

## Course 20689D: Upgrading Your Skills to MCSA Windows® 8

**Three Days, Instructor-Led**

### About this course

Get detailed instruction and hands-on practice upgrading your configuration and troubleshooting skills from Windows 7 to Windows 8.1 in this 3-day Microsoft Official Course. This course is designed for experienced IT professionals who configure and support Windows PCs and devices. You will learn the new skills you need to support Windows 8.1 in a Windows Server domain environment with managed access to the Internet and cloud services. You will learn how to install and customize Windows 8.1 operating systems and apps, as well as how to migrate user state and settings. The labs in the course incorporate Windows PowerShell and Group Policy and other Windows management tools. With the increasing BYOD trend, learn to control access for non-domain joined Windows devices through Workplace Join services and Work Folders.

Additionally, you will learn how to resolve common support issues related to Windows 8.1, including troubleshooting Internet Explorer, recovering BitLocker encrypted drives, and optimizing performance. Finally, you will learn about implementing Client Hyper-V in Windows 8.1. As part of the learning experience, you will perform hands-on exercises in a virtual lab environment. This course also helps candidates prepare for Exam 70-689, MCSA: Upgrading Your Skills to MCSA Windows 8.

*NOTE: This course is based on Windows 8.1 Enterprise Edition with domain services provided by Windows Server 2012 R2.*

### Audience profile

The primary audience for this course is IT professionals who configure and support Windows 7 or Windows 8-based PCs, devices, users, and associated network and security resources, and who wish to update their skills to Windows 8.1. The audience includes experienced IT Professionals who focus on supporting a broad range of technical issues related to Windows operating systems, devices, cloud services, applications, networking, and hardware.

A secondary audience for this course includes certification candidates who want to migrate their current credentials to the Microsoft Certified Solutions Associate (MCSA) for Windows 8.1, and have either:

- An existing Microsoft Certified IT Professional (MCITP) level certification for Windows 7
- An existing Microsoft Certified Solutions Associate (MCSA) level certification for Windows 8

### At course completion

After completing this course, students will be able to:

- Describe the solutions and features related to managing Windows 8.1 in an enterprise network environment.
- Install Windows 8.1 and upgrade previous versions of Windows to Windows 8.1.
- Configure and manage Windows 8.1 by using Windows PowerShell, Group Policy, and Windows Intune.
- Implement an application strategy for Windows 8.1.
- Manage non-domain member devices and provide resource access for these devices.
- Secure Windows 8.1 devices by using appropriate tools and technologies.
- Configure remote access for computers running Windows 8.1.

- Monitor and recover Windows 8.1.
- Implement Client Hyper-V® in Windows 8.1.

## Pre-requisites

Before attending this course, students must have:

- Technical knowledge of networking fundamentals, including Transmission Control Protocol/Internet Protocol (TCP/IP), User Datagram Protocol (UDP), and Domain Name System (DNS)
- Familiarity with Microsoft® Active Directory® Domain Services (AD DS) principles and fundamentals of AD DS management
- Understanding of the Public Key Infrastructure (PKI) components and working knowledge of the fundamentals of Active Directory Certificate Services (AD CS)
- Knowledge of Microsoft Windows Server ® 2008 or Windows Server 2012 fundamentals
- Knowledge of Microsoft Windows Client fundamentals; for example, working knowledge of Windows 7
- Knowledge of Windows Assessment and Deployment Kit (WADK) components including Windows PE, Windows System Image Manager (SIM), Volume Activation Management Tool (VAMT), ImageX, User State Migration Tool (USMT), and Deployment Image Servicing and Management (DISM) concepts and fundamentals

## Course Outline

### Module 1: Windows 8.1 in an Enterprise Network Environment

This module explains how the features and related solutions in Windows 8.1 are used to support intranet, Internet, and non-domain joined Windows 8.1 clients. It also explains the changes to the Windows 8.1 user interface and how to perform customizations of the desktop and Start screen.

