## 70-685: Enterprise Desktop Support Technician

#### **Course Introduction**

4m

Course Introduction

# <u>Chapter 01 - Identifying Cause and Resolving Desktop</u> <u>Application Issues</u>

2hr 30m

Identifying Cause and Resolving Desktop Application Issues

Role of Enterprise Technician

Troubleshooting Windows 7

**Programs Troubleshooting** 

Using a Troubleshooter

Demo - Troubleshooter

Problem Steps Recorder

Problem Steps Recorder Output

Demo - Problem Steps Recorder

Software Installation Methods

Installing Applications

Using Group Policy to Install Software

Demo - GPO Driver Installation

Other Group Policy Settings

Group Policy and Software Restrictions

Order of Software Restriction Policies Processing

**Enforcement Rules** 

AppLocker

AppLocker Requirements

Creating AppLocker Rules Procedure Reference

Demo - AppLocker Rules

AppLocker Advantages

AppLocker Disadvantages

Installation Permissions and Compatibility

Mitigation of Compatibility Issues

**Application Compatibility Options** 

Digital Signing Software

Program Compatibility - Control Panel

Application Compatibility Toolkit Features

Application Compatibility Toolkit (ACT)

Running Applications in Compatibility Mode

Demo - Compatibility Toolkit

Other Tools to Know About

User Account Control (UAC)

Demo - User Account Control

Windows Installer

Identifying Cause of and Resolving Desktop Application Issues

Running Legacy Applications

How to Update Applications

**Application Updates** 

Windows Update

Demo - Windows Update

**WSUS** 

GPO Options - WSUS

WSUS Server Administrator

**WSUS Options** 

Troubleshooting Windows Update

Windows Management Instrumentation (WMI)

**WMI Tasks** 

Sample VB Script Using WMI

Internet Explorer

Internet Explorer Privacy Settings

Internet Explorer Add-Ons

Demo - Internet Explorer Add-Ons

Smart Screen Filter

Demo - Smart Screen Filter

**Browsing History** 

Web Site Certificates

**Group Policy Restrictions** 

Demo - Group Policy Restrictions

Restore Default Settings

Chapter 01 Review

## **Chapter 02 - Operating System Troubleshooting and Support**

2hr 34m

Operating System Troubleshooting and Support

Startup Architecture

Windows Startup Recovery: Two Options

Windows Startup Recovery: Advanced Boot Options

Demo - Windows Advanced Startup Options F8

Recovery Tools in Windows RE

Demo - Windows RE

Windows System Restore

Demo - System Restore

**BCD** 

MSConfig.exe

Demo - MSCONFIG

BCDEdit.exe

Demo - BCDEdit

Demo - Editing BCD

Safe Mode Options

Identifying Software Update Level

Demo - Identifying Software Update Level

Working with Services

Configuring Services

**Demo - Configuring Services** 

Finding Problems with Services

Ways to Disable Services

Demo - SC Query

**OS** Troubleshooters

**Troubleshooting Pack Components** 

**Event Viewer** 

Demo - Event Viewer

**Event Log Configuration** 

Properties in Event Viewer

**Event Viewer and Task Scheduler** 

Demo - Attach a Task in Event Viewer

**Event Forwarding** 

Creating Event Subscriptions

**Enabling Subscriptions for Event Forwarding** 

System Restore

Windows Experience Index

How Scores Work Together

Demo - Windows Experience Index

Windows 7 and Language Packs

New Features of Language Packs

Language Pack Deployment Options

Multilingual Deployments

Language Deployment

**Test Environments** 

**Imaging** 

Windows Deployment Services

Unattended Setup - WDS

Microsoft Deployment Toolkit

**ImageX Commands** 

ImageX Commands (Cont.)

Internet Explorer Compatibility

**Enabling Compatibility** 

**Demo - Internet Explorer Compatibility** 

Chapter 02 Review

#### **Chapter 03 - Networking with Windows 7**

Networking with Windows 7

Windows 7 Network Access

Demo - Network and Sharing Center

Demo - Connect/Disconnect VPN

Link Layer Topology Discover (LLTD)

Troubleshooting: Wired Networks

Troubleshooting: Wireless Wireless Signal Strength

Network Protocols

Wireless Security

**Encryption Methods** 

Wireless Profiles - Manual Configuration

Demo - Wireless GPO

**Automatic Configuration** 

**Network Hardware** 

**Network Architecture** 

**Network Scope** 

TCP/IP Configuration

Demo - IPCONFIG

TCP/IP Utilities

Demo - TCP/IP Utilities

Demo - Telnet

Testing Connectivity with IPv4

**Demo - Testing Connectivity** 

IPv6

Name Resolution

Domain Name System (DNS)

Hosts File

Windows Internet Name Service (WINS)

**LMHOSTS** 

Order of Name Resolution Methods

Link-local Multicast Name Resolution (LLMNR)

