



BUILDING TRAINING SOLUTIONS  
FOR THE IT WORLD

## Installing and Configuring Windows 7 Client for Enterprise Desktop Support Technician

**Days:** 5  
**Format:** Instructor-Led  
**Class Code:** 56623  
**Certification Exams:** 70-680  
70-685  
**Certification Track:** MCITP

### Recommended Course Sequence

Knowledge of prerequisites  
noted below.

*Course content is subject to change  
without notice.*

### Course Description:

CTREC Hilton, Houston presents this five-day instructor-led Microsoft training course which provides students with the knowledge and skills needed to students learn how to install, upgrade, and migrate to Windows 7 client. Students then configure Windows 7 client for disk drives, file access, printers, optimizing maintenance Windows 7 client computers, isolate documents and resolve problems on a Windows 7. It will also prepare test takers for the 70-680 and 70-685 exam.

### Target Student:

This Microsoft training course is intended for Windows 7 desktop support technicians who want to expand their knowledge base and technical skills about Windows 7 Client.

### At Course Completion:

After completing this course, students will be able to:

- Perform a clean installation of Windows 7, upgrade to Windows 7, and migrate user-related data and settings from an earlier version of Windows.
- Configure disks, partitions, volumes, and device drivers to enable a Windows 7 client computer.
- Configure file access and printers on a Windows 7 client computer.
- Optimize and maintain the performance and reliability of a Windows 7 client computer.
- Identify and Resolve Desktop Application Issues
- Identify the Cause of and Resolve Networking Issues
- Manage and Maintain Systems That Run Windows 7
- Support Mobile Users
- Identify the Cause of and Resolve Security Issues

### Certification Track:

- MCITP: Windows 7, Enterprise Desktop Support Technician

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## Course Outline

### Module 1: Installing, Upgrading, and Migrating to Windows 7

This module explains how to install, upgrade and migrate to Windows 7. It also describes the key features, editions, and hardware requirements of Windows 7.

Lessons
<ul style="list-style-type: none"><li>■ Preparing to Install Windows 7</li><li>■ Performing a Clean Installation of Windows 7</li><li>■ Upgrading and Migrating to Windows 7</li><li>■ Performing Image-based Installation of Windows 7</li><li>■ Configuring Application Compatibility</li></ul>
Lab : Installing and Configuring Windows 7
<ul style="list-style-type: none"><li>■ Migrating Settings by using Windows Easy Transfer</li><li>■ Configuring a Reference Image of Windows 7</li><li>■ Configuring a Reference Image</li></ul>

### Module 2: Configuring Disks and Device Drivers

This module examines how to configure disks, partitions, volumes, and device drivers to enable Windows 7 to function as desired.

Lessons
<ul style="list-style-type: none"><li>■ Partitioning Disks in Windows 7</li><li>■ Managing Disk Volumes</li><li>■ Maintaining Disks in Windows 7</li><li>■ Installing and Configuring Device Drivers</li></ul>
Lab : Configuring Disks and Device Drivers
<ul style="list-style-type: none"><li>■ Configuring Disks</li><li>■ Configuring Disk Quotas (Optional)</li><li>■ Updating a Device Driver</li></ul>

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## Module 3: Configuring File Access and Printers on Windows 7 Client Computers

This module explains how to manage access to shared folders and printers on a computer running Windows 7. Specifically, it describes how to share and secure folders, configure folder compression, and how to install, configure, and administer printing.

Lessons
<ul style="list-style-type: none"><li>■ Overview of Authentication and Authorization</li><li>■ Managing File Access in Windows 7</li><li>■ Managing Shared Folders</li><li>■ Configuring File Compression</li><li>■ Managing Printing</li></ul>
Lab : Configuring File Access and Printers on Windows 7 Client Computers
<ul style="list-style-type: none"><li>■ Create and Configure a Public Shared Folder for all Users</li><li>■ Configuring Shared Access to Files for Specific Users</li><li>■ Creating and Sharing a Printer</li></ul>

## Module 4: Optimizing and Maintaining Windows 7 Client Computers

This module describes how to use the monitoring and configuration tools to obtain information about Windows 7 performance and how to troubleshoot performance and reliability problems.

Lessons
<ul style="list-style-type: none"><li>■ Maintaining Performance by Using the Windows 7 Performance Tools</li><li>■ Maintaining Reliability by Using the Windows 7 Diagnostic Tools</li><li>■ Backing Up and Restoring Data by Using Windows Backup</li></ul>
Lab : Optimizing and Maintaining Windows 7 Client Computers
<ul style="list-style-type: none"><li>■ Monitoring System Performance</li><li>■ Backing Up and Restoring Data</li></ul>

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## Module 5: Identify and Resolve New Software Installation Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Planning New Software Deployment</li><li>■ Multilingual Deployment</li><li>■ Using Group Policy to install software</li><li>■ Using Software Restriction Policies</li><li>■ Digitally Signing Software</li><li>■ Using WMI</li><li>■ Using Applocker</li><li>■ Using Virtualization for Testing</li><li>■ Resolve Software Installation Issues</li></ul>
Lab : Identify and Resolve New Software Installation Issues
<ul style="list-style-type: none"><li>■ Create a Repair Disk and Installation Partitions</li><li>■ Install and Configure Windows 7</li><li>■ Install Programs and test Applocker</li><li>■ Configure Compatibility Settings</li></ul>