#### Lessons

- Managing Windows 8.1 in an Enterprise Environment
- Overview of Windows 8.1

After completing this module, students will be able to:

- Identify the features and solutions in Windows 8.1 that you can use to support domain member and non-member devices.

- Identify the changes to the Windows 8.1 user interface and customize the desktop and Start screen.

### Module 2: Installing and Upgrading to Windows 8.1

This module explains how to identify hardware, software, and infrastructure readiness for installing Windows 8.1. It also describes the methods to manage volume activation in Windows 8.1 and how to migrate user state and settings when upgrading to Windows 8.1.

#### Lessons

- Preparing to Install and Deploy Windows 8.1
- Installing Windows 8.1
- Volume Activation for Windows 8.1
- Migrating User State and Settings

#### Lab : Installing Windows 8.1

- Planning to Install Windows 8.1

- Performing a Clean Installation of Windows 8.1
- Customizing the Windows 8.1 User Interface

**Lab : Migrating User State by Using USMT**

- Creating and Customizing USMT XML Files
- Capturing and Restoring User State to a Target Computer

After completing this module, students will be able to:

- Identify hardware, software, and infrastructure readiness for installing and deploying Windows 8.1.
- Install Windows 8.1.
- Describe the methods to manage volume activation in Windows 8.1.
- Migrate user state and settings when upgrading to Windows 8.1.

**Module 3: Configuring and Managing Windows 8.1**

This module explains the tools used for local and remote management of Windows 8.1. It also explains how to configure and manage common settings in Windows 8.1 by using Windows PowerShell, Group Policy, and Windows Intune.

**Lessons**

- Tools Used to Perform Local and Remote Management of Windows 8.1
- Using Windows PowerShell to Configure and Manage Windows 8.1
- Using Group Policy to Manage Windows 8.1
- Administering Windows 8.1 by Using Windows Intune

- Configuring User State Virtualization

**Lab : Configure Windows 8.1 Settings by Using Management Tools**

- Planning Management of Windows 8.1 Computers
- Managing Windows 8.1 by Using Group Policy
- Implementing Windows PowerShell Remoting

**Lab : Configuring UE-V**

- Implementing and Configuring UE-V

After completing this module, students will be able to:

- Describe the tools used to perform local and remote management of Windows 8.1.
- Administer Windows 8.1 by using Windows PowerShell.
- Implement Group Policy to manage client computers running Windows 8.1.
- Explain how to administer Windows 8.1 by using Windows Intune.
- Configure Microsoft User Experience Virtualization (UE-V).

**Module 4: Implementing an Application Strategy for Windows 8.1**

This module explains the application deployment options for Windows 8.1. It also explains how to install and manage Windows Store apps, secure Internet Explorer, and configure application restrictions.

**Lessons**

- Application Deployment Options in Windows 8.1
- Managing Windows Store Apps
- Configuring Internet Explorer Settings

- Configuring Application Restrictions in an Enterprise

**Lab : Managing Windows Store Apps**

- Sideload a Windows Store App

**Lab : Troubleshooting an Internet Explorer Issue**

- Resolving an Internet Explorer Issue

**Lab : Configuring AppLocker**

- Configuring AppLocker Rules
- Testing the AppLocker Rules

After completing this module, students will be able to:

- Describe the application deployment options for Windows 8.1.
- Install and manage Windows Store apps.
- Configure and secure Internet Explorer.
- Configure application restrictions.

**Module 5: Managing Devices and Resource Access**

This module explains the options for managing non-domain member devices in a Windows 8.1 environment. It also explains how to configure Workplace Join and Work Folders for non-domain member devices.

**Lessons**

- Options for Managing Non-Domain Member Devices
- Configuring Workplace Join
- Configuring Work Folders and Remote Business Data Removal

**Lab : Configuring Resource Access for Non-Domain Member Devices**

- Implementing Workplace Join
- Configuring Work Folders

After completing this module, students will be able to:

- Describe the options in Windows 8.1 for managing devices that are not domain members.
- Configure Workplace Join.
- Configure Work Folders and remote business data removal.

