



20687: Configuring Windows® 8.1

Duration: 5 Days

Method: Instructor-Led Training (ILT)

Course Description

Get expert instruction and hands-on practice administering and configuring Windows® 8.1 in this Microsoft® Official Course. Participants will learn the skills they need to administer Windows 8.1 in a Windows Server domain environment and also provide secure, managed access to users from their non-domain joined Windows devices. They will also learn how to:

- Install and customize Windows 8.1 operating systems and apps,
- Integrate and control access to domains and cloud services,
- Migrate and synchronize settings across multiple devices,
- Implement mobile security and customize configurations using Windows management tools including Group Policy and Windows PowerShell cmdlets,
- Configure user settings and profiles, local and remote network connectivity, Client Hyper-V, virtual apps, and Internet Explorer 11,
- Optimize security and provide controlled access from Windows 8.1 PCs and devices to specified resources through Workplace Join services and Work Folders.

As part of the learning experience, participants will perform hands-on exercises in a virtual lab environment.

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

Target Audience

This course is intended for:

- IT professionals who administer and support Windows 8.1 PCs, devices, users, and associated network and security resources. The networks with which these professionals typically work are configured as Windows Server domain-based environments with managed access to the Internet and cloud services.
- Enterprise Desktop/Device Support Technicians (EDSTs) who provide Tier 2 support to users who run Windows desktops and devices within a Windows domain environment in medium to large enterprise organizations.



Prerequisites

To attend this course, attendees should have:

- At least two years of experience in the IT field,
- Knowledge of networking fundamentals, including Transmission Control Protocol/Internet Protocol (TCP/IP), User Datagram Protocol (UDP), and Domain Name System (DNS),
- Knowledge of Microsoft Active Directory Domain Services (AD DS) principles and fundamentals of AD DS management,
- Understanding of the certificate security and working knowledge of the fundamentals of Active Directory® Certificate Services (AD CS),
- Understanding of Windows Server 2008 R2 or Windows Server 2012 fundamentals,
- Understanding of Microsoft Windows Client essentials; for example, working knowledge of Windows XP, Windows Vista, Windows 7 and/or Windows 8,
- Basic understanding of Windows PowerShell® syntax,
- Basic awareness of Windows deployment tools (Windows ADK components: Windows PE, Windows SIM, VAMT, ImageX, USMT, and DISM concepts and fundamentals) but no actual prerequisite skills with the specific tools are assumed.

Course Objectives

Upon successful completion of this course, attendees will be able to:

- Describe solutions and features related to managing Windows 8.1 in an enterprise network environment.
- Determine requirements and perform the tasks for installing and deploying Windows 8.1.
- Manage profiles and user state between Windows devices.
- Determine the most appropriate management tools to configure Windows 8.1 settings.
- Configure disks, partitions, volumes, and device drivers in a Windows 8.1 system.
- Configure network connectivity.
- Configure resource connectivity for both domain-joined and non-domain joined PCs and devices.
- Implement Windows 8.1 technologies to secure network connections.
- Configure file, folder, and printer access.
- Implement tools and technologies that can help secure Windows 8.1 PCs and devices.
- Configure and control desktop apps, Windows Store apps, and virtual apps.
- Optimize and maintain Windows 8.1 PCs and devices.
- Configure mobile computer settings and to enable remote access.
- Determine how to recover Windows 8.1 from various failures.
- Describe and configure Client Hyper-V®.



Course Topics

Module 1: Windows 8.1 in an Enterprise Environment

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

Module 2: Installing and Deploying Windows 8.1

- Preparing to Install and Deploy Windows 8.1
- Installing Windows 8.1
- Customizing and Preparing a Windows 8.1 Image for Deployment
- Volume Activation for Windows 8.1

Module 3: Tools Used for Configuring and Managing Windows 8.1

- 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

Module 4: Managing Profiles and User State in Windows 8.1

- Managing User Profiles
- Configuring User State Virtualization
- Migrating User State and Settings

Module 5: Managing Disks and Device Drivers

- Managing Disks, Partitions, and Volumes
- Maintaining Disks, Partitions, and Volumes
- Working with Virtual Hard Disks
- Installing and Configuring Device Drivers

Module 6: Configuring Network Connectivity

- Configuring IPv4 Network Connectivity
- Configuring IPv6 Network Connectivity
- Implementing Automatic IP Address Allocation
- Implementing Name Resolution
- Implementing Wireless Network Connectivity

Module 7: Configuring File Access and Printers on Windows 8.1 Clients

- Managing File Access
- Managing Shared Folders
- Configuring File Compression
- Configuring File Access
- Managing Printers

Module 8: Implementing Network Security

- Overview of Threats to Network Security
- Configuring Windows Firewall
- Securing Network Traffic by Using IPsec
- Guarding Windows 8.1 Against Malware

Module 9: Configuring Resource Access for Domain-Joined Devices and Devices That Are Not Domain Members

- Configuring Domain Access for Windows 8.1 Devices
- Configuring Resource Access for Devices That Are Not Domain Members
- Configuring Workplace Join
- Configuring Work Folders



Course Topics *Continued*

Module 10: Securing Windows 8.1 Devices

- Authentication and Authorization in Windows 8.1
- Applying Security Settings by Using Group Policy
- Securing Data with EFS and BitLocker
- Configuring and Testing UAC

Module 11: Configuring Applications for Windows 8.1

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

Module 12: Optimizing and Maintaining Windows 8.1 Computers

- Optimizing Performance in Windows 8.1
- Managing the Reliability of Windows 8.1
- Managing Software Updates in Windows 8.1

Module 13: Configuring Mobile Computing and Remote Access

- Configuring Mobile Computers and Device Settings
- Overview of DirectAccess
- Configuring VPN Access
- Configuring Remote Desktop and Remote Assistance

Module 14: Recovering Windows 8.1

- Backing Up and Restoring Files in Windows 8.1
- Recovery Options in Windows 8.1

Module 15: Configuring Client Hyper-V

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

LABS INCLUDED