Troubleshooting: Name Resolution

**IPSec** 

**Authentication of Connections** 

**Network Profiles** 

3hr 17m

**Network Diagnostics** 

Remote Access Methods

VPN and Dial-up Authentication

**Direct Access Configuration** 

**Direct Access Authentication Methods** 

Connection Manager Administration Kit

Troubleshooting Remote Access

**Branch Cache** 

Branch Cache - Configuration Options

Chapter 03 Review

#### **Chapter 04 - Configuring Security and Troubleshooting Issues**

1hr 56m

Configuring Security and Troubleshooting Issues

Certificates

**Certificate Types** 

Encrypting Files System

**EFS Encryption Keys** 

Process of EFS

**Recovery Agents** 

**EFS Configuration** 

Best Practices for EFS

BitLocker Drive Encryption

BitLocker Recovery

How to Determine If Your Computer Has TPM

Group Policy Settings - BitLocker

BitLocker Best Practices

BitLocker to Go

Internet Explorer

Demo - Configuring Internet Explorer

**User Account Control** 

**Firewalls** 

Demo - Windows Advanced Firewall

Windows Firewall with Advanced Security

Create a New Rule

Exceptions

Conflicting Firewall Rules

Logging

**Network Security Tools** 

Windows Defender

Demo - Netsh

Protecting the OS from Attacks

Types of Issues as a Result of Infection

Windows 7 Tools and Features

Demo - Registry Editor

Demo - Action Center

Demo - Windows 7 Action Center

Protecting the PC Proactively

Programs to Assist

Most Effective

Anti-Virus Software

Microsoft Security Essentials

Spyware and Preventative Measures

Internet Explorer Protection

How to Know If Your Infected

How to Respond to Infected PC

Chapter 04 Review

### **Chapter 05 - Supporting Mobile Users**

Supporting Mobile Users

**VPN Networking** 

**VPN Protocols** 

**VPN Authentication Methods** 

**Network Policies** 

Network Policies Flow

Remote Desktop

Demo - Remote Desktop

Configure Remote Desktop through GPO

Demo - GPO - RDP

Remote Assistance

Configuring Remote Assistance with GPO

**Network Access Protection** 

Troubleshooting NAP

**Direct Access** 

**DirectAccess Configuration Notes** 

**Branch Cache** 

**Setting Power Management** 

**Demo - Power Management** 

Chapter 05 Review

## Chapter 06 - Maintaining Hardware on Windows 7

1hr 52m

Maintaining Hardware on Windows 7

Types of Failures

Identifying Hardware Issues

Demo - Hardware Information

Troubleshooting Hardware

Devices Most Likely to Fail

Memory Failures

Hard Drive Failure

Demo - Hard Drives

Working with Hard Drive Issues

**Network Card Issues** 

Power Supply Issues

Hardware Diagnostic Tools Summary

Resource Monitor

Demo - Resource Monitor

Performance Monitor

Demo - Performance Monitor

What Are Data Collector Sets?

Demo - Data Collector Sets

What Is Reliability Monitor?

Demo - Reliability Monitor

Performance Issues

Demo - Process Affinity

**Common Components** 

**Device Drivers** 

Removing Unsigned Drivers

PNPUtil.exe

**Driver Verifier** 

**Updating Drivers** 

Safe Mode

Safe Mode Notes

Legacy Programs with Driver Install

Configuring Page File

1hr

Centralizing Configurations What is Group Policy Group Policy Settings Demo - Local GPO Tools to Determine Group Policy Issues Demo - GPO Server Administrative Templates Group Policy Application and Processing Order Settings That Can Affect Group Policy GPO Examples Synchronous GPO Processing Asynchronous GPO Processing GPO Troubleshooting GPO Troubleshooting GPO Troubleshooting Chapter 07 Review  Chapter 08 - User Login, Profiles and Access to Resources Login Process Login Process Types of Authentication Demo - User Accounts Multi-factor Authentication Network Infrastructure Active Directory Active Directory Topology Network Based Services DNS Types of DNS Zones Demo - DNS DHCP	Demo - Virtual Memory Power Management Managing USB Devices Windows 7 Clients and Printer Installation Mobile Users and Printing XPS Based Printing Printer Driver Issues Print Spooler Spooler Options Configuration Options Printer Pools Installing Printers on the Network Printers and Group Policy How to Connect to Network Printers Internet Printers Printer Permissions Location Aware Printing Chapter 06 Review	
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Demo - DNS		
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Time Servers		

Trust Relationships

Trust Examples

Machine Accounts

Benefits of Pre-staging Computer Accounts

**User Accounts** 

**Cached Credentials** 

User Profiles

**Local Profiles** 

Roaming User Profiles

Mandatory User Profiles

Troubleshooting: Login Settings Troubleshooting: Logon Errors

**Drive Mappings** 

Demo - Drive Mappings

**Shared Folders** 

Offline Files

Offline File Settings – Server Side

Demo - Offline Files

Configuring Offline Files - Client Side

Sync Center

Offline Files Options

Troubleshooting: Offline Files

**Transparent Caching** 

NTFS Security

Combining Shared Permissions with NTFS Permissions

Inheritance

NTFS DENY Permission

Using DFS for Access to File Resources

How DFS Works

Notes About DFS

Restoring Files - Local and Network

Backups

Chapter 08 Review

Course Closure

**Total Duration: 15hrs 25m**