**Module 6: Securing Windows 8.1 Devices**

This module explains the methods used for authentication and authorization in Windows 8.1. It also explains how to secure data by using BitLocker and configure User Account Control (UAC) settings. It then explains how to configure Windows SmartScreen and Windows Defender to protect against malware. It also describes how to configure and implement Windows Firewall.

**Lessons**

- Authentication and Authorization in Windows 8.1
- Securing Data by Using BitLocker
- Configuring UAC
- Guarding Against Malware
- Configuring Windows Firewall

**Lab : Securing Data by Using BitLocker**

- Protecting Files with BitLocker
- Recovering BitLocker Encrypted Drives
- Creating a New BitLocker Password

**Lab : Configuring Inbound and Outbound Firewall Rules**

- Creating an Inbound Windows Firewall Rule
- Creating an Outbound Firewall Rule

After completing this module, students will be able to:

- Describe authentication and authorization in Windows 8.1.

- Select a suitable file encryption method to help secure Windows 8.1 files.
- Configure User Account Control (UAC).
- Configure malware protection.
- Configure Windows Firewall.

### **Module 7: Configuring Remote Access**

This module explains how to implement a simple DirectAccess deployment. It explains the process for implementing an advanced DirectAccess infrastructure. It also explains how to enable and configure virtual private network (VPN) access.

#### **Lessons**

- Overview of DirectAccess
- Advanced DirectAccess Infrastructure
- Configuring VPN Access

#### **Lab : Implementing DirectAccess by Using the Getting Started Wizard**

- Configuring DirectAccess
- Validating the DirectAccess Deployment

After completing this module, students will be able to:

- Implement DirectAccess by using the Getting Started Wizard.
- Identify the components that are used in advanced DirectAccess infrastructure.
- Explain how to configure VPN access.

### **Module 8: Monitoring and Recovering Windows 8.1**

This module explains how to monitor and troubleshoot performance in Windows 8.1. It describes the Windows 8.1 startup process and how to troubleshoot Windows 8.1 startup. It then explains the recovery options in Windows 8.1 and how to recover Windows 8.1.

#### **Lessons**

- Monitoring and Troubleshooting Performance in Windows 8.1
- Troubleshooting Windows 8.1 Startup
- Recovery Options in Windows 8.1

#### **Lab : Identifying Performance Problems**

- Troubleshooting a Performance Problem

#### **Lab : Recovering Windows 8.1**

- Exploring Recovery Options in Windows 8.1
- Introduce a Simulated Problem
- Resolving the Problem

After completing this module, students will be able to:

- Monitor and troubleshoot performance in Windows 8.1.
- Troubleshoot Windows 8.1 startup.
- Use the recovery options in Windows 8.1.

### **Module 9: Implementing Client Hyper-V in Windows 8.1**

This module explains Client Hyper-V for Windows 8.1. It also explains how to manage virtual hard disks and checkpoints.

#### **Lessons**

- Overview of Client Hyper-V
- Creating Virtual Machines
- Managing Virtual Hard Disks
- Managing Checkpoints

#### **Lab : Configuring Client Hyper-V**

- Installing Client Hyper-V
- Creating a Virtual Switch, a Virtual Hard Disk, and a Virtual Machine

After completing this module, students will be able to:

- Describe Client Hyper-V in Windows 8.1.
- Create and work with virtual machines.

- Manage virtual hard disks.
- Manage checkpoints in Client Hyper-V.

**Course Inclusions:**

- Microsoft Official Curriculum (MOC) and/or Wizards Learning Courseware (WLC)
- Microsoft Certified Trainer (MCT)
- Lunch, AM and PM Snacks
- Certificate of Achievement
- Course Note