OD10982BC - Microsoft Official Courses On-Demand Supporting and Troubleshooting Windows 10 (90 Day)

This course is designed to provide students with the knowledge and skills required to support and troubleshoot Windows 10 PCs and devices in a Windows Server domain environment. These skills include understanding of Windows 10 features, how they can be used in an Active Directory environment and how to troubleshoot them.

Contents

Overview

Course Duration: 2 Days

About This Course
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Audience Profile

The primary audience for this course is the Enterprise Desktop Support Technician (EDST), who provides Tier 2 support to users running Windows 10 personal computers (PCs) and devices in medium to large enterprise organizations, within a Windows domain environment. EDSTs focus on a broad range of technical issues for Windows operating systems (OSs), devices, cloud services, applications, networking, and hardware support. In the overarching scenario, if an Enterprise offers the service, the EDST is asked to support it.
The key responsibilities include resolving technical issues pertaining to Windows 10 installation and migration, activation, performance, profiles, settings; and device synchronization. Some other key responsibilities include local and remote network access; access to applications, access to data and printers; authentication, Endpoint security and policy; OS and data recovery.
The secondary audience for this course are IT professionals who administer and support Windows 10 desktops, devices, users, and associated network and security resources. Students who seek certification in the following exams will also benefit from this course:
70-697, Configuring Windows Devices
70-698, Installing and Configuring Windows 10

At Course Completion

After completing this course, students will be able to:
Describe the processes for planning and using a Windows 10 troubleshooting methodology.
Troubleshoot startup issues and operating system services on a Windows 10 device.
Resolve issues that pertain to hardware devices and device drivers.
Troubleshoot Windows 10 devices remotely.
Troubleshoot issues that pertain to network connectivity.
Troubleshoot client-configuration failures and issues with application of Group Policy Objects.
Troubleshoot issues related to user settings.
Troubleshoot remote-connectivity issues.
Resolve issues that pertain to accessing resources from devices that are domain-joined.
Resolve issues that pertain to accessing resources from devices that are not domain-joined.
Troubleshoot issues that pertain to application installation and operation.
Maintain a device that is running Windows 10.
Recover a device that is running Windows 10

Course Details

Module 1: Implementing a Troubleshooting Methodology

This module explains the processes involved in establishing and using a troubleshooting methodology. This module also covers various Windows 10 fundamentals, high- level architecture, and often- used troubleshooting tools. It also explains the role of an EDST (Enterprise Desktop Support Technician) in a Windows 10 environment

Lessons
Overview of Windows 10
Introduction to the EDST Job Role
Overview of the Troubleshooting Steps
Troubleshooting Tools
Lab: Implementing a Troubleshooting Methodology
Implementing a Troubleshooting Methodology
Lab: Using Troubleshooting Tools
Using Troubleshooting Tools

After completing this module, students will be able to:
Describe Windows 10, supported devices, and the Windows 10 architecture.
Understand the role of an EDST in a Windows 10 environment.
Understand the troubleshooting methodology for Windows 10.
Describe Windows 10 troubleshooting tools.
Use Windows 10 troubleshooting tools.

Module 2: Troubleshooting Startup Issues

This module describes how to identify and troubleshoot issues that affect the Windows 10 operating system's ability to start, and how to identify problematic services that run on the operating system. It also describes how to use the Windows 10 advanced troubleshooting tools, collectively known as the Windows Recovery Environment (Windows RE).

Lessons
Overview of the Windows 10 Startup Recovery Environment
Troubleshooting Startup Settings
Troubleshooting Operating System Services Issues
Recovering BitLocker-Protected Drives
Lab: Troubleshooting Startup Issues
Resolving a Startup Issue (1)
Resolving a Startup Issue (2)
Lab: Recovering BitLocker-Encrypted Drives
Recovering a BitLocker-Encrypted Drive
Creating a New BitLocker Password

After completing this module, students will be able to:

Describe the Windows 10 startup architecture.
Optimize and troubleshoot startup settings.

Troubleshoot Windows 10 operating system services.
Recover drives encrypted with Windows BitLocker Drive Encryption.

