



BUILDING TRAINING SOLUTIONS  
FOR THE IT WORLD

## Managing Enterprise Desktops Using the Microsoft Desktop Optimization Pack

**Days:** 5  
**Format:** Instructor-Led  
**Class Code:** 50235

### Recommended Course Sequence

Knowledge of prerequisites  
noted below.

*Course content is subject to change  
without notice.*

### Course Description:

This five-day instructor-led course will enable attendees to gain an understanding of the tools available in Microsoft Desktop Optimization Pack (MDOP) to improve their Change Management process and reduce support across their or their customer's environment.

### Target Student:

The primary audience is IT Professionals focusing on desktop configuration, which could include Network Administrators, SMS Administrators, Field Consultants, Technical Business Consultants, and any other technical worker that is responsible for the types of tasks that can be automated or improved through the MDOP

### Prerequisites:

Before attending this course, students must have:

- Active Directory knowledge and concepts including Group Policy.
- Windows Server 2008 knowledge and experience.
- Fundamental knowledge of SQL Server 2005.
- Fundamental knowledge of Windows Terminal Services.
- Fundamental knowledge of System Center Configuration Manager 2007.
- Fundamental knowledge of Microsoft Operations Manager.
- Experience managing Windows desktops in an Enterprise environment.

### At Course Completion:

After completing this course, students will walk away with a deep understanding of the Application Virtualization environment and be able to install, configure, administer, and troubleshoot the components. Students will also be able to install and utilize the MDOP components and understand their position in the desktop management process.

## Course Outline

### Module 1: Optimizing Windows Desktop Management in the Enterprise

This module explains key desktop manageability challenges and identifies MDOP applications that can address those challenges.

Lessons
<ul style="list-style-type: none"><li>■ Desktop Management in the Enterprise</li><li>■ Microsoft Desktop Optimization Pack Overview</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Describe desktop management challenges and strategies within the enterprise.</li><li>■ Identify how MDOP can help an organization improve infrastructure optimization goals.</li></ul>

### Module 2: Microsoft Enterprise Desktop Virtualization: Introduction and Architecture

This module explains the concepts, components, and infrastructure of MED-V.

Lessons
<ul style="list-style-type: none"><li>■ Introduction to MED-V</li><li>■ MED-V Architecture</li><li>■ Installation and Configuration</li></ul>
Lab : Installing MED-V
<ul style="list-style-type: none"><li>■ Exercise 1: Install the MED-V Server and Client Components</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Describe the features of MED-V.</li><li>■ Understand the components of a MED-V Infrastructure.</li><li>■ Install a MED-V Infrastructure.</li></ul>

### Module 3: Microsoft Enterprise Desktop Virtualization: Management

This module explains how to create a MED-V workspace and deploy it to an infrastructure of users

Lessons
<ul style="list-style-type: none"><li>■ Microsoft Enterprise Desktop Virtualization (MED-V) Image Management</li><li>■ Managing MED-V Workspace Policies</li><li>■ Deploying MED-V Client Images</li><li>■ Working with a MED-V Workspace</li><li>■ Maintaining MED-V</li></ul>
Lab : MED-V Management
<ul style="list-style-type: none"><li>■ Exercise 1: Preparing a Virtual Machine to be a MED-V image</li><li>■ Exercise 2: Creating a MED-V image</li><li>■ Exercise 3: MED-V Policy Management</li><li>■ Exercise 4: Workspace Walkthrough</li><li>■ Exercise 5: Create a Deployment Package</li><li>■ Exercise 6: Review Reports</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Describe a MED-V Workspace.</li></ul>

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- Understand how to create and prepare a virtual machine for MED-V.
- Create MED-V workspace policies.
- Describe the process to create a MED-V deployment package.
- Monitor and troubleshoot MED-V.

## Module 4: Microsoft Application Virtualization Management System: Introduction and Architecture

This module explains application virtualization concepts and how the components and architecture of Microsoft Application Virtualization Management system address the various phases of the Application Management Lifecycle.

