MS 10982 D: Supporting and Troubleshooting Windows 10 In the Enterprise

Days: 5

Prerequisites: Before attending this course, students must have:

- Networking fundamentals, including Transmission Control Protocol /Internet Protocol (TCP/IP), User Datagram Protocol (UDP), and Domain Name System (DNS).
- Microsoft Active Directory Domain Services (AD DS) principles.
- Understanding of the Public Key Infrastructure (PKI) components.
- Windows Server 2012 R2 fundamentals.
- Microsoft Windows Client essentials; for example, experience with Windows 10 or knowledge from the courses 20697-1 and 20697-2.

Audience: For those in need of the knowledge and skills required to install and configure Windows 10 desktops and devices in a Windows Server domain corporate environment

Description: This course is designed to provide students with the knowledge and skills required to install and configure Windows 10 desktops and devices in a Windows Server domain corporate environment. These skills include learning how to install and customize Windows 10 operating systems and apps, and configure local and remote network connectivity and storage. Students will also learn how to configure data security, device security, and network security, and maintain, update, and recover Windows 10.

OUTLINE:

MODULE 1: IMPLEMENTING A TROUBLESHOOTING METHODOLOGY

This module explains how to describe the processes involved in establishing and using a troubleshooting methodology. Module also covers various Windows 10 fundamentals, high level architecture and often used troubleshooting tools.

LESSON

- 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 FOR WINDOWS 10

- Using Troubleshooting Tools

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe Windows 10.
- Understand the EDST job role.
- Describe troubleshooting steps.
- Describe troubleshooting tools.

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MODULE 2: TROUBLESHOOTING STARTUP ISSUES

This module explains how to enable students to troubleshoot startup issues and OS services on a computer with Windows 10 installed. 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).

LESSON

- 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 Problem (1)
- Resolving a Startup Problem (2)
- Resolving a Startup Problem (3)

LAB: RECOVERING BITLOCKER-ENCRYPTED DRIVES

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

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Understand the Windows 10 startup recovery environment.
- Troubleshoot startup settings.
- Troubleshoot OS services issues.
- Recover BitLocker-protected drives.

MODULE 3: TROUBLESHOOTING HARDWARE AND DEVICE DRIVERS

This module explains how to enable students to resolve issues related to device drivers and hardware devices.

LESSON

- Troubleshooting Device Driver Failures
- Overview of Hardware Troubleshooting
- Troubleshooting Physical Failures
- Monitoring Reliability
- Configuring the Registry

LAB: TROUBLESHOOTING DEVICE DRIVER ISSUES

- Resolving Hardware Issues
- Configuring Group Policy Settings to Control Device Installation
- Adding a Missing Device Driver to a Driver Store
- Reverting a Problematic Device Driver

LAB: TROUBLESHOOTING HARDWARE ISSUES

- Diagnosing Memory
- SynTroubleshooting and Repairing Failed Disk Redundancychronizing Settings between Devices
- Accessing Data on a Foreign Volume

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Resolve hardware issues.
- Configure Group Policy settings to control device installation.
- Add a missing device driver to a driver store.
- Revert a problematic device driver.

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MODULE 4: TROUBLESHOOTING REMOTE COMPUTERS

This module covers how to troubleshoot a remote Windows 10 computer by using Remote Desktop (RD), Windows RemoteAssistance and Windows PowerShell remoting.

LESSON

- 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.
- Use Remote Assistance.
- Understand remoting with Windows PowerShell.

MODULE 5: RESOLVING NETWORK CONNECTIVITY ISSUES

This module explains how to identify network settings and troubleshoot issues related to network connectivity in wired and wireless networks, IPv4 and IPv6 connectivity, and name resolution.

LESSON

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

LAB: RESOLVING NETWORK CONNECTIVITY ISSUES

- Resolving a Network Problem (1)
- Resolving a Network Problem (2)
- Troubleshooting a Wireless Network

LAB: RESOLVING NAME RESOLUTION ISSUES

- Resolving a Network Problem (1)
- Resolving a Network Problem (2)
- Resolving a Network Problem (3)

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Determine network settings.
- Troubleshoot network connectivity issues.
- Troubleshoot 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.

