

Corso: Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure

Codice PCSNET: MWS1-7

Cod. Vendor: 6421

Durata: 5 gg.

Obiettivi

- Pianificare e configurare un'infrastruttura di rete IPv4.
- Implementare il DHCP all'interno della propria organizzazione.
- Configurare e risolvere i problemi DNS.
- Pianificare una transizione verso IPv6 e risolverne i problemi.
- Configurare e risolvere i problemi di routing e accesso remoto.
- Installare, configurare e risolvere i problemi del servizio Network Policy Server Role.
- Implementare la Network Access Protection.
- Implementare funzioni di sicurezza in Windows Server 2008 e Windows Server 2008 R2.
- Implementare funzioni di sicurezza in Windows Server 2008 e Windows Server 2008 R2, per la protezione delle comunicazioni di rete.
- Configurare i servizi di condivisione file e di stampa.
- Attivare e configurare servizi per ottimizzare l'accesso dati da parte delle filiali.
- Monitorare lo storage di rete.
- Recuperare i dati su Windows Server 2008 e Windows Server 2008 R2.
- Monitorare i servizi di infrastruttura di rete di Windows Server 2008 e Windows Server R2.

Prerequisiti

- E' necessario disporre di una conoscenza intermedia di sistemi operativi Windows Server, come Windows Server 2003, Windows Server 2008 o Windows Server 2008 R2 Sp1 e Windows sistemi operativi client, come Windows Vista o Windows 7. Sarebbe utile una conoscenza del sistema operativo client equivalente a quella delle seguenti certificazioni:
 - Esame 70-680: TS: Windows 7, Configurazione o Esame 70-620: TS: Windows Vista, Configurazione
- E' necessario comprendere il funzionamento del TCP/IP e avere una conoscenza di base della risoluzione dei nomi (Domain Name System [DNS] / Windows Internet Name Service [WINS]) e dei metodi di connessione (wired, wireless, reti private virtuali [VPN]).
- Si dovrebbe avere la consapevolezza di best practice di sicurezza come ad esempio i permessi dei file, i metodi di autenticazione, i metodi di hardening di workstation e server, e così via.
 - Il livello minimo di conoscenza richiesto in questi tre punti, escludendo l'esperienza, può essere coperto dall'aver una conoscenza equivalente al corso **MOC 6420: Fondamenti di Windows Server 2008**
- Utile ma non strettamente necessaria anche una conoscenza di base di Active Directory.

CONTENUTI:

Module 1: Planning and Configuring IPv4

Implementing an IPv4 Network Infrastructure
Overview of Name Resolution Services in an IPv4 Network Infrastructure
Configuring and Troubleshooting IPv4

Lab : Planning and Configuring IPv4

Selecting an IPv4 Addressing scheme for branch offices
Implementing and Verifying IPv4 in the branch office

Module 2: Configuring and Troubleshooting DHCP

Overview of the DHCP Server Role
Configuring DHCP Scopes
Configuring DHCP Options
Managing a DHCP Database
Monitoring and Troubleshooting DHCP
Configuring DHCP Security

Lab : Configuring and Troubleshooting the DHCP Server Role

Selecting a Suitable DHCP Configuration
Implementing DHCP
Reconfiguring DHCP in the Head Office
Testing the Configuration
Troubleshooting DHCP Issues

Module 3: Configuring and Troubleshooting DNS

Installing the DNS Server Role
Configuring the DNS Server Role
Configuring DNS Zones
Configuring DNS Zone Transfers
Managing and Troubleshooting DNS

Lab : Configuring and Troubleshooting DNS

Selecting a DNS Configuration
Deploying and Configuring DNS
Troubleshooting DNS

Module 4: Configuring and Troubleshooting IPv6 TCP/IP

Overview of IPv6
IPv6 Addressing
Coexistence with IPv6
IPv6 Transition Technologies
Transitioning from IPv4 to IPv6

Lab : Configuring an ISATAP Router

Configuring a New IPv6 Network and Client
Configuring an ISATAP Router to Enable Communication Between an IPv4 Network and an IPv6 Network

