

## Building an Exchange Server 2010 Enterprise Infrastructure: Hands-On - 4 Days

### *Course 2501 Overview*

- You Will Learn How To**
- Build and configure a robust Exchange Server 2010 enterprise e-mail network solution
  - Leverage Exchange Database Availability Groups to achieve high server availability
  - Optimize and secure the routing of e-mail messages both internally and externally
  - Develop a security model with Transport Layer Security (TLS)
  - Extend permission levels with Role-Based Access Control (RBAC)
  - Manage the Transport Rules engine for compliance and ease of access
- Course Benefits** Exchange 2010 provides major structural improvements to the server and messaging architecture. These advances offer greater flexibility in managing a complex network of high availability mailbox databases. In this course, you gain the essential skills to build a complete Exchange 2010 organization using the latest technological improvements, including the PowerShell-based command set.
- Who Should Attend** Experienced administrators interested in administering and securing Exchange Server 2010. Knowledge of Exchange at the level of Course 2500, "Installing and Managing Exchange Server 2010," or equivalent experience is assumed. Experience with the Active Directory is also assumed.
- Hands-On Training** Throughout this course, extensive hands-on exercises provide practical experience building an Exchange infrastructure. Exercises include:
- Building a Client Access Server (CAS), mailbox and HUB Exchange 2010 Server
  - Configuring DAG on multiple Exchange servers
  - Testing Exchange routing topologies and setting AD site parameters
  - Designing an effective model for Exchange administration
  - Administering Exchange 2010 with PowerShell CMDlets in the EMS

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## Course 2501 Outline

### Exchange Server 2010 Architecture

- Identifying the Exchange Server roles
- Investigating the Exchange Management Console (EMC)
- Analyzing the new remote Exchange Management Shell (EMS) and PowerShell

### Maximizing High-Availability Exchange Leveraging high availability through Database Availability Groups (DAG)

- Creating and managing Database Availability Groups
- Configuring DAG Properties
- Mailbox database copies
- Database activation

### Transporting and Routing E-mail Processing of agent-submitted e-mail

- Scoping out e-mail content conversion
- Generating DSN message packages

### Defining intraorganizational routing components

- Configuring Active Directory sites and site links
- Microsoft Exchange Active Directory Topology service
- Reviewing routing group functions for transitional organizations, including RGCs and SMTP

### Configuring interorganizational routing components

- Overview of the Edge Transport Server role
- Preparing the list of accepted domains
- Testing out Active Directory site-based routing

### Investigating the moderated Exchange transport

- Pickup and replay directories
- Send and Receive connectors
- Processing recipient resolution
- Shadow redundancy

### Creating a Security Model for Exchange 2010

#### Implementing TLS in Exchange 2010

- Reviewing Transport Layer Security (TLS)
- Deploying inbound and outbound anonymous TLS certificates
- Setting up inbound STARTTLS certificates

### Exchange 2010 Transport Engine functions

- Testing MailTips functionality for Outlook 2010 and OWA
- Inspecting the SMTP firewall for mail header processing
- Analyzing message flow with Shadow Redundancy

### Federation Trusts for Exchange organizations

- Creating and managing Federation Trusts
- Organizing Federated Organization identifiers
- Defining Federation Trust properties

### Defining Permission Sets with RBAC

#### Setting up Exchange access

- Differentiating between Exchange and Windows administration
- Coexisting Exchange 2010 and Exchange 2007 permissions
- Scoping out Cross-Forest Permissions Management

### Role-based access control

- Addressing the Exchange 2010 management roles
- Building a tailored management role assignment policy

### Built-in management roles

- Defining the Exchange 2010 organization management structure
- Setting up View-Only organization management

### Setting up Exchange Policies

#### Specifying message classifications and metadata

- Analyzing message metadata
- Classifying Outlook messages for transport rule processing

### Applying message journaling

- Positioning Exchange message journaling in respect of legal and regulatory requirements
- Applying standard mailbox database journaling
- Assigning a user with premium message journaling

### Integrating Compliance Features

### Leveraging message records management

- Applying retention tags to categorize messages
- Configuring AutoTagging to simplify message classification

### Setting up rights protection

- Configuring the Active Directory Rights Management Service
- Assessing the AD RMS prelicensing agent
- Building ControlPoint Encryption
- Editing AD RMS Rights Policy templates

### Creating a Discovery Search

- Configuring the Discovery engine
- Performing a Search
- Inspecting the Discovery Management role
- Reviewing Advanced Query Syntax

### Automating the e-mail archive

- Defining archive and retention policies
- Applying provisional settings for personal archiving
- Creating retention policy tags