



Course M6422-ILT

Implementing and Managing Windows Server 2008 Hyper-V

Three days, Instructor-Led

INTRODUCTION

This three-day instructor-led course teaches students how to implement and manage Windows Server 2008 Hyper-V. It also teaches students how to manage Hyper-V with Solution Center Virtual Machine Manager (SCVMM) and with PowerShell.

AUDIENCE

The primary audience for this course is Windows Server 2003/2008 System Administrators who manage and implement Server Virtualization technologies within their network.

The secondary audience for this course is Enterprise System Architects who plan enterprise server resources with an emphasis on server consolidation.

PREREQUISITES

In addition to their professional experience, students who attend this training should have technical knowledge in the following areas:

- Windows Server 2000/2003 System Administration
- Server Virtualization using Virtual Server 2005 or Virtual PC

COURSE OUTLINE

MODULE 1: INTRODUCTION TO WINDOWS SERVER 2008 HYPER-V

This module introduces the concepts related to and the history of server virtualization. Through this module, the student will understand the business need for virtualization and how virtualization fits into their existing environment. Selecting the required hardware and basic installation and configuration are also covered.

Lessons

- Introducing Windows Server Hyper-V
- Hyper-V Requirements
- Installing the Hyper-V Server Role
- Configure Hyper-V to be Highly Available

Lab : Install Hyper-V and Perform Initial Configuration

- Install Hyper-V
- Explore the Hyper-V Management Console

MODULE 2: CONFIGURE HYPER-V SETTINGS AND VIRTUAL NETWORKS

This module provides information on the configuration options available on the Hyper-V server and the Hyper-V Virtual Networks.

Lessons

- Configuring Hyper-V Options
- Configuring the Virtual Network

Lab : Configuring Hyper-V and Virtual Networks

- Configure Hyper-V Server Settings
- Configure Hyper-V Virtual Networks

MODULE 3: HYPER-V REMOTE ADMINISTRATION

This module explores the requirements for remote management of the Hyper-V Server and the tools available for remote management.

Lessons

- Configuring Hyper-V Remote Administration
- Using Scripting for Hyper-V Administration

Lab : Accessing and Managing Hyper-V Remotely

- Configure the Windows Firewall
- Install the Hyper-V Manager on Windows Vista
- Connect to the Hyper-V Server Remotely

MODULE 4: CREATION OF VIRTUAL MACHINES AND VIRTUAL HARD DRIVES

This module explores the creation of the Hyper-V Virtual Machines and their associated Virtual Hard Drives. The options available for the Virtual Machines and the types of Virtual Hard Drives will be covered. This module also covers the importance of Hyper-V Integration Services and Hypervisor.

Lessons

- Creating Virtual Hard Drives
- Creating Virtual Machines

Lab : Creating Virtual Machines and Virtual Hard Drives

- Creating New Virtual Hard Drives
- Creating New Virtual Hard Drives

MODULE 5: VIRTUAL MACHINE SETTINGS, SNAPSHOTS, AND HIGH AVAILABILITY

This module explores the settings available on each Virtual Machines hosted on the Hyper-V server and how to use and manage Virtual Machine snapshots. The module will also cover configuring Hyper-V for high availability and performance monitoring on the Hyper-V server.

Lessons

- Managing Virtual Machine Settings
- Using Virtual Machine Snapshots
- Configuring Hyper-V for High Availability
- Monitoring Hyper-V Performance

Lab : Managing Virtual Machine Settings

- Configure Virtual Machine Settings
- Monitor Hyper-V Performance

MODULE 6: MIGRATION OF VIRTUAL MACHINES TO HYPER-V

This module provides instruction on how to migrate virtual machines hosted on earlier virtualization technologies to the Hyper-V server.

Lessons

Three days, Instructor-Led

- Migrating Legacy Virtual Machines
- Understanding the Impact of Migrated VMs

Lab : Migrating Legacy Virtual Machines to Hyper-V

- Migrate Existing Virtual Machines to Hyper-V
- Troubleshoot Issues on the Migrated VMs

MODULE 7: INTRODUCTION TO SYSTEM CENTER VIRTUAL MACHINE MANAGER

This module introduces System Center Virtual Machine Manager and shows how it can be used to manage Hyper-V servers throughout an enterprise.

Lessons

- Introducing System Center Virtual Machine Manager
- Managing Virtual Machines with SCVMM

Lab : Using SCVMM to Manage Hyper-V

- Importing and Managing the Hyper-V Server using SCVMM

MODULE 8: MANAGING THE SCVMM VIRTUAL MACHINE IMAGE LIBRARY AND CHECKPOINTS

This module explores the Virtual Machine image library and checkpoints available in System Center Virtual Machine Manager.

Lessons

- Using the SCVMM Library
- Managing the Image Library in SCVMM
- Managing Checkpoints

Lab : Managing VM Templates and the Image Library

- Managing VM Snapshot
- Using the Image Library

MODULE 9: POWERSHELL AND DISASTER RECOVERY

This module explores how to use PowerShell to manage the Hyper-V server. This module also explores how to backup virtual machines in Hyper-V.

Lessons

- Using PowerShell to Manage Hyper-V
- Virtual Machine Backup and Recovery

Lab : Using PowerShell and Disaster Recovery

- Create and Manage and Recover VM Snapshots