Course 20412A: Configuring Advanced Windows Server 2012 Services
Exam Code: 70-412
Duration: 40 Hrs

Course Outline

Module 1: Implementing Advanced Network Services

This module describes how to configure advanced features in the Domain Name System (DNS) and Dynamic Host Configuration Protocol (DHCP) with Windows Server 2012, and it covers IP Address Management (IPAM).

Lessons

- Configuring Advanced DHCP Features
- Configuring Advanced DNS Settings
- Implementing IP Address Management

Lab: Implementing Advanced Network Services

- Configuring Advanced DHCP Settings
- Configuring Advanced DNS Settings
- Configuring IP Address Management

Module 2: Implementing Advanced File Services

This module describes how to configure and manage iSCSI and Branch Cache, and how to implement Windows 2012 features that optimize storage utilization, such as File Server Resource Manager, file classification and data duplication.

Lessons

- Configuring iSCSI Storage
- Configuring Branch Cache
- Optimizing Storage Usage

Lab : Implementing Advanced File Services

- Configuring iSCSI Storage
- Configuring the File Classification Infrastructure

Lab: Implementing BanchCache

- Configuring the Main Office Servers for Branch Cache
- Configuring the Branch Office Servers for Branch Cache
- Configuring Client Computers for Branch Cache
- Monitoring Branch Cache

Module 3: Implementing Dynamic Access Control

This module describes how to plan and implement Dynamic Access Control.

Lessons

- Overview of Dynamic Access Control
- Planning for Dynamic Access Control
- Deploying Dynamic Access Control

Lab: Implementing Dynamic Access Control

- Planning the Dynamic Access Control Implementation
- Configuring User and Device Claims
- Configuring Resource Property Definitions
- Configuring Central Access Rules and Central Access Policies
- Validating and Remediating Dynamic Access Control
- Implementing New Resource Policies

Module 4: Implementing Network Load Balancing

This module describes how to plan and implement NLB. It will cover managing and configuring an NLB cluster and validating high availability for an NLB cluster.

Lessons

- Overview of NLB
- Configuring an NLB Cluster
- Planning an NLB Implementation

Lab: Implementing Network Load Balancing

- Implementing an NLB Cluster
- Configuring and Managing an NLB Cluster
- Validating High Availability for the NLB Cluster

Module 5: Implementing Failover Clustering

This module describes the failover clustering features in Windows Server 2012. It explains how to implement a failover cluster, configure highly available applications and services on a failover cluster, maintain a failover cluster, and use new maintenance features such as Cluster Aware Updating (CAU). It will also cover how to implement multisite failover clustering.

Lessons

- Overview of Failover Clustering
- Implementing a Failover Cluster
- Configuring Highly Available Applications and Services on a Failover Cluster
- Maintaining a Failover Cluster
- Implementing a Multi-Site Failover Cluster

Lab: Implementing Failover Clustering

- Configuring a Failover Cluster
- Deploying and Configuring a Highly Available File Server
- Validating the Deployment of a Highly Available File Server
- Configuring Cluster-Aware Updating on the Failover Cluster

Module 6: Implementing Failover Clustering with Hyper-V

This module describes the options for making virtual machines highly available. It explains how to implement virtual machines in a failover cluster that was deployed on a host and how you can move a virtual machine or its storage. In addition, it provides a high-level overview of System Center Virtual Machine Manager (SCVMM) 2012.

Lessons

- Overview of Integrating Hyper-V with Failover Clustering
- Implementing Hyper-V Virtual Machines on Failover Clusters
- Implementing Hyper-V Virtual Machine Movement
- Managing Hyper-V Virtual Environments by Using VMM

Lab : Implementing Failover Clustering with Hyper-V

- Configuring Hyper-V Replicas
- Configuring a Failover Cluster for Hyper-V
- Configuring a Highly Available Virtual Machine

Module 7: Implementing Disaster Recovery

This module describes considerations for implementing a disaster recovery solution, and how to plan and implement a backup solution for Windows Server 2012. In addition, it explains how to plan and implement server and data recovery using Windows Server backup and Microsoft Online backup.

Lessons

- Overview of Disaster Recovery
- Implementing Windows Server Backup
- Implementing Server and Data Recovery

Lab: Implementing Windows Server Backup and Restore

- Backing Up Data on a Windows Server 2012 Server
- Restoring Files Using Windows Server Backup
- Implementing Microsoft Online Backup and Restore

Module 8: Implementing Distributed Active Directory Domain Services Deployments

This module describes the components of a highly complex AD DS deployment, which includes implementing a distributed AD DS deployment and configuring AD DS forest trusts.

Lessons

- Overview of Distributed AD DS Deployments
- Implementing a Distributed AD DS Environment
- Configuring AD DS Trusts

Lab: Implementing Complex AD DS Deployments

- Implementing Child Domains in AD DS
- Implementing Forest Trusts
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Module 9: Implementing Active Directory Domain Services Sites and Replication

This module describes how replication works in a Windows Server 2012 AD DS environment, including how to configure AD DS sites so that you can optimize AD DS network traffic and how to configure and monitor AD DS replication.

Lessons

- Overview of AD DS Replication
- Configuring AD DS Sites

- Configuring and Monitoring AD DS Replication

Lab: Implementing AD DS Sites and Replication

- Modifying the Default Site
- Creating Additional Sites and Subnets
- Configuring AD DS Replication

Module 10: Implementing Active Directory Certificate Services

This module describes the Public Key Infrastructure (PKI) components and concepts. It covers implementing a certification authority infrastructure, planning and implementing a certificate template deployment using an AD CS certification authority, and planning and implementing certificate distribution and revocation.

Lessons

- PKI Overview
- Deploying CAs
- Deploying and Managing Certificate Templates
- Implementing Certificate Distribution and Revocation
- Managing Certificate Recovery

Lab: Implementing Active Directory Certificate Services

- Deploying a Standalone Root CA
- Deploying an Enterprise Subordinate CA
- Configuring Certificate Templates
- Configuring Certificate Enrollment
- Configuring Certificate Revocation
- Configuring Key Recovery

Module 11: Implementing Active Directory Rights Management Services

This module describes the AD RMS features and functionality. It explains how to use AD RMS to configure content protection, and deploy and manage an AD RMS infrastructure.

Lessons

- AD RMS Overview
- Deploying and Managing an AD RMS Infrastructure
- Configuring AD RMS Content Protection
- Configuring External Access to AD RMS

Lab : Configuring AD RMS

- Installing and Configuring AD RMS
- Configuring AD RMS Templates
- Implementing the AD RMS Trust Policies
- Verifying the AD RMS Deployment

Module 12: Implementing Active Directory Federation Services

This module provides identity federation business scenarios, and it describes how to use AD FS to address such scenarios. It explains how to configure AD FS prerequisites, deploy AD FS services, enable single sign-on (SSO) for an organization, and enable SSO between federated business partners.

Lessons

- Overview of AD FS
- Deploying AD FS
- Implementing AD FS for a Single Organization
- Deploying AD FS in a B2B Federation Scenario

Lab: Implementing AD FS

- Configuring AD FS Prerequisites
- Installing and Configuring AD FS
- Configuring AD FS for a Single Organization
- Configuring AD FS for Federated Business Partners