Module 3: Troubleshooting Hardware and Device Drivers

This module explains how to support users that utilize a multitude of devices that run Windows 10. It describes how an operating system uses device drivers, and how you can troubleshoot hardware devices and device drivers. The module also covers how to monitor the reliability of a Windows 10 device and troubleshoot any issue that might occur.

Lessons
Troubleshooting Device Driver Failures
Overview of Hardware Troubleshooting
Troubleshooting Physical Failures
Monitoring Reliability
Configuring the Registry
Lab: Troubleshooting Device Driver Issues
Troubleshooting a Missing Device Driver
Resolving Hardware Problems
Resolving a Device Driver Problem
Configuring Group Policy Settings to Control Device Installation
Lab: Troubleshooting Hardware Issues
Diagnosing Memory and Troubleshooting Failed Disk Redundancy
Accessing a Volume from a Failed Computer

After completing this module, students will be able to:

Troubleshoot hardware device drivers.
Describe the process of troubleshooting hardware.
Troubleshoot physical hardware failures.
Monitor the reliability of Windows 10 devices.
Configure the Windows 10 registry.

Module 4: Troubleshooting Remote Computers

This module explores three ways in which you can remotely connect to and manage remote computers: Remote Desktop, Windows Remote Assistance, and Windows PowerShell remoting.

Lessons
Using Remote Desktop
Using Remote Assistance
Remoting with Windows PowerShell
Lab: Troubleshooting Remote Computer by using Remote Desktop and Remote Assistance
Using Remote Desktop
Using Remote Assistance
Lab: Troubleshooting Remote Computer by Using Windows PowerShell
Using Windows PowerShell Remoting

After completing this module, students will be able to:

Use Remote Desktop to manage remote computers.
Use Windows Remote Assistance to manage remote computers.
Use Windows PowerShell remoting to manage remote computers.

Module 5: Resolving Issues with Network Connectivity Issues

This module explains the tools that you can use to set up and troubleshoot both wired and wireless network connections more efficiently. This module also explains how to support your organization's network infrastructure, and how to use these tools to configure and troubleshoot network connections.

Lessons
Determining Network Settings
Troubleshooting Network Connectivity
Troubleshooting Name Resolution
Lab: Resolving Network Connectivity Issues
Resolving a Network Problem (1)
Resolving a Network Problem (2)
Troubleshooting a Wireless Network

After completing this module, students will be able to:

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

Module 6: Troubleshooting Group Policy

This module provides an overview of the 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
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 (1)

After completing this module, students will be able to:

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

Module 7: Troubleshooting User Settings

In this module, you will examine issues that can occur when users sign in, and you will also learn about how to troubleshoot the application of user settings.

Lessons
Troubleshooting Sign In Issues
Troubleshooting the Application of User Settings
Lab: Troubleshooting Sign in Problems
Resolving Sign-In Issue 1
Resolving Sign-In Issue 2
Lab: Troubleshooting the Application of User Settings
Resolving Folder Redirection Issue

After completing this module, students will be able to:

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

Module 8: Troubleshooting Remote Connectivity

This module explains the virtual private network (VPN) and Direct Access technologies, describes the common problems with their implementation and usage, and provides several possible mitigations for those problems.

Lessons
Troubleshooting VPN Connectivity Issues
Troubleshooting Direct Access
Lab: Troubleshooting VPN Connectivity
Troubleshoot VPN Connectivity Issue 1
Troubleshoot VPN Connectivity Issue 2
Lab: Configuring and Troubleshooting Direct Access
Prepare the Direct Access Implementation
Configuring and Verifying Client-Side Settings for Direct Access
Troubleshooting Direct Access
After completing this module, students will be able to:
Troubleshoot issues with VPN connectivity.
 Configure and troubleshoot Direct Access.

Module 9: Troubleshooting Resource Access Within a Domain

This module explains how to resolve problems related to resource access from computers that are domain members. It explains how to troubleshoot file permission issues, encrypting file system (EFS) issues and printer access issues.

