70-247: Configuring and Deploying a Private Cloud with System Center 2012

Module 01 - Understanding the Private Cloud
Lesson 1: Understanding the Private Cloud
Cloud Comparisons
Comparing the Private and Public Clouds
Benefits of the Private Cloud with Microsoft
Using System Center 2012
Lesson 2: Preparing to Deploy the Cloud
Major Business Needs
Service Identification
Management Process Automation
Lesson 3: Components of the Private Cloud
Looking at the Data Center Environment
High Availability
Scalability
BCP
DRP
Lesson 4: System Center 2012 Components
What is VMM?
Orchestrator
Service Manager
Operations Manager
DPM
Lesson 5: Using Hyper-V with VMM
Cluster Requirements
Hyper-V Cluster Creation
Using VMM for Clusters
Did it Deploy?
Demo - Preparing the Private Cloud Infrastructure
Demo - Creating a Host Group
Demo - Creating a RunAs Account
Demo - Creating a User Role
Module 01 Review

Module 02 - Using VMM to Deploy the Cloud
Lesson 1: VMM Architecture
VMM Architecture
Private Cloud Infrastructure
VMs and the Services Tab
VMM Jobs
VMM Libraries
VMM Manager Settings
Deploying VMs in VMM
Lesson 2: Install and/or Upgrade VMM
Minimum Requirements for Installing VMM

What to Plan For
Upgrading Earlier Versions of VMM
Making the VMM Highly Available
Lesson 3: Host Groups
Understanding Host Groups
Placement Rules
Power Optimization
Dynamic Optimization
Host Reservations
Storage
Networks
Lesson 4: Understanding Security
Service Accounts
Run As Account
User Roles in VMM
Demo - Reviewing the Hosts
Demo - Library Shares
Demo - Preparing the Cloud Infrastructure
Demo - Veryfying Roles
Demo - Deploying a New Virtual Machine
Module 02 Review

Module 03 - Working With the Private Cloud Infrastructure
Lesson 1: PXE and Update Servers
PXE Server Architecture
Update Management in the VMM
Lesson 2: Bare Metal Hyper-V Host Servers
Installing the PXE Server for Integration
Bare Metal Deployment
The Host Profile
Adding the PXE Server Role
Adding Resource Wizard
Lesson 3: Configuring the Update Server Role
Server Updates
Using WSUS
Adding and Managing the Update Server to VMM
Lesson 4: The Update Baseline
Preparing for the Update Baseline
Check for Compliance
Choosing Remediation for Non-Compliance
Demo - Configuring a PXE Server
Demo - Creating a Host Profile
Demo - Creating an Update Server
Demo - Update Baseline
Module 03 Review

Module 04 - Virtual Applications

Lesson 1: Dynamic Application Deployment
Describing Dynamic Application Deployment
Using the Web Deployment Tool
What is Server Application Virtualization?
Lesson 2: Server Application Virtualization Overview
Server App-V Basics
Scenarios for Server App-V
Definitions
What is Sequencing?
The Server App-V Package
What's Different Between Server App-V and App-V?
Lesson 3: Web Deployment Packages
The Web Deployment Process
Creating Web Deployment Packages
Lesson 4: Configuring Server App-V Components
Requirements
Cmdlets
Best Practices
Lesson 5: Sequencing and Deploying Virtual Apps
Creating a Server App-V Package
Sequencer Cmdlets and the Server App-V Agent
Testing the Package
Protecting the Server App-V Package
Demo - Configuring Virtual Application Delivery
Module 04 Review

Module 05 - Components of the Private Cloud

Lesson 1: SQL Server Profiles
Using VMM for SQL Installation
Preparing and Deploying the Image
SQL Server Profile
Service Templates to Complete Deployment
Lesson 2: OS Profiles
Guest OS Profiles
General Settings for Guest OS Profiles
Roles and Features
Network Settings
Scripting Guest OS Profiles
Lesson 3: Application Profiles
Overview of Application Profiles
Making a Profile
Deploying the Profile
Lesson 4: Hardware Profiles
Hardware Profile Overview
Compatibility and General Settings
Network Adapter Settings
Bus Configuration

