

Course 20697-2B: Deploying and Managing Windows 10 Using Enterprise Services

5 days, Instructor-Led

About this Course

This course provides administrators with the knowledge and skills necessary to deploy and manage Windows 10 desktops, devices, and applications in an enterprise environment. Students learn how to plan and implement Windows 10 deployments in large organizations. Students also learn how to manage the Windows 10 installations after deployment to provide secure identity and data access using technologies related to Group Policy, Remote Access, and device registration.

To support a variety of device and data management solutions, Microsoft Azure Active Directory, Microsoft Intune, and Microsoft Azure Rights Management are introduced. These services are part of the Enterprise Mobility Suite, which provides identity and access management, and cloud-based device, application, and update management. In addition, Enterprise Mobility Suite offers more secure data access to information stored both in the cloud and on location within corporate networks.

Audience Profile

This course is intended for IT professionals who are interested in specializing in Windows 10 desktop and application deployments, and in managing cloud-based application and data service environments for medium-to-large enterprise organizations. These professionals typically work with networks that are configured as Windows Server domain-based environments with managed access to the Internet and cloud services. This course also is intended to provide skills for individuals who seek to pass the 70-697 Configuring Windows Devices exam.

At Course Completion

After completing this course, students will be able to:

- Describe the challenges and solutions for desktop and device management in an enterprise environment.
- Deploy Windows 10 Enterprise desktops.
- Manage user profiles and user state virtualization.
- Manage desktop and application settings by using Group Policy.
- Manage Windows 10 sign-in and identity.
- Manage data access for Windows-based devices.
- Manage remote access solutions.
- Manage Windows 10 devices by using enterprise mobility solutions.
- Manage desktop and mobile clients by using Intune.
- Manage updates and Endpoint Protection by using Intune.
- Manage application and resource access by using Intune.
- Configure and manage client Hyper-V.

Pre-requisites

Students should have at least two years of experience in the IT field and should already have the following technical knowledge:

- Networking fundamentals, including Transmission Control Protocol /Internet Protocol (TCP/IP), User Datagram Protocol (UDP), and Domain Name System (DNS)
- Microsoft Active Directory Domain Services (AD DS) principles
- Windows Server 2012 R2 fundamentals

Microsoft Windows Client essentials; for example, working knowledge of Windows 7 and/or Windows 8.1

Course Outline

Module 1: Managing Desktops and Devices in an Enterprise Environment

This module explains the most current trends and information related to desktop and device management in the enterprise. It also provides an overview of on-premises management compared to cloud-based IT management and services.

Lessons

- Managing Windows 10 in the Enterprise
- Managing a Mobile Workforce
- Supporting Devices in the Enterprise
- Extending IT Management and Services to the Cloud

Lab : Planning for Windows 10 and Device Management in the Enterprise

- Reading the scenario

After completing this module, students will be able to:

- Discuss managing Windows 10 in an enterprise environment.
- Explain the complexities of managing a mobile workforce.
- List the challenges of supporting devices in the enterprise.
- Explain how to extend IT Management and services to the cloud.

Module 2: Deploying Windows 10 Enterprise Desktops

This module explains the various deployment scenarios for Windows 10 and the considerations

to keep in mind while performing these deployments. This module also explains how to deploy Windows 10 by using the Windows Assessment and Deployment Kit (WADK) and the Microsoft Deployment Toolkit (MDT).

This module also explains how to maintain Windows 10 by using DISM and Windows Imaging and Configuration Designer (ICD).

