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## Configuring and Troubleshooting Windows Server 2008 Network Infrastructure

Duration: 5 Days    Course Code: M6421

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### Overview:

This instructor-led course provides students with the knowledge and skills to configure and troubleshoot a Windows Server 2008 network infrastructure. Students will learn to implement and configure secure network access and implement fault tolerant storage technologies. Students will gain an understanding of the network technologies most commonly used with Windows Server 2008 and IP-enabled networks. Students will also learn how to secure servers and maintain update compliance.

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### Target Audience:

The primary audience for this course includes Active Directory technology specialists aspiring to be Enterprise Administrators (Tier 4 day-to-day network operations) or Network Administrators (Tier 2). Experienced Server Administrators aspiring to be Enterprise Administrators would also benefit from this course. The secondary audience for this course includes Storage Area Network Administrators who need to understand this information to deploy or extend their current storage infrastructure. Operations Managers who need this information to support troubleshooting efforts and business decisions would also benefit from this course.

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### Objectives:

- After completing this course, students will be able to:
  - Install and configure servers.
  - Configure and troubleshoot DNS.
  - Configure and manage WINS.
  - Configure and troubleshoot DHCP.
  - Configure and troubleshoot IPv6 TCP/IP.
  - Configure and troubleshoot Routing and Remote Access.
  - Install, configure, and troubleshoot the Network Policy Server Role service.
  - Configure Network Access Protection.
  - Configure IPsec.
  - Monitor and troubleshoot IPsec.
  - Configure and manage Distributed File System.
  - Configure and manage storage technologies.
  - Configure availability of network resources and content.
  - Configure server security compliance.
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### Prerequisites:

Before attending this course, students must have:

- Working experience with Windows Server 2003.
  - Basic knowledge of Active Directory.
  - An understanding of security concepts and methodologies (for example, corporate policies)
  - Basic knowledge of DHCP.
  - Basic knowledge of IPsec.
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## Content:

- Installing and Configuring Servers  
This module explains how to identify the appropriate usage scenario and installation type for a server and then install and configure appropriate server roles and features.
- Installing Windows Server 2008
- Managing Server Roles and Features
- Overview of the Server Core Installation Option
- Configuring and Troubleshooting DNS  
This module explains how to configure, manage and troubleshoot DNS server and zone properties to be used in a secure environment.
- Installing the DNS Server Role
- Configuring the DNS Server Role
- Configuring DNS Zones
- Configuring DNS Zone Transfers
- Managing and Troubleshooting DNS
- Configuring and Managing WINS  
This module explains how to configure, manage and troubleshoot WINS servers.
- Installing the Windows Internet Name Service
- Managing the WINS Server
- Configuring WINS Replication
- Migrating from WINS to DNS
- Configuring and Troubleshooting DHCP  
This module explains how to configure, manage and troubleshoot a DHCP environment supporting an IPV4 infrastructure.
- Overview of the DHCP Server Role
- Configuring DHCP Scopes and Options
- Managing a DHCP Database
- Monitoring and Troubleshooting DHCP
- Securing DHCP
- Configuring and Troubleshooting IPv6 TCP/IP  
This module explains how to configure and troubleshoot static and dynamic IPv6 addresses, including subnet prefix lengths, gateways and DNS servers.
- Overview of IPv6
- Coexistence with IPv6
- IPv6 Tunneling Technologies
- Transitioning from IPv4 to IPv6
- Troubleshooting IPv6
- Configuring and Troubleshooting Routing and Remote Access  
This module explains how to configure and troubleshoot Routing and Remote Access Services.
- Configuring Network Access
- Configuring VPN Access
- Overview of Network Policies
- Overview of the Connection Manager Administration Kit
- Troubleshooting Routing and Remote Access
- Installing, Configuring, and Troubleshooting the Network Policy Server Role Service  
This module explains how to install, configure and troubleshoot 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
- Configuring Network Access Protection  
This module explains how to configure and manage NAP for DHCP, VPN, and 802.1X.
- Overview of Network Access Protection
- How NAP Works
- Configuring NAP
- Monitoring and Troubleshooting NAP
- Configuring IPsec  
This module explains how to configure and test IPsec.
- Overview of IPsec
- Configuring Connection Security Rules
- Configuring IPsec NAP Enforcement
- Monitoring and Troubleshooting IPsec  
This module explains how to monitor and troubleshoot IPsec.
- Monitoring IPsec Activity
- Troubleshooting IPsec
- Configuring and Managing Distributed File System  
This module explains how to configure and manage Distributed File System.
- DFS Overview
- Configuring DFS Namespaces
- Configuring DFS Replication
- Configuring and Managing Storage Technologies  
This module explains how to configure and troubleshoot file system storage technologies included with Windows Server 2008.
- Overview of Windows Server 2008 Storage Management
- Managing Storage Using File Server Resource Manager
- Configuring Quota Management
- Implementing File Screening
- Managing Storage Reports
- Configuring Availability of Network Resources and Content  
This module explains how to describe and configure backup and recovery methods.
- Backing Up Data
- Configuring Shadow Copies
- Providing Server and Service Availability
- Configuring Server Security Compliance  
This module explains how to configure and analyze server security and security update compliance.
- Securing a Windows Infrastructure
- Using Security Templates to Secure Servers
- Configuring an Audit Policy
- Overview of Windows Server Update Services
- Managing WSUS

## Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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