Troubleshooting Operating System Service Issues
- Recovering a Computer

*Lab : Performing System Recovery*

- Preparing for System Recovery
- Recovering a Computer

After completing this module, you will be able to:

- Troubleshoot operating system services.
- Recover a computer that is running Windows 10.

Module 4: Troubleshooting Hardware and Device Drivers

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

*Lessons*

- Troubleshooting Device Driver Failures
- Overview of Hardware Troubleshooting

*Lab : Troubleshooting Hardware and Device Driver Issues*

- Troubleshooting a Missing Device Driver
- Resolving Hardware Problems

After completing this module, you will be able to:

- Troubleshoot device driver failures.
- Describe the process of troubleshooting hardware.

Module 5: Administering Windows 10

This module describes how to use the various administration tools in Windows 10 to resolve issues. It describes the features and functionalities of tools such as Windows Admin Center, Remote Desktop, Quick Assist, and Windows PowerShell.

*Lessons*

- Overview of Administration Tools
- Using Remote Desktop
- Introduction to Windows PowerShell
- Remoting with Windows PowerShell
- Introduction to Provisioning

*Lab : Troubleshooting Remote Computers through Remote Desktop*

- Using Remote Desktop

*Lab : Troubleshooting a Remote Computer by Using Windows PowerShell*

- Using Windows PowerShell Remoting

After completing this module, you will be able to:

- Use Remote Desktop to manage remote computers.
- Use Windows PowerShell cmdlets and scripts.
- Use Windows PowerShell remoting to manage remote computers.
- Implement provisioning packages.

Module 6: Resolving Issues with 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.

*Lessons*

- Determining Network Settings
- Troubleshooting Network Connectivity
- Troubleshooting Name Resolution

*Lab : Resolving Network Connectivity Issues*

- Configuring Network Settings
- Resolving a Network Problem (1)
- Resolving a Network Problem (2)

After completing this module, you will be able to:

- Determine network settings in Windows 10.
- Troubleshoot issues with network connectivity.
- Troubleshoot name resolution issues.

Module 7: Troubleshooting Group Policy

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

*Lessons*

- Overview of Group Policy Application
- Resolving Client-Configuration Failures and GPO Application Issues

*Lab : Troubleshooting Issues with Group Policy Application*

- Working with GPOs
- Resolving Group Policy Application (1)
- Resolving Group Policy Application (2)
- Resolving Group Policy Application (3)

*Lab : Resolving Issues with Group Policy*

- Resolving Group Policy Application (4)

After completing this module, you will be able to:

- Describe how you apply GPOs to computers.
- Resolve client-side configuration failures and GPO application issues.

Module 8: Configuring and Troubleshooting User Settings

This module describes the common sign-in issues, how to detect them, and how to troubleshoot these issues. The module also provides an overview of user account types that are supported by Windows 10 and how authentication works for those accounts.

*Lessons*

- Troubleshooting Sign-In Issues
- Troubleshooting the Application of User Settings

*Lab : Troubleshooting Sign-In Issues*

- Resolving a Sign-In Issue

*Lab : Configuring and Troubleshooting the Application of User Settings*

- Configuring UE-V
- Configuring Folder Redirection
- Resolving a Folder Redirection Issue

After completing this module, you will be able to:

- Troubleshoot user sign-in issues.
- Troubleshoot the application of user settings.

Module 9: 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 synchronization and file recovery in Windows 10.

*Lessons*

- Troubleshooting File Permissions Issues
- Troubleshooting Issues with Printer Access
- Configuring and Troubleshooting File Synchronization
- Performing File Recovery in Windows 10

*Lab : Troubleshooting File Access Issues*

- Resolving a File Access Issue (1)
- Resolving a File Access Issue (2)
- Resolving a File Access Issue (3)

*Lab : Troubleshooting Printer Issues*

- Resolving a Printer Issue (1)
- Resolving a Printer Issue (2)

*Lab : Configuring and Troubleshooting File Synchronization*

- Troubleshooting Work Folders

*Lab : Recovering Data*

- Preparing for File Recovery
- Resolving Issues by Using Previous Versions (Optional)

After completing this module, you will be able to:

- Troubleshoot issues with file permissions.
- Troubleshoot issues with accessing printers.
- Configure and troubleshoot file synchronization.
- Configure and troubleshoot file recovery.

Module 10: Troubleshooting Remote Connectivity

This module provides an overview of Remote Access and describes how to troubleshoot issues with VPN connectivity.

*Lessons*

- Overview of Remote Access
- Troubleshooting Issues with VPN Connectivity

*Lab : Troubleshooting VPN Connectivity*

- Troubleshooting VPN Connectivity Issue 1
- Troubleshooting VPN Connectivity Issue 2

After completing this module, you will be able to:

- Describe common remote access technologies.
- Troubleshoot issues with VPN connectivity.

Module 11: Troubleshooting Applications

This module explains how to troubleshoot common desktop app operations issues. It also describes the Universal Windows apps, Microsoft Store, and Microsoft Store for Business, and explains how to resolve issues related to Universal Windows apps.

*Lessons*

- Troubleshooting Desktop Apps
- Managing Universal Windows Apps

*Lab : Troubleshooting Desktop Apps*

- Troubleshooting AppLocker Policy Applications
- Troubleshooting Application Compatibility Issues

*Lab : Provisioning a Kiosk Device*

- Creating a provisioning package
- Applying a provisioning package

After completing this module, you will be able to:

- Troubleshoot desktop apps.
- Manage Universal Windows apps.

Module 12: Maintaining Windows 10

This module describes how to troubleshoot performance issues in Windows 10. It also explains how to apply and troubleshoot Windows updates.

*Lessons*

- Monitoring and Troubleshooting Computer Performance
- Applying Windows Updates

*Lab : Maintaining Windows 10*

- Using Performance Monitor
- Configuring Windows Update Settings

After completing this module, you will be able to:

- Monitor and troubleshoot Windows 10 performance.
- Update applications and Windows 10.