

## **Windows 7 Configuration 70-680 Training Course**

In this training course, you'll learn what's new in Microsoft's latest operating system: Windows 7. Once you understand the new features and changes in this OS, you'll see that it's a pleasure to work with. In addition to becoming proficient with Windows 7 productivity tools, you'll also be prepared to take certification exam 70-680, MCTS: Windows 7 Configuration Certification. Expert Tom Carpenter will take you through the complete Windows 7 experience and give you the tools to configure and deploy Windows 7 as your own computing environment. Complete and detailed walkthrough of Windows 7 installation, upgrades, migration and deployment and detailed instruction on VPN's, encryption, file management and automated backup configurations.

### **Session 1**

#### **Section A: Introduction**

- Why Windows 7?
- Compatibility
- Enhancements
- Vista Pain Repairs
- 70-680 Exam
- 70-680 Objectives
- Windows 7 Network

#### **Section B: Installation Methods**

- Previous Installation Methods
- Current Boot Practices
- Current Installation Methods
- Sole Operating Systems
- Dual Booting
- Using bcdedit
- Default Boot Loader
- Deleting Database Entries

#### **Section C: Upgrade Methods**

- Upgrade Considerations
- Windows 7 Upgrade Advisor
- Installing the Advisor
- Running the Advisor
- Anytime Upgrade

#### **Section D: Clean Installation Planning**

- Hardware Requirements
- Booting from a USB Drive
- Create a Bootable USB Drive
- Preparing a Network Share
- Preparing WDS

#### **Section E: Performing a Clean Install**

- Clean Install Process
- Install Windows 7
- Initial Setup Tasks

## **Section F: Migrating Windows**

- Migration Options
- Wipe-and-Load
- Side-by-Side
- Previous Versions
- Windows Easy Transfer
- Migrating from XP

## **Section G: Image-Based Deployment**

- The History of Imaging
- WIM Files
- Manual Image Deployment
- Automated Image Deployment
- Microsoft Deployment Toolkit
- Installing MDT 2010
- The Deployment Workbench

## **Section H: Capturing System Images**

- Creating a Deployment Share
- Importing an OS Image
- Customizing the Share
- Task Sequencing
- Updating the Deployment Share
- Sysprepping

## **Session 2**

### **Section A: Manipulating Images**

- Deployment Tools
- DISM tool
- Mounted Image Directory
- Image Application Management
- Image Driver Management
- Adding Drivers to Images
- Image Update Management

### **Section B: Advanced Imaging Techniques**

- WinSIM tool
- Creating an Answer File
- VHD File
- Boot from VHD
- Working with a VHD
- Creating a VHD in Disk Management

### **Section C: Working with Device Drivers**

- Device Drivers

- Updating Device Drivers
- Using Device Manager to Update Drivers
- Disable or Uninstall Drivers
- Advanced Options
- Driver Certificate Verification
- sigverif.exe

#### **Section D: Hardware Compatibility**

- Windows 7 Hardware Compatibility
- Driver Install Process
- Installing Vista Drivers
- Verify Driver Installation
- Devices and Printers
- Device Stage

#### **Section E: Internet Explorer 8**

- Compatibility View
- Security Settings
- Add-ons and Provider Management
- InPrivate Filtering
- InPrivate Mode
- Certificates

#### **Section F: Understanding Application Compatibility**

- Application Compatibility
- Compatibility Properties
- Compatibility Wizard
- Windows XP Mode
- Installing / Configuring Windows XP mode
- 16-Bit Example
- Windows XP Mode Applications

#### **Section G: Using Application Restrictions**

- Application Restrictions
- Software Restriction Policies
- AppLocker

#### **Section H: Understanding IPv4 and IPv6**

- Networking in Windows 7
- The Network Stack
- IPv4 Addressing
- Subnet Masks
- Default Gateways
- Public vs. Private Addressing
- Device Naming
- IPv6
- IPv6 Benefits
- IPv6 Address Space
- IPv6 Address Types