Lessons
<ul style="list-style-type: none"><li>■ Application Management Lifecycle</li><li>■ Benefits of Application Virtualization</li><li>■ Requirements and Interaction of App-V Components</li></ul>
Lab : Examining Application Virtualization Basics
<ul style="list-style-type: none"><li>■ Exercise 1: Examining an Application Virtualization Package</li><li>■ Exercise 2: Examining Standard Application Installation</li><li>■ Exercise 3: Examining Virtualized Applications</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Describe the Application Management Lifecycle.</li><li>■ Describe the benefits of Application Virtualization.</li><li>■ Describe the components of Microsoft Application Virtualization Management environment.</li></ul>

## Module 5: Microsoft Application Virtualization Management System: Planning and Deployment

This module explains how to plan, install, and test the installation of the Microsoft Application Virtualization environment.

Lessons
<ul style="list-style-type: none"><li>■ Planning the Supporting Infrastructure</li><li>■ Planning Deployment Scenarios</li><li>■ Overview of the Server Installation Process</li></ul>
Lab : Installing the Application Virtualization Management Server
<ul style="list-style-type: none"><li>■ Exercise 1: Verifying Pre-Installation Requirements</li><li>■ Exercise 2: Installing the Application Virtualization Management Server</li><li>■ Exercise 3: Preparing the Content Directory for Application Streaming</li></ul>
Lab : Using the App-V Streaming Server
<ul style="list-style-type: none"><li>■ Exercise 1: Installing an App-V Streaming Server</li><li>■ Exercise 2: Copy a Package onto the App-V Streaming Server</li><li>■ Exercise 3: Configure a Client to Use the App-V Streaming Server</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Describe the components of an App-V Infrastructure.</li></ul>

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- Describe deployment scenarios available with Application Virtualization.
- Perform an Installation of the Application Virtualization Server.
- Describe the requirements and purpose of the App-V Streaming Server.

### Module 6: Planning and Installing the Microsoft Application Virtualization Client

This module explains how to plan for the deployment of the Application Virtualization Client and then install and perform client configuration tasks.

Lessons
<ul style="list-style-type: none"><li>■ Planning the Application Virtualization Client Deployment</li><li>■ Installing and Configuring the App-V Client</li><li>■ Managing Client Configuration Features</li></ul>
Lab : Deploying the App-V Client in Standalone Mode
<ul style="list-style-type: none"><li>■ Exercise 1: Installing and Configuring the App-V Client</li><li>■ Exercise 2: Installing a Standalone App-V Package</li></ul>
Lab : Deploying the App-V Client
<ul style="list-style-type: none"><li>■ Exercise 1: Installing and Configuring the App-V Client</li><li>■ Exercise 2: Testing the Client Install</li><li>■ Exercise 3: Configuring Root Node Options</li></ul>
Lab : Managing Client Configuration Features
<ul style="list-style-type: none"><li>■ Exercise 1: Modifying Publishing Server Options</li><li>■ Exercise 2: Configuring Applications Using the Application Virtualization Client</li><li>■ Exercise 3: Configuring Offline Mode for Disconnected Operation</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Plan for the deployment and installation of the Application Virtualization Client.</li><li>■ Install and configure the Application Virtualization Client.</li><li>■ Manage client configuration features.</li></ul>

### Module 7: Administering the Application Virtualization Management Server

This module explains how to use the Application Virtualization Management Console to publish applications into the application virtualization environment and configure active upgrades.

