Monitoring and Operating a Private Cloud

Duration: 5 Days

Price: $2795 *California residents and government employees call for pricing.*

Discounts: We offer multiple discount options. Click here for more info.

Delivery Options: Attend face-to-face in the classroom or remote-live attendance.

Students Will Learn

- Describing the Cloud Model
- Configuring and optimizing a Private Cloud
- Deploying Cloud Services
- Monitoring Cloud Services
- Configuring Application Performance Monitoring in a Cloud Environment
- Operating and extending Service Management in a Cloud Environment
- Automating Incident Creation, Remediation and Change Requests in a Cloud Environment
- Performing Problem Management in a Cloud Environment
- Operating a Self-Service, Multi-Tenant Cloud with Windows Azure Pack
- Configuring High Availability, Protection and Recovery in a Cloud Environment
- Optimizing the Cloud Infrastructure
- Configuring SLAs, Dashboards and Widgets in a Cloud Environment

Course Description

This course focuses on how to monitor and operate a cloud with Microsoft System Center 2012 R2. Topics include how to manage and administer a cloud environment; monitor key infrastructure elements and applications that run within a cloud; an overview of Virtual Machine Manager; using Operations Manager to monitor the services deployed in a cloud; core features of Service Manager; using Orchestrator; integrating of Microsoft System Center 2012 R2 Service Manager; managing a highly available cloud Infrastructure using SQL Server 2012 Always-On, Hyper-V Replica and Azure Site Recovery and how Configuration Manager can be used to provide update management for Virtual Machines.

Course Prerequisites

Students should have working knowledge of Windows Server 2012, Hyper-V, AD DS, System Center, SharePoint, Windows Azure, cloud and data center management processes and networking.

Course Overview

Introduction to the Cloud Model

- Overview of the Cloud Computing Model
- Requirements for a Private Cloud
- Requirements for a Public or Hybrid Cloud
- Operating a Hybrid Cloud Infrastructure with System Center
- Maintaining the Health of a Cloud
- Integrating System Center Components

Configuring a Private Cloud Environment

- Overview of System Center 2012 R2 Virtual Machine Manager
- Managing the Virtual Environment with Virtual Machine Manager
- Configuring Private Cloud Resources and Security

Deploying Cloud Services

- Overview of Service Templates
- Creating VMM Machine Profiles
- Creating Web Deploy Packages
- Sequencing Applications by Using Server App-V
- Creating Data-Tier Application Packages
- Deploying Services through App Controller

Monitoring Cloud Based Applications

- Overview of System Center 2012 R2 Operations Manager
- Agent Deployment in Operations Manager
- Configuring Custom Monitoring for Applications and Services in the Cloud
- Monitoring the Network Infrastructure
- Monitoring Distributed Applications

Configuring Application Performance Monitoring

- Application Performance Monitoring
- Configuring Advanced Monitoring in APM
- Viewing Application Performance Data in Operations Manager

Operating and Extending Service Management in the Private Cloud

- Overview of Service Manager
- Configuring Security and User Roles
- Configuring Work Items
- Configuring Incident Queues
- Configuring Service Offerings for a Cloud

Automating Incident Creation, Remediation, and Change Requests

- Overview of System Center 2012 R2 Orchestrator
- Integrating Orchestrator with Operations Manager and Service Manager

Problem Management in the Private Cloud

- Overview of Problem Management
- Creating Custom Rules in Operations Manager

Operating a Self Service, Multi-Tenant Cloud with Windows Azure Pack

- Windows Azure Pack Key Concepts
- Provision and Configure Services in the Windows Azure Pack
- Windows Azure Pack Providers

High Availability, Protection, and Recovery for the Cloud

- High Availability for a Cloud
- Protecting Data in the Private Cloud
- Recovering Data in the Private Cloud

Optimizing Your Cloud Infrastructure

Configuring SLAs, Dashboards, and Widgets

- Using Virtual Machine Manager to Keep the Cloud Infrastructure Up-to-Date
- Using Configuration Manager to keep Virtual Machines Up-to-Date
- Using System Center Advisor to Optimize Cloud Infrastructure
- Using Pro-Tips to Optimize Cloud Infrastructure

- Configuring Service Level Tracking in Operations Manager
- Configuring and Deploying Widgets and Dashboards
- Publishing Real-Time State with Microsoft Visio Snap-in
- System Center Analytics
- Analyzing Service Manager OLAP Cube Data Using Microsoft Office Excel
- Installing, Configuring and Configuring Service Reporting to Create Chargeback Reports