

Microsoft® Official Course



20247D

Configuring and Deploying a Private Cloud



Course Introduction

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## Welcome!

**Thank you for joining us today.**

We've worked together with Microsoft Learning Partners and Microsoft IT Academies to bring you a world-class learning experience, including:

**Microsoft Certified Trainers + Instructors.** Your instructor is a premier technical and instructional expert who meets ongoing certification requirements.

**Customer Satisfaction Guarantee.** Our Partners offer a satisfaction guarantee and we hold them accountable for it. At the end of class, please complete an evaluation of today's experience. We value your feedback!

**Certification Benefits.** After training, consider pursuing a Microsoft Certification, to help distinguish your technical expertise and experience. Ask your instructor about available exam promotions and discounts.

We wish you a great learning experience and ongoing career success!



## Hello

- **Instructor:** <Instructor Name>
- <Title or other credentials, e.g. Microsoft Certified Trainer>
- <Affiliation/Company>
- <A few words about my technical and professional experience>

## Student Introductions

- Name
- Company affiliation
- Title/function
- Job responsibility
- Programming, networking, database experience
- Product experience
- Your expectations for the course

## Facilities

- Class hours
- Building hours
- Parking
- Restrooms
- Meals
- Phones
- Messages
- Smoking
- Internet access
- Recycling
- Emergency procedures

## About This Course - Audience

- This course is intended for cloud administrators who will be responsible for designing, installing and configuring a cloud infrastructure. The secondary audience includes datacenter administrators who are responsible for designing, installing and configuring the infrastructure for an on premise, Microsoft Private Cloud. In addition, the secondary audience includes people who need to learn the required material in order to take the Microsoft exam 70-247: Configuring and Deploying a Cloud with Microsoft System Center.

## About This Course - Prerequisites

This course describes how to deploy and configure a cloud with System Center 2012 R2. Because this is an extensive technical domain that includes several individual products and technologies, it is strongly recommended administrators have prerequisite knowledge in the following areas:

- Windows Server 2012 R2 operating system.
- Active Directory Domain Services (AD DS).
- Working knowledge of previous versions of System Center products.
- Microsoft SharePoint.
- Windows Server 2012 R2 Hyper-V.
- Microsoft Azure.
- Microsoft Windows Azure Pack.
- Networking and storage experience.
- Familiarity with cloud management processes.
- Previous work with IT Infrastructure Library (ITIL).
- Previous work with Microsoft Operations Framework (MOF).

## Your Printed Course Materials (Optional)

- Microsoft Official Course Handbook
  - Printed Courseware book
  - Organized by modules
  - Includes Labs and Lab Answer Keys
  - Module Reviews and Takeaways—great for an on-the-job reference
- Digital Companion Content
  - Supplemental content and helpful links
  - Download at:  
<http://www.microsoft.com/learning/companionmoc>

## Your Digital Course Materials (Optional)

- Microsoft Official Course Handbook
  - Accessed online using the Arvato Skillpipe reader at  
<http://skillpipe.courseware-marketplace.com/reader>
  - Registration/Login and redeem your digital courseware
  - Add notes, comments highlight content just as you would with printed materials
  - Organized by modules
  - Includes Labs and Lab Answer Keys
  - Module Reviews and Takeaways—great for on-the-job reference
- Digital Companion Content
  - Supplemental content and helpful links
  - Download at: <http://www.microsoft.com/learning/companionmoc>

## Course Outline

- Module 1: Planning for the Cloud
- Module 2: Configuring and Deploying the Private Cloud with Microsoft System Center 2012 R2 Virtual Machine Manager
- Module 3: Extending and Maintaining Cloud Infrastructure
- Module 4: Configuring Application Delivery

## Course Outline Continued

- Module 5: Creating the Private Cloud Building Blocks
- Module 6: Deploying and Configuring Access to a Private Cloud
- Module 7: Monitoring Cloud Infrastructure
- Module 8: Extending and Customizing Monitoring of the Cloud Infrastructure

## Course Outline Continued

- Module 9: Implementing Service Management for the Cloud
- Module 10: Configuring High Availability, Disaster Recovery and Protection for a Cloud
- Module 11: Automating and Standardizing a Cloud
- Module 12: Configuring a Self-Service Multi-Tenant Cloud with the Windows Azure Pack

## Microsoft Certification Program

### Get trained. Get certified. Get ahead.

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<http://www.microsoft.com/learning/certification>

Microsoft Certified  
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## Preparing for the Labs

- Contoso has set forth strategic objectives that include optimizing its current datacenter by moving to a hybrid cloud model that will deliver end to end automation and control, service catalog and self service provisioning underpinned with elasticated resource allocation and chargeback reporting. Executives/Managers/Developers at Contoso want to create a prototype or proof-of-concept for a hybrid cloud infrastructure with the goal of demonstrating the cost savings and efficiencies that can be gained by the business. If successful this prototype or proof-of-concept would be the foundation for a full-scale pilot. You have been asked to set up System Center 2012 R2 for this purpose with the aim of demonstrating its capabilities in both configuring and managing the new cloud infrastructure.

## Virtual Machine Environment

Virtual Machine	Use as:
LON-DC1	Domain controller for the Contoso domain
LON-SQ1	SQL Server 2012 hosting System Center 2012 R2 databases
LON-SM1	Windows Server 2012 R2 hosting System Center 2012 R2 Service Manager
LON-AP1	Windows Server 2008 R2 hosting SharePoint Server 2010
LON-AP2	Windows Server 2008 R2 hosting the DinnerNow .NET application
LON-VM1	Windows Server 2012 R2 used to host a System Center 2012 R2 Virtual Machine Manager Server
LON-DW1	Windows Server 2012 R2 used to host a System Center 2012 R2 Service Manager Data Warehouse Management Server
LON-DM1	Windows Server 2012 R2 used to host a System Center 2012 R2 Data Protection Manager Server
LON-OR1	Windows Server 2012 R2 used to host a System Center 2012 R2 Orchestrator Management Server
LON-OM1	Windows Server 2012 R2 used to host a System Center 2012 R2 Operations Manager Management Server
LON-WAP	Windows Server 2012 R2 used to host the Windows Azure Pack Tenant and Administrator Portals,
LON-WEB	Windows Server 2012 R2 used to host the Windows Azure Pack Web Sites



## Demonstration: Using Hyper-V Manager (Optional)

In this demonstration, you will learn how to:

- Open Hyper-V Manager
- Navigate the various sections/panes within Hyper-V Manager
- Identify the virtual machines used in the labs for this course
- Take a snapshot and apply a snapshot
- Connect to a virtual machine
- Start and sign in to a virtual machine
- Switch between full screen and window modes
- Revert to the previous snapshot
- When and how to shut down a virtual machine
- Close Hyper-V Manager

## Demonstration: Navigation in Windows Server 2012 (Optional)

- In this demonstration, you will learn how to:
  - Access applications
  - Access Control Panel
  - Use shortcut keys