Module 06 - A First Business Unit Cloud

Module 07 - Private Cloud Infrastructure

Lesson 4: Management Packs
Management Packs
Downloading and Installing Management Packs
Tuning
Making Your Own Management Pack
Lesson 5: Putting It All Together
Putting It All Together
Demo - Deploying Agents
Demo - Installing Management Packs
Module 07 Review

Module 08 - Monitoring the Private Cloud
Lesson 1: Using SharePoint
Using Dashboard in SharePoint
Installing and Configuring the SC OM Web Part
Lesson 2: Templates for Monitoring
Installing and Configuring the SC OM Web Part
Monitoring Database Performance
Port Availability
Processes
Windows Services
Web Applications
.NET Applications
Lesson 3: Watching a Distributed App
Distributed Applications
Creating a Distributed Application
Templates
Demo - Creating Custom Monitoring
Module 08 Review

Module 09 - Service Management for the Cloud
Lesson 1: What is Service Manager
Service Manager Components
Prerequisites
Deployment Options
Security
Lesson 2: Understanding Work Items
Change Management
Release Management
Incident Management
Problem Management
Service Requests
Knowledge Management
Lesson 3: Connectors
AD Connectors
SC CM Connectors
SC OM Connectors
Orchestrator Connector

VMM Connector
Lesson 4: Notifications
Channels
Subscriptions
Templates
Demo - Configuring Service Manager Basic Settings
Module 09 Review

Module 10 - Private Cloud Service Catalog

Lesson 1: Private Cloud Service Catalog
Service Catalog
Creating Request Offerings
Process Pack
Cloud Services Process Pack
Cloud Services Process Pack Reporting
Lesson 2: Service Level Management
Service Level Management
Calendar Items
Demo - Configuring the Storage Pool
Module 10 Review

Module 11 - Security for the Cloud

Lesson 1: Planning DPM Deployment
Considerations for DPM Deployment
Selecting a Backup Method
Storage Requirements
Security Requirements
Software Requirements
Hardware, Network, and Scaling Requirements
Lesson 2: DPM Technologies
Components
Protection Process
Files and Applications
Lesson 3: Upgrading DPM
Upgrading to DPM 2012
In-Place Upgrade
Side-by-Side Upgrade
Lesson 4: Configuring DPM for the Private Cloud
Storage
Agents for Trusted Domains
Agents for Untrusted Domains
Deploying Agents on the Untrusted Domains
Using DPM Protection Agents with Certificate Authentication
Deploying DPM Protection Agents using Certificate Authentication
Lesson 5: Configuring Application Protection for the Private Cloud Protection Groups
SQL Protection
Protecting the Private Cloud
Item-Level Recovery

Cluster Shared Volume Protection
Self-Service Recovery
Lesson 6: Restoring Applications to the Private Cloud
Recovering SQL Data
Self-Service SQL Server Data Recovery
VM Recovery
Item-Level Recovery on Hyper-V
Demo - Automating the Private Cloud
Module 11 Review

Module 12 - Automation in the Private Cloud

Lesson 1: Orchestrator Architecture
Orchestrator Overview
Architecture
Integration Packs for Automation
Orchestrator Requirements
Lesson 2: Deployment and Configuration of Orchestrator
Orchestrator Deployment Tasks
Deploying Integration Packs
Configuring Orchestrator Security
The Console and Runbook Designer
Lesson 3: Using Runbooks
Working with Runbooks
Standard Activities
Workflow
Parameters, Computer Groups, Global Settings
Designing Runbooks
Lesson 4: Using Integration Packs
Integration with SC 2012
Demo - Installing the Cloud Service Process Pack
Module 12 Review
Course Closure

Total Duration: 11h 2m