Lessons
<ul style="list-style-type: none"><li>■ Overview of the Application Virtualization Management Console</li><li>■ Publishing Applications into the Application Virtualization Environment</li><li>■ Modifying Published Applications and Configuring Version Upgrades</li></ul>
Lab : Publishing Applications into the Application Virtualization Environment

<ul style="list-style-type: none"> <li>■ Exercise 1: Configuring System Options</li> <li>■ Exercise 2: Publishing an Application</li> <li>■ Exercise 3: Verifying Application Virtualization Functionality</li> </ul>
<b>Lab : Configuring Active Upgrades for Published Applications</b>
<ul style="list-style-type: none"> <li>■ Exercise 1: Configuring Package Versions</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Describe the options available within the Application Virtualization Management Console.</li> <li>■ Publish applications into the application virtualization environment.</li> <li>■ Configure Active Upgrades for published applications.</li> </ul>

### Module 8: Advanced Application Virtualization Administration Tasks

This module explains how to create new provider policies to apply specific settings such as license enforcement to specific users.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Creating and Configuring Provider Policies</li> <li>■ Enforcing License Compliance</li> <li>■ Managing Server Groups and Server Objects</li> <li>■ Troubleshooting</li> </ul>
<b>Lab : Implementing License Enforcement</b>
<ul style="list-style-type: none"> <li>■ Exercise 1: Publishing and Application to be Licensed</li> <li>■ Exercise 2: Creating a License Group</li> <li>■ Exercise 3: Creating a New Policy Provider</li> <li>■ Exercise 4: Testing License Enforcement</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Create and configure Provider Policies.</li> <li>■ Enforce license compliance.</li> <li>■ Manage server groups and server objects.</li> </ul>

### Module 9: Planning and Deploying the Application Virtualization Sequencer

This module explains how to perform various sequence scenarios using the Application Virtualization Sequencer.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Overview of the Application Virtualization Sequencer</li> <li>■ Planning the Sequencer Environment</li> <li>■ Installing and Configuring the Application Virtualization Sequencer</li> <li>■ Sequencing Applications for Virtualization</li> </ul>
<b>Lab : Installing the Application Virtualization Sequencer</b>
<ul style="list-style-type: none"> <li>■ Exercise 1: Configuring a Partition to be the Q drive</li> <li>■ Exercise 2: Installing the Application Virtualization Sequencer</li> </ul>
<b>Lab : Sequencing Applications for Virtualization</b>
<ul style="list-style-type: none"> <li>■ Exercise 1: Sequencing Applications for Virtualization</li> <li>■ Challenge Exercise (If Time Permits)</li> </ul>

**After completing this module, students will be able to:**

- Describe the Application Virtualization Sequencer process.
- Plan the Sequencer environment.
- Install and configure the Application Virtualization Sequencer.
- Sequence applications for virtualization.

**Module 10: Advanced Sequencing**

This module explains how to perform advanced sequence scenarios.

**Lessons**

- Upgrading Existing Packages
- Advanced Package Options
- Hard-coded Applications
- Sequencing a Web-based Application
- Standalone Packages
- OSD File Scripting

**Lab : Advanced Sequencing**

- Exercise 1: Performing a Package Upgrade
- Exercise 2: Sequencing Hard-coded Applications

**After completing this module, students will be able to:**

- Upgrade existing sequencer packages.
- Perform package options.
- Install a hard-coded application into a virtual environment.
- Sequence a Web-based application.
- Sequence an application for Standalone installation.
- Perform OSD file scripting

**Module 11: Microsoft Application Virtualization and System Center Configuration Manager Integration**

This module explains how System Center Configuration Manager 2007 R2 can integrate and deploy App-V virtual applications.

**Lessons**

- Overview of Application Deployment with System Center Configuration Manager 2007
- Delivery Methods Available to Configuration Manager Clients
- Preparing the Configuration Manager Infrastructure for Application Virtualization
- Integration
- Creating and Distributing Virtual Application Packages
- Reporting and Troubleshooting

**Lab : Microsoft Application Virtualization and System Center Configuration Manager Integration**

- Exercise 1: Preparing the Configuration Manager Infrastructure for Application Virtualization Integration
- Exercise 2: Creating and Distributing Virtual Application Packages

**After completing this module, students will be able to:**

- Describe the integration of App-V in Configuration Manager.
- Describe the different App-V Delivery Methods with Configuration Manager.
- Prepare a Configuration Manager Infrastructure for App-V.
- Create and distribute Virtual Applications.
- Deploy the App-V Client with Configuration Manager.