## Module 6: Resolve Software Configuration Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Change Default Settings on the Image</li><li>■ Enable and Disable Features</li><li>■ Pointing to a Network Resource</li><li>■ Configuring Updates</li><li>■ Resolve Configuration Issues with Group Policy</li><li>■ Driver Updates</li><li>■ Problem Steps Recorder</li><li>■ Resolve Software Configuration Issues</li></ul>
Lab : Resolve Software Configuration Issues
<ul style="list-style-type: none"><li>■ Install the Windows Automated Installation Kit</li><li>■ Create a Windows PE bootable image</li><li>■ Create a VHD disk</li><li>■ Install Windows 7 on a VHD</li><li>■ Boot Windows 7 from a VHD</li><li>■ Use the Problem Steps Recorder</li></ul>

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## Module 7: Resolve Software Failure

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

Lessons
<ul style="list-style-type: none"><li>■ Event Viewer</li><li>■ Event Forwarding</li><li>■ Application Compatibility Toolkit</li><li>■ Windows Troubleshooting Platform</li><li>■ Windows Experience Index</li><li>■ Testing Compatibility with Safe Mode</li><li>■ System Restore</li><li>■ Resolve Software Failure</li></ul>
Lab : Resolve Software Failure
<ul style="list-style-type: none"><li>■ Install applications written for older versions of Windows</li><li>■ Use the Program Compatibility Tool to configure settings for older applications</li><li>■ Use PowerShell scripts to configure Network Adapters</li><li>■ Use the Troubleshooter to enable the network adapter</li><li>■ Install Windows 7 SDK</li><li>■ Create a Troubleshooting Pack with the SDK</li><li>■ Configure Event Forwarding</li><li>■ Use System Restore</li></ul>

## Module 8: Identify and Resolve Logon Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Authentication Process</li><li>■ Machine Accounts</li><li>■ Trust Relationships</li><li>■ Network Services</li><li>■ User Account Properties</li><li>■ User Profiles</li><li>■ Resolve Logon Issues</li></ul>
Lab : Identify and Resolve Logon Issues
<ul style="list-style-type: none"><li>■ Join a computer to the domain</li><li>■ Install Remote Server Administration Tools (RSAT)</li><li>■ Test and Verify Domain User Account Properties</li><li>■ Create Logoff script using PowerShell</li><li>■ Test the use of Roaming Profiles</li><li>■ Test the use of Mandatory Profiles</li></ul>

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## Module 9: Identify and Resolve Network Connectivity Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Scope of the Problem</li><li>■ Hardware Issues</li><li>■ TCP/IP Configuration</li><li>■ Network Routing</li><li>■ IPSec Configuration</li><li>■ Network Connectivity Tools</li><li>■ Branch Cache</li><li>■ Resolve Network Connectivity Issues</li></ul>
Lab : Identify and Resolve Network Connectivity Issues
<ul style="list-style-type: none"><li>■ Use command-line tools to identify and fix network connectivity problems</li><li>■ Fix connectivity problems caused by problem scripts</li></ul>

## Module 10: Identify and Resolve Name Resolution Issues

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

Lessons
<ul style="list-style-type: none"><li>■ DNS Name Resolution</li><li>■ Using a Hosts files</li><li>■ WINS Configuration</li><li>■ Using LMHOSTS files</li><li>■ Name Resolution Order</li><li>■ Manual vs DHCP Configuration</li><li>■ Resolve Name Resolution Issues</li></ul>
Lab : Identify and Resolve Name Resolution Issues
<ul style="list-style-type: none"><li>■ Configure and Test DNS Resolution</li><li>■ Configure and Test Hosts File Resolution</li><li>■ Configure and Test NetBIOS Resolution</li></ul>

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## Module 11: Identify and Resolve Network Printer Issues

This module explains how to configure printer settings and security.

Lessons
<ul style="list-style-type: none"><li>■ Connecting to a Network Printer</li><li>■ Managing the Print Spooler</li><li>■ Setting Printer Priorities</li><li>■ Creating Printer Pools</li><li>■ Configuring Drivers</li><li>■ Printer Schedules</li><li>■ Printer Permissions</li><li>■ Manage Printers with Group Policy Settings</li><li>■ Resolve Network Printer Issues</li></ul>
Lab : Identify and Resolve Network Printer Issues
<ul style="list-style-type: none"><li>■ Install local and network printers</li><li>■ Create and use a separator page</li><li>■ Configure Printer Redirection and Printer Pooling</li><li>■ Move the Print Spooler Directory</li></ul>

