

50331 Windows Client, Enterprise Desktop Support Technician

Duration: 5 Day(s)

Overview

This 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.

Who Should Attend

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.

Course Objective:

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.

Course Outline:

1 - Identify and Resolve New Software Installation Issues

- 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
- Install Programs and test Applocker
- Configure Compatibility Settings

2 - Resolve Software Configuration Issues

- 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 on a VHD
- Boot Windows from a VHD
- Use the Problem Steps Recorder

3 - Resolve Software Failure

- 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
- 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

4 - Identify and Resolve Logon Issues

- 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

5 - Identify and Resolve Network Connectivity Issues

- Overview
- Scope of the Problem
- Hardware Issues
- TCP/IP Configuration
- Network Routing
- 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 deliberately created by problem scripts

6 - Identify and Resolve Name Resolution Issues

- 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

7 - Identify and Resolve Network Printer Issues

- Overview
- 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
- 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

8 - Identify and Resolve Performance Issues

- 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

9 - Identify and Resolve Hardware Failure Issues

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

10 - Identify and Resolve Wireless Connectivity Issues

- 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. (Interactive Video Simulation is provided to practice this skill.)

11 - Identify and Resolve Remote Access Issues

- 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
- Create and Test a VPN Connection

12 - Manage File Synchronization

- 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

13 - Identify and Resolve Internet Explorer Security Issues

- 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

14 - Identify and Resolve Firewall Issues

- 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

15 - Identify and Resolve Issues Due To Malicious Software

- 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 System File Checker
- Use the Malicious Software Removal Tool
- Install Microsoft Security Essentials

16 - Identify and Resolve Encryption Issues

- Overview
- Configuring a Recovery Agent
- Using EFS
- Using BitLocker
- Encryption Tools
- Resolve Encryption Issues
- Review
- Lab: Identify and Resolve Encryption Issues
- Encrypt Files using EFS
- Configure EFS Sharing
- Configure a Recovery Agent

17 - Identify and Resolve Software Update Issues

- 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

18 - PowerShell for Desktop Support Technicians

- Overview
- Compared to other Scripting Languages
- Creating and Running Scripts
- Administering Local Resources
- Administering Network Resources
- Connect to Microsoft Azure with PowerShell
- Review
- Lab: PowerShell for Desktop Support Technicians
- Use PowerShell to get System Information and change Computer Settings
- Use PowerShell documentation to understand and use Cmdlets
- Create and Execute Scripts
- Configure and Test remote device configuration
- Create an Azure VM with Azure PowerShell