



Course M50331-ILT

Windows 7, Enterprise Desktop Support Technician

Five days, Instructor-Led

INTRODUCTION

This five-day instructor-led course provides students with the knowledge and skills needed to isolate, document and resolve problems on a Windows 7 desktop or laptop computer. It will also help test takers prepare for the 70-685 exam.

AUDIENCE PROFILE

This course is intended for Windows 7 desktop support technicians who resolve Tier 1 and 2 problems on desktop computers. A minimum of three years of experience configuring and supporting desktop or laptop operating systems is recommended.

PREREQUISITES

Before attending this course, students must have:

- TCP/IP Troubleshooting skills
- Experience working in a domain environment
- Experience using desktop and command-line troubleshooting tools
- Experience installing and troubleshooting desktop application problems
- Experience configuring registry and group policy settings

COURSE OUTLINE

MODULE 1: IDENTIFY AND RESOLVE NEW SOFTWARE INSTALLATION ISSUES

This module explains how to fix problems that occur during the installation of new software.

Lessons

- Overview
- Planning New Software Deployment
- Multilingual Deployment
- Using Group Policy to install software
- Using Software Restriction Policies
- Digitally Signing Software
- Using WMI
- Using Applocker
- Using Virtualization for Testing
- Resolve Software Installation Issues
- Review

Lab: Identify and Resolve New Software Installation Issues

- Create a Repair Disk and Installation Partitions
- Install and Configure Windows 7
- Install Programs and test Applocker
- Configure Compatibility Settings

MODULE 2: RESOLVE SOFTWARE CONFIGURATION ISSUES

This module explains how to fix application install problems caused by older programs or new features and options.

Lessons

- Overview
- Change Default Settings on the Image
- Enable and Disable Features
- Pointing to a Network Resource
- Configuring Updates
- Resolve Configuration Issues with Group Policy
- Driver Updates
- Problem Steps Recorder
- Resolve Software Configuration Issues
- Review

Lab: Resolve Software Configuration Issues

- Install the Windows Automated Installation Kit
- Create a Windows PE bootable image
- Create a VHD disk
- Install Windows 7 on a VHD
- Boot Windows 7 from a VHD
- Use the Problem Steps Recorder

MODULE 3: RESOLVE SOFTWARE FAILURE

This module explains how to fix problems with applications that have problems after being installed.

Lessons

- Overview
- Event Viewer
- Event Forwarding
- Application Compatibility Toolkit
- Windows Troubleshooting Platform
- Windows Experience Index
- Testing Compatibility with Safe Mode
- System Restore
- Resolve Software Failure
- Review

Lab: Resolve Software Failure

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- Install applications written for older versions of Windows
- Use the Program Compatibility Tool to configure settings for older applications
- Use PowerShell scripts to configure Network Adapters
- Use the Troubleshooter to enable the network adapter
- Install Windows 7 SDK
- Create a Troubleshooting Pack with the SDK
- Configure Event Forwarding
- Use System Restore

MODULE 4: IDENTIFY AND RESOLVE LOGON ISSUES

This module explains how to fix logon problems and configure local and roaming logon profiles.

Lessons

- Overview
- Authentication Process
- Machine Accounts
- Trust Relationships
- Network Services
- User Account Properties
- User Profiles
- Resolve Logon Issues
- Review

Lab: Identify and Resolve Logon Issues

- Join a computer to the domain
- Install Remote Server Administration Tools (RSAT)
- Test and Verify Domain User Account Properties
- Create Logoff script using PowerShell
- Test the use of Roaming Profiles
- Test the use of Mandatory Profiles

MODULE 5: IDENTIFY AND RESOLVE NETWORK CONNECTIVITY ISSUES

This module explains how to troubleshoot connectivity and network problems for client computers.

Lessons

- Overview
- Scope of the Problem
- Hardware Issues
- TCP/IP Configuration
- Network Routing



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- IPsec Configuration
- Network Connectivity Tools
- Branch Cache
- Resolve Network Connectivity Issues
- Review

Lab: Identify and Resolve Network Connectivity Issues

- Use command-line tools to identify and fix network connectivity problems
- Fix connectivity problems caused by problem scripts

MODULE 6: IDENTIFY AND RESOLVE NAME RESOLUTION ISSUES

This module explains how to use network services and local computer files to resolve computer names.

Lessons

- Overview
- DNS Name Resolution
- Using a Hosts files
- WINS Configuration
- Using LMHOSTS files
- Name Resolution Order
- Manual vs DHCP Configuration
- Resolve Name Resolution Issues
- Review

Lab: Identify and Resolve Name Resolution Issues

- Configure and Test DNS Resolution
- Configure and Test Hosts File Resolution
- Configure and Test NetBIOS Resolution

MODULE 7: IDENTIFY AND RESOLVE NETWORK PRINTER ISSUES

This module explains how to configure printer settings and security.

Lessons

Overview

- Connecting to a Network Printer
- Managing the Print Spooler
- Setting Printer Priorities
- Creating Printer Pools
- Configuring Drivers
- Printer Schedules



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- Printer Permissions
- Manage Printers with Group Policy Settings
- Resolve Network Printer Issues
- Review

Lab: Identify and Resolve Network Printer Issues

- Install local and network printers
- Create and use a separator page
- Configure Printer Redirection and Printer Pooling
- Move the Print Spooler Directory

MODULE 8: IDENTIFY AND RESOLVE PERFORMANCE ISSUES

This module explains how to improve the performance of a system by monitoring and controlling the use of resources by applications.