## Module 12: 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
<ul style="list-style-type: none"><li>■ Analyzing Event Logs</li><li>■ Setting Power Management</li><li>■ Optimize Processor Usage</li><li>■ Optimizing Memory Usage</li><li>■ Optimize Hard Drive Usage</li><li>■ Optimize Network Usage</li><li>■ Performance Tools</li><li>■ Resolve Performance Issues</li></ul>
Lab : Identify and Resolve Performance Issues
<ul style="list-style-type: none"><li>■ Schedule and Perform a Disk Defragmentation</li><li>■ Using Task Manager</li><li>■ Using Resource Monitor</li><li>■ Display a message when a Service stops</li></ul>

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## Module 13: Identify and Resolve Hardware Failure Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Diagnosing Memory Failure Issues</li><li>■ Hard Drive Issues</li><li>■ Network Card Issues</li><li>■ Power Supply Issues</li><li>■ Windows Hardware Diagnostic Tools</li><li>■ Resolve Hardware Failure Issues</li></ul>
Lab : Identify and Resolve Hardware Failure Issues
<ul style="list-style-type: none"><li>■ Use the Windows Memory Diagnostics Tool</li><li>■ Fix Hard Disk Errors</li><li>■ Use the Reliability Monitor</li><li>■ Use Event Viewer to Find Hardware Information</li></ul>

## Module 14: Identify and Resolve Wireless Connectivity Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Signal Strength</li><li>■ Wireless Security</li><li>■ Wireless Profiles</li><li>■ Management Options for Wireless Devices</li><li>■ Resolve Wireless Connectivity Issues</li></ul>

## Module 15: Identify and Resolve Remote Access Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Remote Access Methods</li><li>■ Dial-up Configuration</li><li>■ VPN Configuration</li><li>■ DirectAccess Configuration</li><li>■ Authentication Protocols</li><li>■ Resolve Remote Access Issues</li><li>■</li></ul>
Lab : Identify and Resolve Remote Access Issues
<ul style="list-style-type: none"><li>■ Configure Remote Access settings for a domain user account</li><li>■ Create and Test a VPN Connection</li></ul>

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## Module 16: 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
<ul style="list-style-type: none"><li>■ Configuring Offline File Access</li><li>■ Synchronization Settings</li><li>■ Transparent Caching</li><li>■ Roaming Profiles</li><li>■ Restoring Network Files</li><li>■ Resolve File Synchronization Problems</li></ul>
Lab : Manage File Synchronization
<ul style="list-style-type: none"><li>■ Configure and Test Offline Files</li><li>■ Restore the Previous Version of a File</li></ul>

## Module 17: 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
<ul style="list-style-type: none"><li>■ Configure Security Zone</li><li>■ Configure Security Levels</li><li>■ Configure Privacy Settings</li><li>■ Managing Add-ons</li><li>■ Configure Smart Screen Filter</li><li>■ Other Security Issues</li><li>■ Resolve Internet Explorer Security Issues</li></ul>
Lab : Identify and Resolve Internet Explorer Security Issues
<ul style="list-style-type: none"><li>■ Configure Trusted Security Zone</li><li>■ Configure the Security and Privacy Features in IE</li><li>■ Configure Group Policy Settings for Internet Explorer</li></ul>

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## Module 18: Identify and Resolve Firewall Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Securing Network Applications and Features</li><li>■ Program and Port Exceptions</li><li>■ Configuring Notifications and Logging</li><li>■ Network Security Tools</li><li>■ Resolve Firewall Issues</li></ul>
Lab : Identify and Resolve Firewall Issues
<ul style="list-style-type: none"><li>■ Configure and Test Firewall Rules for an application</li><li>■ Fix Application Problems Caused by Firewall Rules</li></ul>

## Module 19: 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
<ul style="list-style-type: none"><li>■ Proactive Malware Protection</li><li>■ Protecting Internet Explorer</li><li>■ Windows and Anti-Virus Updates</li><li>■ Recovering From Malware Infection</li><li>■ Resolve Issues Due To Malicious Software</li></ul>
Lab : Identify and Resolve Issues Due To Malicious Software
<ul style="list-style-type: none"><li>■ Use the Action Center to manage UAC settings</li><li>■ Use Windows Defender</li><li>■ Use System File Checker</li><li>■ Use the Malicious Software Removal Tool</li></ul>

## Module 20: Identify and Resolve Encryption Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Configuring a Recovery Agent</li><li>■ Using EFS</li><li>■ Using BitLocker</li><li>■ Encryption Tools</li><li>■ Resolve Encryption Issues</li></ul>
Lab : Identify and Resolve Encryption Issues
<ul style="list-style-type: none"><li>■ Encrypt Files using EFS</li><li>■ Configure EFS Sharing</li><li>■ Configure a Recovery Agent</li></ul>

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## Module 21: Identify and Resolve Software Update Issues

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

Lessons
<ul style="list-style-type: none"><li>■ Types of Windows Updates</li><li>■ Using Windows Update</li><li>■ Using Microsoft Update</li><li>■ Resolve Software Update Issues</li></ul>
Lab : Identify and Resolve Software Update Issues
<ul style="list-style-type: none"><li>■ Configure Windows Updates using desktop settings</li><li>■ Configure Windows Updates using Group Policy settings</li></ul>