



REAL WORLD
TECHNOLOGY TRAINING & SOLUTIONS
"Training You Can Really Use"

20247: Configuring and Deploying a Private Cloud

Duration: 5 Days

Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This course imparts the requisite skills for configuring and deploying a private cloud environment on Windows® System Center 2012 R2 platform. Through a combination of lectures and hands-on labs, participants will learn to configure Microsoft® Server Application Virtualization (App-V), PXE Servers, monitor clouds using Operations Manager, and Data Protection manager.

Target Audience

This course is intended for:

- Cloud administrators responsible for designing, installing, and configuring a cloud infrastructure.

Prerequisites

To attend this course, candidates must have:

- Access to Microsoft Azure®.
- Networking experience.
- Hyper-V knowledge.
- Windows Server® 2012 experience.
- Knowledge of Active Directory Domain Services (AD DS)
- Working knowledge of previous versions of System Center products.
- Knowledge of Microsoft SharePoint® configuration.
- Storage Area Network (SAN) knowledge.
- Understanding of cloud and data centre management processes.



Course Objectives

Upon successful completion of this course, attendees will be able to:

- Produce a high-level design that accounts for requirements for cloud environments.
- Configure and deploy the cloud fabric.
- Configure a PXE server, an update server, and a software update baseline.
- Configure Microsoft Server Application Virtualization (App-V) so that it can be used to sequence and deploy an application virtually.
- Build the core components necessary for delivering services on the fabric.
- Allocate resources to a cloud and grant access to a cloud.
- Understand how to monitor clouds using Operations Manager.
- Understand the tools necessary to extend and customize the Operations Manager for cloud environments.
- Set up, configure, and integrate the core components of Service Manager into a cloud fabric.
- Configure a service Catalogue, and then publish it to the Self-Service Portal.
- Gain the knowledge necessary to deploy and configure the Data Protection Manager in a cloud.
- Deploy and configure Orchestrator in a cloud, and then integrate it with other System Center components.

Course Topics

Module 1: Planning for the Cloud

- Understanding Cloud Models
- Benefits of Deploying a Private Cloud
- Designing a Private Cloud Infrastructure
- Overview of Windows Server 2012 R2 Hyper-V
- Overview of System Center 2012 R2 components
- Deploying Hyper-V Clustering with VMM

Module 2: Configuring and Deploying the Private Cloud with Microsoft System Center 2012 R2 Virtual Machine Manager

- Overview of VMM Architecture and Components

- Configuring Advanced Networking in VMM
- Installing and Upgrading VMM
- Configuring VMM Security and Roles
- Understanding Host Groups

Module 3: Extending and Maintaining the Cloud Infrastructure

- Overview of the PXE and Update Server Roles
- Deploying Bare-Metal Hyper-V Host Servers
- Configuring the Update Server Role
- Creating and Using an Update Baseline





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Course Topics *Continued*

Module 4: Configuring Application Delivery

- Dynamic Application Deployment Overview
- Web Deployment Packages
- Server Application Virtualization Overview
- Configuring Server App-V Components
- Sequencing and Deploying Virtual Applications

Module 5: Creating the Private Cloud Building Blocks

- Configuring Templates and Profiles
- Configuring Networks and Sites
- Configuring Service Provider Foundation
- Configuring User Roles

Module 6: Deploying and Configuring Access to a Private Cloud

- Understanding Private Cloud Resources
- Installing and Configuring App Controller
- Creating and Managing Service Templates

Module 7: Monitoring a Cloud Infrastructure

- Operations Manager Architecture and Security
- Operations Manager Installation Considerations
- Configuring Roles and Notifications
- Configuring Management Packs
- Configuring Integration with System Center 2012 R2

Module 8: Extending and Customizing Monitoring of the Cloud Infrastructure

- Configuring System Center Advisor
- Configuring the SharePoint Server Portal
- Monitoring Templates
- Distributed Application Monitoring

Module 9: Implementing Service Management for the Cloud

- Service Manager Architecture Overview
- Upgrading to System Center 2012 R2 Service Manager
- Understanding Service Manager Work Items
- Configuring Service Manager Connectors
- Configuring Service Manager Notifications

Module 10: Configuring High Availability, Disaster Recovery and Protection for a Cloud

- Planning for Hyper-V Recovery Manager
- Planning DPM deployment
- DPM Architecture and Components
- Upgrading DPM
- Configuring DPM for a Private Cloud
- Configuring Application Protection for a Cloud
- Restoring Applications to a Cloud

Module 11: Automating and Standardizing a Cloud

- Orchestrator Architecture and Components Overview
- Deploying and Configuring Core Components
- Managing Runbooks
- Configuring Integration Packs

Module 12: Configuring a Self-Service and Multi-tenant Private Cloud

- Implementing the Cloud Services Process Pack
- Configuring the Windows Azure Pack

LABS INCLUDED