LESSON

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

LAB: TROUBLESHOOTING GROUP POLICY APPLICATION ISSUES

- Resolving Group Policy Application (1)
- Resolving Group Policy Application (2)

LAB: RESOLVING GROUP POLICY ISSUES

- Resolving Group Policy Application (1)
- Resolving Group Policy Application (2)

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LAB: INSTALLING AND SHARING A PRINTER

- Installing and Sharing a Printer

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Understand Group Policy application.
- Resolve client configuration failures and GPO application issues.

MODULE 7: TROUBLESHOOTING USER SETTINGS

This module explains the cause of sign in problems in order to detect the issues and how to troubleshoot them.

LESSON

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

LAB: TROUBLESHOOTING SIGN IN PROBLEMS

- Resolving Sign in Problem (1)
- Resolving Sign in Problem (2)
- Resolving Sign in Problem (3)

LAB: TROUBLESHOOTING THE APPLICATION OF USER SETTINGS

- Resolving Folder Redirection Problem
- Resolving Roaming User Profile Problem

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

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

MODULE 8: TROUBLESHOOTING REMOTE CONNECTIVITY

This module explains how to troubleshoot remote connectivity issues when a virtual private network (VPN) or DirectAccess is used.

LESSON

- Troubleshooting VPN Connectivity Issues
- Troubleshooting DirectAccess

LAB: TROUBLESHOOTING VPN CONNECTIVITY

- Troubleshooting VPN Connectivity (1)
- Troubleshooting VPN Connectivity (2)

LAB: CONFIGURING AND TROUBLESHOOTING DIRECTACCESS

- Configuring and Verifying DirectAccess Client-Side Settings
- Troubleshooting DirectAccess

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Troubleshoot VPN connectivity issues.
- Troubleshoot DirectAccess.

MODULE 9: TROUBLESHOOTING RESOURCE ACCESS WITHIN A DOMAIN

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

LESSON

- 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)

LAB: TROUBLESHOOTING ACCESS TO ENCRYPTED FILES

- Recovering Encrypted File

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LAB: TROUBLESHOOTING PRINTER ACCESS ISSUES

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

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Troubleshoot file permission issues.
- Recover files encrypted by EFS
- Troubleshoot printer access issues.

MODULE 10: TROUBLESHOOTING RESOURCE ACCESS FOR NON DOMAIN MEMBER CLIENTS

This module explains how to enable students to resolve problems of resource access from computers that are not domain-joined.

LESSON

- Configuring and Troubleshooting Device Registration
- Configuring and Troubleshooting Work Folders
- Configuring and Troubleshooting OneDrive Access

LAB: TROUBLESHOOTING RESOURCE ACCESS FOR CLIENTS THAT ARE NOT DOMAIN MEMBERS

- Troubleshooting Device Registration
- Troubleshooting Work Folders
- Troubleshooting OneDrive for Business

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Configure and troubleshoot device registration.
- Configure and troubleshoot Work Folders.
- Configure and troubleshoot OneDrive for Business.

MODULE 11: TROUBLESHOOTING APPLICATIONS

This module explains how to troubleshoot application installation issues and problems in the desktop and Windows Store apps.

LESSON

- 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 issue

LAB: TROUBLESHOOTING ACCESS TO COMPANY WEB APPLICATIONS

- Troubleshooting Internet Explorer Issue
- Troubleshooting Microsoft Edge Issue

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Troubleshoot desktop app installation issues.
- Troubleshoot desktop apps.
- Manage Windows Store apps.
- Troubleshoot access to company web applications.

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MODULE 12: MAINTAINING WINDOWS 10

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

LESSON

- Managing and Troubleshooting Windows Activation
- Monitoring and Troubleshooting Performance
- Applying Applications and Windows Updates

LAB: MONITORING AND TROUBLESHOOTING PERFORMANCE

- Troubleshooting a Performance Problem (1)
- Troubleshooting a Performance Problem (2)
- Troubleshooting a Performance Problem (3)

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Manage and troubleshoot Windows activation.
- Monitoring and troubleshooting performance.
- Applying applications and Windows updates.

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.

LESSON

- File Recovery in Windows 10
- Recovering an OS

LAB: RECOVERING DATA

- Recovering Data from Azure Backup
- Recovering Deleted File by Using File History

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 a file in Windows 10.
- Recover an operating OS.