### **Session 3**

## **Section A: Configuring IP Protocols**

- The Need for Configuration
- Network Connection Properties
- IPv4 Properties
- IPv4 Advanced Settings
- IPv6 Properties
- netsh: Net Shell
- netsh: Interface
- netsh: IPv4 Interface
- Setting a Static Address
- Commands Directly from Command Prompt
- netsh: IPv6 Interface

## **Section B: Managing Networking Configurations**

- Wireless Network Connections
- Preferred Wireless Networks
- Wireless Security Settings
- Network Adapters
- Location Aware Printers
- Adding Additional Network Adapters
- Installing the Drivers

## **Section C: Windows Firewall**

- The Windows Firewall
- Networking Concepts
- Configuring Windows Firewall
- Turning the Firewall On/Off
- The WFAS Interface
- Connection Security Rules
- Firewall Monitoring

## **Section D: Remote System Management**

- RDC
- Using RDC
- Remote Assistance
- WinRM
- WinRS
- Remote PowerShell

## **Section E: Updating Windows 7**

- Update Operations
- Configuring via Group Policy Editor
- Checking for Updates
- Viewing Update History
- Roll Back

## **Section F: System Event Monitoring**

- The Event Viewer
- Configuring Event Logging
- Filtering the Log

- Custom Views
- Event Subscriptions
- Assigning Tasks to Events
- Command Line Event Management

## **Section G: System Performance Monitoring**

- Performance Analysis
- Task Manager
- Resource Monitor
- Reliability Monitor
- Performance Monitor
- Data Collector Sets
- Reports

## **Session 4**

### **Section A: Performance Tuning**

- Optimizing Performance
- TCP Window Size
- Page File
- Power Management
- Advanced Power Settings
- Adjusting Visual Effects
- Management of Services
- Processor Scheduling

### **Section B: Managing Storage**

- Disk Management
- Additional Menu Items
- RAID Arrays
- RAID
- Removable Storage
- The Hard Drive Cache
- DiskPart
- Defrag (Command Line)
- Defrag Report (Command Line)
- Disk Defragment
- Disk Cleanup

### **Section C: Securing Authentication**

- Authentication
- Troubleshooting Authentication Issues
- User Accounts
- Multifactor Authentication
- User Rights
- Credential Manager
- Certificate Manager

### **Section D: Sharing Resources**

- Folder Virtualization
- Share Permissions

- NTFS Permissions
- Effective Permissions
- HomeGroup Management
- Printer Sharing

### **Section E: User Rights Management**

- User Account Control
- Configuring User Account Control
- Group Policy Settings
- Admin Approval Mode
- User Rights within Group Policy
- Profile System Performance

### **Section F: Windows 7 Encryption**

- Encryption Technologies
- BitLocker
- Encrypted File System
- Recommendations for EFS
- EFS within Group Policy Mode
- BitLocker To Go
- BitLocker Recovery Key
- BitLocker Options
- Viewing the BitLocker Recovery Key

### **Section G: Remote Connectivity**

- NAP
- VPNs
- Creating a VPN Connection
- VPN Settings/Options
- VPN Reconnect
- Enabling VPN Reconnect
- Creating a Dial-Up Connection

## **Session 5**

### **Section A: Configuring Mobility Options**

- Offline Files
- Enabling Offline Files
- Sharing Offline Files
- Managing Offline Files
- Migrating Power Configurations

### **Section B: Understanding BranchCache**

- BranchCache
- Operating Modes
- BranchCache Facts
- Netsh BranchCache
- Group Policy BranchCache

### **Section C: Implementing DirectAccess**

- DirectAccess
- DirectAccess Requirements
- Group Policy DirectAccess
- Netsh DirectAccess

#### **Section D: Backing Up Windows 7**

- System Recovery Disc
- Verifying the System Recovery Disc
- Full System Backup
- Scheduling Backups

#### **Section E: System Restore and Recovery**

- System Protection
- Creating a Restore Point
- Configure System Protection Settings
- System Restore
- Reverting to a Restore Point
- Last Known Good

#### **Section F: File Management and Recovery**

- Shadow Copies
- Previous File Versions
- Copy Previous File Version
- Restore Previous File Version
- Scheduling Restore Points