

# Microsoft Certified Solutions Expert Cloud Platform & Infrastructure

This course is designed for IT professionals to implement, manage, monitor and troubleshoot Data Center, Microsoft Cloud Platform and Infrastructure using Windows Server 2012 R2 and System Center 2012 R2. Microsoft cloud platform and Infrastructure can provide Infrastructure as a Service (IaaS) for Private and Public Cloud (Hybrid Cloud) with high availability, scalability and elasticity to meet the needs of today's – and tomorrow's businesses.

This training is conducted by Senior IT Operations Engineers (systems, network and applications) with several years of IT industry experience.

## Course Outline

### Introduction to Microsoft Cloud Platform and Infrastructure

- Overview of Cloud Computing and Types of Cloud
- Advantages of Deploying a Cloud
- Introduction to Microsoft Cloud Platform and Infrastructure
- Overview of System Center 2012 R2 products

### Installing Microsoft System Center Virtual Machine Manager 2012 R2 (SCVMM)

- Hardware and Software requirements SCVMM 2012 R2
- Installing prerequisites for SCVMM
- Installing System Center Virtual Machine Manager 2012 R2
- Upgrading / migration from previous versions

### Deploying and Configuring Access to Cloud Services using SCVMM

- VMM Settings and Security (User Roles and Run As account)
- Understanding fabric
- Logical networks and Logical switches
- Static IP Address pools
- MAC Address pools
- VMM storage
- Storage Classifications
- Add file server to VMM
- VMM Library
- Profiles (Hardware, Guest OS)
- VM Templates
- Host groups and adding hosts to Host Groups

- Creating Clouds
- Cloud Libraries
- Deploy virtual machine to Cloud

### Configuring Application Services Delivery with App Controller

- Installation and configuring App Controller
- User Roles and Delegation
- Accessing and managing Virtual Machines using App Controller
- Creating service templates with VMM
- Deploying services using App Controller

### Monitor Cloud Infrastructure with Operations Manager

- Installation and Configuration of System Center Operations Manager 2012 R2
- Deploy Operation Manager Agents
- Monitoring Servers and Devices
- Managing Management Packs
- Integrating Operations Manager with SCVMM
- Notifications through E-mail

### Operating and Extending Private Cloud with Service Manager

- Installation and Configuration of System Center Service Manager 2012 R2
- Configuring Connectors
- Understanding and Implementing Service Level management
- Managing incidents and problems

### Managing and maintaining Private Cloud with Configuration Manager

- Overview Configuration Manager
- Configuration Manager for Client Management
- Configuration Manager Cloud Services
- Demo – Configuration Manager

### Automation and Service Delivery using Orchestrator

- Installation and configuring System Center Orchestrator 2012 R2
- Extending Orchestrator using integration packs
- Implementing runbook automation
- Using Orchestrator runbooks with Service Manager

### Configuring High Availability, Disaster Recovery and Protection of Cloud

- Installation and configuring Data Protection Manager (DPM)
- Deploying DPM agents
- Configuring DPM Storage
- Creating DPM protection groups
- Performing recovery
- PXE server to VMM
- WSUS server to VMM
- Managing Updates with WSUS

### Introduction to Windows Azure Stack/Azure Pack

- Introduction to Windows Azure Stack
- Introduction to Windows Azure Pack
- Implementing Windows Azure Pack
- Demo – Windows Azure Pack (WAP)