Lessons

- Overview of Windows 10 Enterprise Deployment
- Customizing Enterprise Desktop Deployments
- Deploying Windows 10 by Using MDT
- Maintaining a Windows 10 Installation
- Volume License Activation for Windows 10

Lab : Building a Reference Image by Using Windows Assessment and Deployment Kit (ADK) Tools

- Configuring Custom Windows PE Boot Media
- Creating a Custom Answer File by Using Windows SIM
- Installing a Reference Computer by Using an Answer File
- Preparing a Reference Computer by Using Sysprep
- Capturing a Reference Computer

Lab : Using MDT to Deploy Windows 10 Desktops

- Creating and Configuring an MDT Deployment Share
- Creating a Task Sequence
- Deploying a Windows 10 Image by Using MDT

Lab : Maintaining a Windows 10 Installation by Using Windows ICD

- Creating and Configuring a Windows ICD Provisioning Package

After completing this module, students will be able to:

- Describe the Windows 10 enterprise deployment process.
- Customize enterprise desktop deployments.
- Deploy Windows 10 by using MDT.
- Maintain a Windows 10 installation.
- Manage volume license activation for Windows 10.

Module 3: Managing User Profiles and User State Virtualization

This module explains how to manage user profiles and user state using tools such as the User State Migration Tool (USMT) and User Experience Virtualization (UE-V).

Lessons

- Managing User Profiles and User State
- Implementing User State Virtualization by Using Group Policy
- Configuring UE-V
- Managing User State Migration

Lab : Configuring User Profiles and User State Virtualization

- Configuring Roaming User Profiles and Folder Redirection
- Implementing and Configuring UE-V

Lab : Migrating User State by Using USMT

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

After completing this module, students will be able to:

- Manage user profiles and user state.
- Implement user state virtualization by using Group Policy.
- Configure UE-V.
- Manage user state migration.

Module 4: Managing Desktop and Application Settings by Using Group Policy

This module explains how to manage Group Policy inheritance, administrative templates, and common enterprise desktop settings. This module also explains how to apply Group Policy Preferences using targeting and filtering.

Lessons

- Managing Group Policy Objects
- Configuring Enterprise Desktops by Using Group Policy
- Overview of Group Policy Preferences

Lab : Configuring Group Policy Objects and Settings

- Managing Windows 10 by Using Group Policy

Lab : Using Group Policy Preferences to Manage Desktop Settings

- Configuring Group Policy Preferences to Apply Drive and Printer Mapping

After completing this module, students will be able to:

- Describe Group Policy processing and management.
- Configure common settings to users and desktops by using Group Policy.
- Manage settings using Group Policy preferences.

Module 5: Managing Windows 10 Sign-In and Identity

This module explains the concept of identity and explains the methods to enhance identity security. This module also explains cloud identities and the use of Azure Active Directory Premium in enterprise organizations.

Lessons

- Overview of Enterprise Identity
- Planning for Cloud Identity Integration

Lab : Integrating a Microsoft Account with a Domain Account

- Signing up for a Microsoft Account
- Connecting a Microsoft Account to a Domain Account

Lab : Joining Windows 10 to Azure Active Directory

- Signing up for Office 365 and Azure Trial Subscriptions
- Joining Windows 10 to Azure Active Directory

After completing this module, students will be able to:

- Describe the concept of enterprise identity.
- Plan for cloud identity integration.

Module 6: Managing Data Access for Windows-based Devices

This module explains how to provide secure access to company data. Solutions discussed include Device Registration (previous known as Workplace Join) and Work Folders. This module also explains how to configure and share data stored in Microsoft OneDrive.

Lessons

- Overview of Data Access Solutions
- Implementing Device Registration
- Implementing Work Folders
- Managing Online Data Using Cloud-Based Storage Solutions

Lab : Configuring Data Access for Non-Domain Joined Devices

- Configuring Work Folders

Lab : Managing Data Access by Using OneDrive

- Configuring OneDrive

After completing this module, students will be able to:

- Describe the data access solutions.
- Implement Device Registration.
- Implement Work Folders.
- Manage online data by using cloud-based storage solutions.

Module 7: Managing Remote Access Solutions

This module explains how to configure a virtual private network (VPN) and DirectAccess in Windows 10. This module also explains how to publish applications in Microsoft Azure RemoteApp.

