Szkolenie autoryzowane

## MS 50331 Windows Client, Enterprise Desktop Support Technician

Strona szkolenia   |   Terminy szkolenia   |   Rejestracja na szkolenie   |   Promocje

# About this course

**This three-day instructor-led course provides students with the knowledge and skills needed to isolate, document and resolve problems on Windows Desktops in a corporate domain. The material is geared towards corporate IT technicians that support Windows 7, 8 or 10 devices. PowerShell scripts and support files are now included to allow students to perform classroom lab exercises on their own time using Azure Virtual Machines.**

### Audience profile

This course is intended for technicians that support Windows 7, 8 or 10 devices. Tier 1 and 2 problems are the focus of this material. Windows PowerShell and Azure PowerShell tutorials and labs are now a part of the course.

### After completing this course, students will be able to:

- Manage and Maintain Windows devices locally or remotely
- Manage Windows devices using a GUI or a command-line interface
- Identify the Cause of and Resolve Networking Issues
- Identify the Cause of and Resolve Security Issues
- Manage Windows devices locally or remotely

■ Manage Windows Clients with Windows PowerShell & Azure PowerShell

## PREREQUISITES:

Before attending this course, students must have:

■ TCP/IP Troubleshooting skills
■ Experience working in a corporate domain environment
■ Experience using GUI and command-line troubleshooting tools
■ Experience installing and troubleshooting applications

# Course Outline

### Module 1: Identify and Resolve New Software Installation Issues (Required)

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

### Lessons

■ 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

### Lab : Identify and Resolve New Software Installation Issues

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

### After completing this module, students will be able to:

- Understand the different installation options for Windows 7
- Understand the different installation options for Windows 7 applications
- Resolve Windows 7 installation problems
- Prevent users from running unapproved applications

## Module 2: Resolve Software Configuration Issues (Required)

This module explains how to fix application installation and configuration issues.

### Lessons

- 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

### Lab : Resolve Software Configuration Issues

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

### After completing this module, students will be able to:

- Create a Windows 7 VHD disk
- Configure operating system features
- Understand the impact of Driver Updates
- Fix software configuration problems
- Use the Problem Steps Recorder tool

## Module 3: Resolve Software Failure (Required)

This module explains how to fix application problems that come up during their use and configuration.

**Lessons**

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

## Lab : Resolve Software Failure

- 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 SDK
- Create a Troubleshooting Pack with the SDK
- Configure Event Forwarding
- Use System Restore

## After completing this module, students will be able to:

- Configure Event Forwarding
- Use System Restore to fix desktop problems.
- Create a Windows 7 Troubleshooter

## Module 4: Identify and Resolve Logon Issues (Required)

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

**Lessons**

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

## Lab : Identify and Resolve Logon Issues

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- 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

## After completing this module, students will be able to:

- Create Roaming and Mandatory User Profiles
- Configure Machine Accounts in Active Directory
- Configure User Account Properties in Active Directory

## Module 5: Identify and Resolve Network Connectivity Issues (Required)

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

## Lessons

- Scope of the Problem
- Hardware Issues
- TCP/IP Configuration
- Network Routing
- IPSec Configuration
- Network Connectivity Tools
- Branch Cache
- Resolve Network Connectivity Issues

## Lab : Identify and Resolve Network Connectivity Issues

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

## After completing this module, students will be able to:

- Use command-line tools to troubleshoot connectivity problems.
- Use the Windows Troubleshooters to fix configuration issues.
- Configure Advanced TCP/IP options on a client computer

## Module 6: Identify and Resolve Name Resolution Issues (Required)

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This module explains how to use network and local computer services to resolve IP and computer naming issues.

## Lessons

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

## Lab : Identify and Resolve Name Resolution Issues

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

## After completing this module, students will be able to:

- Configure records on a DNS Server
- Configure HOSTS records
- Using command-line and scripting tools to configure TCP/IP settings

## Module 7: Identify and Resolve Network Printer Issues (Optional)

This module explains how to implement printer configuration and security settings.

## Lessons

- Connecting to a Network Printer
- Managing the Print Spooler
- Setting Printer Priorities
- Creating Printer Pools
- Configuring Drivers
- Printer Schedules
- Printer Permissions
- Manage Printers with Group Policy Settings
- Resolve Network Printer Issues

## Lab : Identify and Resolve Network Printer Issues

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

**After completing this module, students will be able to:**

- Optimize the performance of the Print Spooler
- Redirect Print Jobs from non-functioning Printers
- Manage Active Directory registration of Printers
- Manage Printer Permissions

### Module 8: Identify and Resolve Performance Issues (Required)

This module explains how to improve the performance of a system by monitoring and controlling the use of computer resources. Methods of auditing and reporting the use of computer resources are also demonstrated.

#### Lessons

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

#### 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

**After completing this module, students will be able to:**

- Configure automatic responses to Service failure
- Manage the use of Processing resources by applications
- View and control active connections to a computer
- Optimize Hard-Disk performance.

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## Module 9: Identify and Resolve Hardware Failure Issues (Optional)

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

### Lessons

- Diagnosing Memory Failure Issues
- Hard Drive Issues
- Network Card Issues
- Power Supply Issues
- Windows Hardware Diagnostic Tools
- Resolve Hardware Failure Issues

### 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

### After completing this module, students will be able to:

- Understand how to be proactive in dealing with hardware problems
- Use Windows 7 hardware diagnostic tools

## Module 10: Identify and Resolve Wireless Connectivity Issues (Optional)

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

### Lessons

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

### Lab : Identify and Resolve Wireless Connectivity Issues

- No lab exercises. (Interative Video Simulation is provided to practice this skill.)

**After completing this module, students will be able to:**

- Understand the encryption options available for wireless networks
- Use Windows Wireless security options
- Fix client connectivity problems

## Module 11: Identify and Resolve Remote Access Issues (Optional)

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

### Lessons

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

### Lab : Identify and Resolve Remote Access Issues

- Configure Remote Access settings for a domain user account
- Create and Test a VPN Connection

**After completing this module, students will be able to:**

- Understand the security options available when creating remote access connections
- Understand the new capabilities of VPN connections that use DirectAccess
- Resolve connectivity problems for VPN and Dial-Up connections

## Module 12: Manage File Synchronization (Required)

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

### Lessons

- Configuring Offline File Access
- Synchronization Settings
- Transparent Caching
- Roaming Profiles
- Restoring Network Files

- Resolve File Synchronization Problems

## Lab : Manage File Synchronization

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

## After completing this module, students will be able to:

- Configure Transparent Caching
- Restore deleted network files

## Module 13: Identify and Resolve Internet Explorer Security Issues (Optional)

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

### Lessons

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

## 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

## After completing this module, students will be able to:

- How to use new security features like Smart Screen Filtering
- Manage Internet Explorer Add-ons
- Use IE features to warn the user about potential security problems

## Module 14: Identify and Resolve Firewall Issues (Optional)

This module explains how to configure Windows Firewall to secure application and network

traffic on a computer.

## Lessons

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

## Lab : Identify and Resolve Firewall Issues

- Configure and Test Firewall Rules for an application
- Fix Application Problems Caused by Firewall Rules

## After completing this module, students will be able to:

- Block/ Allow applications from communicating over the network

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