Lessons

- Overview
- Analyzing Event Logs
- Setting Power Management
- Optimize Processor Usage
- Optimizing Memory Usage
- Optimize Hard Drive Usage
- Optimize Network Usage
- Performance Tools
- Resolve Performance Issues
- Review

Lab: Identify and Resolve Performance Issues

- Schedule and Perform a Disk Defragmentation
- Using Task Manager
- Using Resource Monitor
- Display a message when a Service stops

MODULE 9: IDENTIFY AND RESOLVE HARDWARE FAILURE ISSUES

This module explains how to diagnose hardware problems on a computer.

- Lessons
- Overview
- Diagnosing Memory Failure Issues
- Hard Drive Issues
- Network Card Issues



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- Power Supply Issues
- Windows Hardware Diagnostic Tools
- Resolve Hardware Failure Issues
- Review

Lab: Identify and Resolve Hardware Failure Issues

- Use the Windows Memory Diagnostics Tool
- Fix Hard Disk Errors
- Use the Reliability Monitor
- Use Event Viewer to Find Hardware Information

MODULE 10: IDENTIFY AND RESOLVE WIRELESS CONNECTIVITY ISSUES

This module explains how to configure reliable and secure wireless connectivity for client computers.

Lessons

- Overview
- Signal Strength
- Wireless Security
- Wireless Profiles
- Management Options for Wireless Devices
- Resolve Wireless Connectivity Issues
- Review

Lab: Identify and Resolve Wireless Connectivity Issues

- No Lab Exercises

MODULE 11: IDENTIFY AND RESOLVE REMOTE ACCESS ISSUES

This module explains how to configure remote network connections for client computers.

Lessons

- Overview
- Remote Access Methods
- Dial-up Configuration
- VPN Configuration
- DirectAccess Configuration
- Authentication Protocols
- Resolve Remote Access Issues
- Review

Lab: Identify and Resolve Remote Access Issues

- Configure Remote Access settings for a domain user account

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- Create and Test a VPN Connection

MODULE 12: MANAGE FILE SYNCHRONIZATION

This module explains how to allow end-users to work with network files that are being synchronized on their local desktops or laptops.

- Lessons
- Overview
- Configuring Offline File Access
- Synchronization Settings
- Transparent Caching
- Roaming Profiles
- Restoring Network Files
- Resolve File Synchronization Problems
- Review

Lab: Manage File Synchronization

- Configure and Test Offline Files
- Restore the Previous Version of a File

MODULE 13: IDENTIFY AND RESOLVE INTERNET EXPLORER SECURITY ISSUES

This module explains how to configure the security features in Internet Explorer to protect user information and privacy.

Lessons

- Overview
- Configure Security Zone
- Configure Security Levels
- Configure Privacy Settings
- Managing Add-ons
- Configure Smart Screen Filter
- Other Security Issues
- Resolve Internet Explorer Security Issues
- Review

Lab: Identify and Resolve Internet Explorer Security Issues

- Configure Trusted Security Zone
- Configure the Security and Privacy Features in IE
- Configure Group Policy Settings for Internet Explorer

MODULE 14: IDENTIFY AND RESOLVE FIREWALL ISSUES

This module explains how to configure Windows Firewall to secure network traffic and applications on a computer.

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- Lessons
- Overview
- Securing Network Applications and Features
- Program and Port Exceptions
- Configuring Notifications and Logging
- Network Security Tools
- Resolve Firewall Issues
- Review

Lab: Identify and Resolve Firewall Issues

- Configure and Test Firewall Rules for an application
- Fix Application Problems Caused by Firewall Rules
- Module 15: Identify and Resolve Issues Due To Malicious Software
- This module explains how to restore a computer system after an attack by viruses or other malicious software.
- Lessons
- Overview
- Proactive Malware Protection
- Protecting Internet Explorer
- Windows and Anti-Virus Updates
- Recovering From Malware Infection
- Resolve Issues Due To Malicious Software
- Review

Lab: Identify and Resolve Issues Due To Malicious Software

- Use the Action Center to manage UAC settings
- Use Windows Defender
- Use System File Checker
- Use the Malicious Software Removal Tool

MODULE 16: IDENTIFY AND RESOLVE ENCRYPTION ISSUES

This module explains how to fix problems caused by using encryption on a Windows computer.

- Lessons
- Overview
- Configuring a Recovery Agent
- Using EFS
- Using BitLocker
- Encryption Tools
- Resolve Encryption Issues
- Review

Lab: Identify and Resolve Encryption Issues



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- Encrypt Files using EFS
- Configure EFS Sharing
- Configure a Recovery Agent

MODULE 17: IDENTIFY AND RESOLVE SOFTWARE UPDATE ISSUES

This module explains how to enable and use the software update features available in Windows 7.

- Lessons
- Overview
- Types of Windows Updates
- Using Windows Update
- Using Microsoft Update
- Resolve Software Update Issues
- Review

Lab: Identify and Resolve Software Update Issues

- Configure Windows Updates using desktop settings
- Configure Windows Updates using Group Policy settings
- Additional Reading

To help you prepare for this class, review the following resources:

- Classroom Training: Course 6292
- Microsoft Press Book: MCTS Self-Packed Training Kit (Exam 70-680): Configuring Microsoft Windows 7