

Module 5 – Application Server

Module 5 teaches the students to use the Application Server role to support server-based applications and Hyper-V to manage virtual networks.

Section 5.1: Application Server

Summary

This section discusses using the Application Server role to add support for running server-based applications. The following areas are discussed:

- Role services that can be installed with the Application Server role:
 - .NET Framework 3.5.1
 - Web Server (IIS) Support
 - COM+ Network Access
 - TCP Port Sharing
 - Windows Process Activation Service Support
 - Distributed Transactions
- Role services that can be added to provide support for application development and deployment:
 - ASP.NET
 - .NET Extensibility
 - ASP
 - CGI
 - ISAPI Extensions
 - ISAPI Filters
 - Server Side Includes (SSI)

Students will learn how to:

- Add application server roles and role services.
- Verify the operation of IIS.

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- 103. Plan infrastructure services server roles.
- 104. Plan application servers and services.

Video/Demo

	Time
<input type="checkbox"/>  5.1.1 Application Server	2:44
<input type="checkbox"/>  5.1.2 Configuring Application Server	<u>2:54</u>

Total

5:38

Number of Exam Questions: 4 questions

Total Time: About 15 minutes

Section 5.2: Hyper-V

Summary

This section explores using Hyper-V as the virtualization for Windows Server 2008 and 2008 R2. The following concepts are covered:

- Types of Virtualization
 - Server virtualization
 - Network virtualization
 - Storage virtualization
- Features supported by Hyper-V
- Additional features supported by Hyper-V on Windows Server 2008 R2 with SP1:
 - VM Chimney (also known as TCP Chimney offload)
 - Live migration
 - Dynamic virtual machine storage
 - Dynamic memory
- Components of the Hyper-V architecture:
 - Hypervisor
 - Partition
 - VMBus
 - Hyper stack
- Benefits of Hyper-V
- Installing Hyper-V
- Using the Hyper-V Manager to create virtual machines
- Methods to create hard disk that are used by virtual machines:
 - Virtual hard disk
 - Physical disk attached to the virtual machine
 - iSCSI storage
- Disk types that can be used to create a virtual disk:
 - Fixed
 - Dynamically expanding
 - Differencing
- Virtual Networking
 - Options available when configuring virtual networks:
 - External
 - Internal
 - Private
 - No network
 - Configuring virtual networking with Hyper-V
- Hyper-V implementation

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- Considerations when implementing virtual machines with Hyper-V:
 - Licensing
 - Migration
 - Snapshots

Students will learn how to:





- Add the Hyper-V role.
- Create and manage virtual networks.
- Create and manage virtual machines.

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- 104. Plan application servers and services.
- 401. Provision applications.

Video/Demo

Time

<input type="checkbox"/>  5.2.1 Hyper-V	8:48
<input type="checkbox"/>  5.2.3 Adding the Hyper-V Role	5:25
<input type="checkbox"/>  5.2.4 Managing Virtual Servers	7:10
<input type="checkbox"/>  5.2.8 Virtualization Planning	<u>8:59</u>
<i>Total</i>	<u>30:22</u>

Number of Exam Questions: 9 questions

Total Time: About 50 minutes