Lab : Converting the Network to Native IPv6

Transitioning to a Native IPv6 Network

Module 5: Configuring and Troubleshooting Routing and Remote Access

Configuring Network Access
Configuring VPN Access
Overview of Network Policies
Overview of the Connection Manager Administration Kit
Troubleshooting Routing and Remote Access
Configuring DirectAccess

Lab : Configuring and Managing Network Access

Configuring Routing and Remote Access as a VPN Remote Access Solution
Configuring a Custom Network Policy
Create and distribute a CMAK Profile

Lab : Configuring and Managing DirectAccess

Configure the AD DS Domain Controller and DNS
Configure the PKI Environment
Configure the DirectAccess Clients and Test Intranet Access
Configure the DirectAccess Server
Verify DirectAccess Functionality

Module 6: Installing, Configuring, and Troubleshooting the Network Policy Server Role Service

Installing and Configuring a Network Policy Server
Configuring RADIUS Clients and Servers
NPS Authentication Methods
Monitoring and Troubleshooting a Network Policy Server

Lab : Configuring and Managing Network Policy Server

Installing and Configuring the Network Policy Server Role Service
Configuring a RADIUS Client
Configuring Certificate Auto-Enrollment
Configuring and Testing the VPN

Module 7: Implementing Network Access Protection

Overview of Network Access Protection
How NAP Works
Configuring NAP
Monitoring and Troubleshooting NAP

Lab : Implementing NAP into a VPN Remote Access Solution

Configuring NAP Components
Configuring Client Settings to Support NAP

Module 8: Increasing Security for Windows Servers

Windows Security Overview
Configuring Windows Firewall with Advanced Security
Deploying Updates with Windows Server Update Services

Lab : Increasing Security for Windows Servers

Deploying a Windows Firewall Rule
Implementing WSUS

Module 9: Increasing Security for Network Communication

Overview of IPsec
Configuring Connection Security Rules
Configuring NAP with IPsec Enforcement
Monitoring and Troubleshooting IPsec

Lab : Increasing Security for Network Communication

Selecting a Network Security Configuration
Configuring IPsec to Authenticate Computers
Testing IPsec Authentication

Module 10: Configuring and Troubleshooting Network File and Print Services

Configuring and Troubleshooting File Shares
Encrypting Network Files with EFS
Encrypting Partitions with BitLocker
Configuring and Troubleshooting Network Printing

Lab : Configuring and Troubleshooting Network File and Print Services

Creating and Configuring a File Share
Encrypting and Recovering Files
Creating and Configuring a Printer Pool

Module 11: Optimizing Data Access for Branch Offices

Branch Office Data Access
DFS Overview
Overview of DFS Namespaces
Configuring DFS Replication
Configuring BranchCache

Lab : Implementing DFS

Installing the DFS Role Service
Configuring the Required Namespace
Configuring DFS Replication

Lab : Implementing BranchCache

Performing Initial Configuration Tasks for BranchCache
Configuring BranchCache Clients
Configuring BranchCache on the Branch Server
Monitoring BranchCache

Module 12: Controlling and Monitoring Network Storage

Monitoring Network Storage
Controlling Network Storage Utilization
Managing File Types on Network Storage

Lab : Controlling and Monitoring Network Storage

Configuring FSRM Quotas
Configuring File Screening
Configuring File Classification and File Management

Module 13: Recovering Network Data and Servers

Recovering Network Data with Volume Shadow Copies
Recovering Network Data and Servers with Windows Server Backup

Lab : Recovering Network Data and Servers

Configuring Shadow Copies
Configuring a Scheduled Backup

Module 14: Monitoring Windows Server 2008 Network Infrastructure Servers

Monitoring Tools
Using Performance Monitor
Monitoring Event Logs

Lab : Monitoring Windows Server 2008 Network Infrastructure Servers

Establishing a Performance Baseline
Identifying the Source of a Performance Problem
Centralizing Events Logs