

Microsoft Endpoint Configuration Manager: Operating System Deployment

WorkshopPLUS

Focus Area: Change and Configuration Management

Duration: 4 days

Difficulty: 400

Overview

This WorkshopPLUS course provides participants with the skills required to customize and troubleshoot operating system deployment in Microsoft Endpoint Configuration Manager with hands-on experience utilizing related technologies for deploying and upgrading to Windows in enterprise environments.

Objectives

After completing this training, students will be able to:

- Understand supporting technologies such as Windows PE
- Configure Pre-Boot Execution Environment (PXE)
- Preparing images for automated deployment
- Upgrade a prior operating system to Windows 10
- Understand task sequences and drivers, and learn the tips to use them
- Explore user state transfer from former versions of operating systems to a newer version of the operating system
- Learn to keep operating system images updated through offline image servicing capabilities
- Explore customization techniques, troubleshooting, and examine the various places to utilize the Microsoft Deployment Toolkit (MDT)
- Explore the automation capabilities and integration with Microsoft Desktop Optimization Pack

Plan for four full days. Early departure on any day is not recommended.

Key Takeaways

Course Material

- Understand technologies involved in operating system deployment
- Keep Windows operating system images more secure with updates

Hands-on Labs

- Most of the concepts covered above will be supported by hands-on labs and demos.
- Attendees have access to resources and labs for up to 6 months after workshop completion.

Agenda

Day 1

- Introduction and Overview
- Capabilities and Architecture
- Windows PE and Media Options
- Preparing Operating System Images

Day 2

- Task Sequence Fundamentals
- Simple Customization and Variables
- Driver Management

Day 3

- User State Migration
- Upgrading to Windows 10
- Image Servicing

Day 4

- Microsoft Deployment Toolkit Integration
- Advanced Customization
- Automation, Tools, Tips, and Tricks

Course Details

Module 1: Introduction and Overview

This module introduces students to operating system deployment concepts and terminology.

Module 2: Capabilities and Architecture

This module will discuss Site systems and architecture and operating system deployment scenarios such as New systems, Refresh, Replace

Module 3: Windows PE and Media Options

This module will cover Introduction to Windows PE, Customizing Windows PE, Media options

Module 4: Preparing Operating System Images

This module will help you prepare operating system images and upgrade packages, examine practical use of various media, plan for default user customization

Module 5: Task Sequence Fundamentals

This module will cover Task sequence fundamentals and variables, Import / Export of task sequences

Module 6: Simple Customization and Variables

This module will examine prestart commands, Windows ADK tools, Windows 10 Start Screen customization

Module 7: Driver Management

This module will cover importing drivers and managing driver packages (including Microsoft Surface drivers), Driver deployment in task sequences.

Module 8: User State Migration

This module will explain how Configuration Manager uses User State Migration Tools (USMT), State migration points, Task sequence steps and computer association

Module 9: Upgrading to Windows 10

This module will examine Terminology and upgrade packages, Task sequence steps, Best practices and advice for success

Module 10: Image Servicing

This module will cover offline servicing, Operating system image package, Operating system upgrade packages, Servicing troubleshooting

Module 11: Microsoft Deployment Toolkit (MDT) Integration

This module will discuss what MDT is and how to install and integrate it, User-driven installation (UDI)

Module 12: Advanced Customization

This module will review task sequence scripting, Dynamic application installation, User device affinity and preferred operating system deployment, Prestaged media, Default application association settings in Windows 10

Module 13: Automation, Tools, Tips, and Tricks

In this module, students will gain familiarity with troubleshooting fundamentals and tools, cover examples of automation with Windows PowerShell, provide error handling for task sequences and use the Diagnostic and Recovery Toolset (DaRT) Review some tips and tricks to lead to success

Recommended Qualifications

To ensure the high-quality knowledge transfer to attendees of this three-day WorkshopPLUS, the class size is limited to students who meet the following criteria:

- Prior experience with Configuration Manager is required
- Experience with Microsoft Deployment Toolkit is useful
- Experience with application packaging is useful
- Experience with Windows PowerShell is useful

For more information

Contact your Microsoft Account Representative for further details.

Hardware Requirements

Participants will require the following prerequisites:

Microsoft Account: Participants also need a Microsoft account to connect to the virtual environment. A Windows 10 PC with the latest browser is recommended.

The Lab environment will be provided using the Lab on Demand Platform.