Lessons

- Overview of Remote Access Solutions
- Supporting DirectAccess with Windows 10
- Configuring VPN Access to Remote Networks
- Supporting RemoteApp

Lab : Implementing DirectAccess

- Configuring the DirectAccess Server
- Configuring the DirectAccess Clients
- Validating Remote Connectivity

Lab : Configuring Microsoft Azure RemoteApp

- Creating a RemoteApp Collection
- Publishing an Application by Using Azure RemoteApp
- Validating Remote Connectivity

After completing this module, students will be able to:

- Describe remote access solutions.
- Implement DirectAccess with Windows 10.
- Configure VPN access to remote networks.
- Support RemoteApp for Windows 10.

Module 8: Managing Windows 10 Devices by Using Enterprise Mobility Solutions

This module provides an overview of the Enterprise Mobility Suite and its components, Microsoft Azure Active Directory Premium, Azure Rights Management (Azure RMS), and Microsoft Intune.

Lessons

- Overview of the Enterprise Mobility Suite
- Overview of Azure Active Directory Premium
- Overview of Azure RMS
- Overview of Intune

Lab : Implementing a Microsoft Intune Subscription

- Signing Up for an Intune Trial Subscription
- Adding Intune Users

After completing this module, students will be able to:

- Describe the Enterprise Mobility Suite.
- Manage directory services by using Azure Active Directory Premium.
- Protect devices by using Azure RMS.
- Explore the options in Intune.

Module 9: Managing Desktop and Mobile Clients by Using Microsoft Intune

This module explains how to install the Microsoft Intune client software and configure and assign Intune policies. This module also explains how to create Mobile Device Management (MDM) policies and enroll mobile devices to Intune.

- Lessons**
- Deploying the Intune Client Software
 - Overview of Microsoft Intune Policies
 - Mobile Device Management by Using Intune

Lab : Installing the Intune Client Software and Configuring a Policy

- Installing the Intune Client Software
- Configuring Intune Policy Settings

Lab : Managing Mobile Devices Using Microsoft Intune

- Configuring and Enrolling Mobile Devices into Microsoft Intune

After completing this module, students will be able to:

- Deploy the Intune client software.
- Describe Intune policies.
- Manage mobile devices by using Intune.

Module 10: Managing Updates and Endpoint Protection by Using Microsoft Intune

This module explains how to configure updates and Endpoint Protection settings and reports using Microsoft Intune.

Lessons

- Managing Updates by Using Intune
- Managing Endpoint Protection

Lab : Managing Updates and Endpoint Protection by Using Microsoft Intune

- Configuring Updates in Intune
- Configuring Endpoint Protection in Intune

After completing this module, students will be able to:

- Manage updates by using Microsoft Intune.
- Manage Endpoint Protection.

Module 11: Application and Resource Access by Using Microsoft Intune

This module explains how to use the Microsoft Intune Software Publisher to deploy applications to managed clients. This module also explains the use of certificate profiles, Wi-Fi profiles, and VPN profiles to control access to company resources.

Lessons

- Application Management by Using Intune
- The Application Deployment Process
- Managing Access to Organizational Resources

Lab: Deploying Applications by Using Microsoft Intune

- Publishing Applications for Deployment in Intune
- Deploying and Monitoring Application Deployment

Lab : Managing Resource Access by Using Intune

- Configuring Certificate Deployment in Intune
- Configuring Conditional Access Policies

After completing this module, students will be able to:

- Describe the requirements for application management by using Intune.
- Describe the application deployment process by using Intune.
- Describe how to manage access to organizational resources by using Intune.

Module 12: Configuring and Managing Client Hyper-V

This module explains how to create virtual switches, virtual hard disks, and virtual machines using Client Hyper-V.

Lessons

- Installing and Configuring Client Hyper-V
- Configuring Virtual Switches
- Creating and Managing Virtual Hard Disks
- Creating and Managing Virtual Machines

Lab : Installing Client Hyper-V

- Creating a Virtual Switch, a Virtual Hard Disk, and a Virtual Machine
- Creating a Virtual Switch, a Virtual Hard Disk, and a Virtual Machine

After completing this module, students will be able to:

- Install and configure Windows 10 Client Hyper-V.
- Configure virtual switches.
- Create and manage virtual hard disks.
- Create and manage virtual machines.

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 Notes