**Module 12: Controlling Group Policy Objects Using Advanced Group Policy Management**

This module explains how to use AGPM to manage controlled group policy objects.

**Lessons**

- Overview of Advanced Group Policy Management
- Configuring Advanced Group Policy Management
- Introduction to Controlling Group Policy Objects
- Managing Group Policy Using AGPM

**Lab : Controlling Group Policy Using AGPM**

- Exercise 1: Installing AGPM
- Exercise 2: Managing Controlled Group Policy Objects

**After completing this module, students will be able to:**

- Describe the benefits and features of AGPM.
- Configure Group Policy using AGPM.
- Describe how to control Group Policy objects.
- Manage Group Policy using AGPM.

**Module 13: Monitoring Desktops Using Microsoft Desktop Error Monitoring**

This module explains how Desktop Error Monitoring can be configured to provide a centralized collection location of computer events and error messages.

**Lessons**

- Overview of Microsoft Desktop Error Monitoring
- Installing and Configuring Desktop Error Monitoring

**Lab : Monitoring Desktops Using Microsoft Desktop Error Monitoring**

- Exercise 1: Configuring a Management Server for Client Monitoring
- Exercise 2: Deploying Client Monitoring Using Group Policy
- Exercise 3: Configuring Error Transmission, Data Collection and Notification
- Exercise 4: Using the DEM Console
- Exercise 5: Using Reporting in the DEM Console

**After completing this module, students will be able to:**

- Describe the benefits and features of Microsoft Desktop Error Monitoring.
- Install and configure Desktop Error Monitoring.

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## Module 14: Managing Software Inventory Using the Asset Inventory Service

This module explains how to use the Microsoft Asset Inventory Service to manage software inventory.

Lessons
<ul style="list-style-type: none"><li>■ Asset Inventory Service (AIS) Overview</li><li>■ Deploying AIS Clients</li><li>■ Managing Computers Reporting to AIS</li><li>■ Managing Software Inventory</li></ul>
Lab : Simulation of the Asset Inventory Service
<ul style="list-style-type: none"><li>■ Exercise 1: Follow a simulation of the Asset Inventory Service</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Describe the benefits and features of the Microsoft Asset Inventory Service.</li><li>■ Deploy AIS clients.</li><li>■ Manage computers reporting to AIS.</li><li>■ Manage software inventory using AIS.</li></ul>

## Module 15: Repairing and Diagnosing Computer Systems Using the Diagnostics and Recovery Toolset

This module explains how to use the Diagnostics and Recover Toolset to recover computer systems.

Lessons
<ul style="list-style-type: none"><li>■ Diagnostics and Recovery Toolset Overview</li><li>■ Differences Between DaRT 5 and DaRT 6</li><li>■ Recovery Tools Overview</li><li>■ Administrative Tools Category Overview</li><li>■ Networking Tools Category Overview</li><li>■ Systems Tools Category Overview</li></ul>
Lab : Systems Tools Category Overview
<ul style="list-style-type: none"><li>■ Exercise 1: Creating the ERD Boot Disk</li><li>■ Exercise 2: Experimenting with the ERD Recovery Tools</li></ul>
After completing this module, students will be able to:
<ul style="list-style-type: none"><li>■ Describe the benefits and features of the Diagnostics and Recovery Toolset.</li><li>■ Recover computer system using ERD commander.</li><li>■ Describe the Administrative Tools Category.</li><li>■ Describe the Networking Tools Category.</li><li>■ Describe the Systems Tools Category.</li><li>■ Differences between DaRT 5 and DaRT 6.</li></ul>