Lessons
Troubleshooting File Permissions Issues
Recovering Files Encrypted by EFS
Troubleshooting Printer Access Issues
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 Access to Encrypted Files
Encrypting and Recovering Access to Encrypted Files
Lab: Troubleshooting Printer Issues
Resolving a Printer Access Issue (1)
Resolving a Printer Access Issue (2)

After completing this module, students will be able to:

Troubleshoot issues with file permissions.
Troubleshoot issues with file access.
Recover files encrypted by EFS.
Troubleshoot access to encrypted files.
Troubleshoot issues with accessing printers.

Module 10: Troubleshooting Resource Access for Clients That Are Not Domain Members

This module explains how to resolve problems related to resource access from computers that are not domain members.
Lessons
Configuring and Troubleshooting Work Folders
Configuring and Troubleshooting OneDrive Access
Lab: Troubleshooting Resource Access for Clients That Are Not Domain Members
Troubleshooting Work Folders 1
Troubleshooting Work Folders 2
Troubleshooting OneDrive for Business

After completing this module, students will be able to:
Configure and troubleshoot the Work Folders feature.
Configure and troubleshoot access to Microsoft OneDrive.

Module 11: Troubleshooting Applications

Windows 10 supports installation and use of two types of applications: desktop apps, and Universal Windows apps. This module examines these two types of applications, and the issues—including application compatibility issues—that affect a user's ability to install and run them. This module also covers how users can resolve web browser–related issues, specifically issues associated with both Microsoft Internet Explorer and Microsoft Edge.

Lessons
Troubleshooting Desktop App Installation Issues
Troubleshooting Desktop Apps
Managing Windows Store Apps
Troubleshooting Access to Company Web Applications
Lab: Troubleshooting Desktop Apps
Troubleshooting AppLocker Policy Application
Troubleshooting Application Compatibility Issues

Lab: Troubleshooting Access to Company Web Applications
Troubleshooting Microsoft Internet Explorer Issues
Troubleshooting Microsoft Edge Issues

After completing this module, students will be able to:

Troubleshoot desktop app installation issues.
Troubleshoot desktop apps.
Manage Universal Windows apps.
Troubleshoot web browsers.

Module 12: Maintaining Windows 10

Once the Windows 10 operating system is activated on your computers, you must establish procedures to monitor their performance and ensure that they remain up-to-date with the latest operating system updates and security fixes. This module discusses how to provide for the ongoing maintenance of Windows 10 operating systems.

Lessons
Managing and Troubleshooting Windows Activation
Monitoring and Troubleshooting Computer Performance
Applying Applications and Windows Updates
Lab: Monitoring and Troubleshooting Performance
Resolve a Performance-Related Issue
Resolve a CPU-Related Performance Issue
Resolve a Disk-Related Performance Issue

After completing this module, students will be able to:

Manage and troubleshoot volume activation in Windows operating systems.
Monitor and troubleshoot Windows 10 performance.
Update applications and Windows 10.

Module 13: Recovering Data and Operating System

This module explains how to use file recovery and troubleshoot deleted files. It also covers how to recover a Windows 10 computer.

Lessons
File Recovery in Windows 10
Recovering an Operating System
Lab: Recovering Data
Resolving Issues with Previous Versions
Lab: Provisioning Computer to Comply with Company Standards
Provision Computer to Comply with Company Standards

After completing this module, students will be able to:

Recover files in Windows 10 by configuring and using file-recovery features.
Recover a computer that is running Windows 10.

About Microsoft Official Course On-Demand

MOC On-Demand is an integrated combination of video, text, practical tasks and knowledge tests designed to help IT experts and developers to expand their knowledge about Microsoft technologies. The courses are a great alternative for anyone wanting to learn independently and at their own pace. They can also be used in the form of a Blended Class together with managed training courses, or as the basis for training solutions with mentoring and other learning programs.

All Labs within a course can be accessed via the Microsoft Labs Online (MLO) platform. Participants enrolled in a course can start the Labs directly from within a course; they do not need to be set up separately.

System requirements for MOC On-Demand
Browser: current version of Internet Explorer, Microsoft Edge, Google Chrome™ or Firefox®
Internet access: broadband Internet connection (recommended: network bandwidth of over 4Mbps)
Screen resolution: 1280 x 1024 or higher