



www.compvisions.com
16 Corporate Woods Blvd.
Albany, NY 12211

Computer Visions Course Outline

Get What You Want

We offer highly customizable group training courses: desktop applications, web development, networking & operating systems, technical certification, professional development & skills, help desk.

Get It When & Where You Want It

All Computer Visions courses are available for presentation on-site or off-site for your convenience. We can roll out any combination of courses at one or more locations anywhere in the United States, according to your requirements and time table. Just let us know and we'll work with you!

Corporate Training Solutions

Corporations look to us to train their employees. Why? Because our proven training methods have increased employee proficiency and productivity. We assign one person to each of our corporate clients to ensure quality service, and we also offer extranet Web registration, management, reporting and billing for all clients. Simplicity, quality and outstanding service are our hallmarks.

Consulting Solutions

Consulting is about trust,

#6421: Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure

Description: This five-day instructor-led course provides students with the knowledge and skills to configure and troubleshoot a Windows Sever 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.

Course Outline:

Module 1: Installing and Configuring Servers

This module explains how to identify the appropriate usage scenario and install for a server and then install and configure appropriate server roles and features.

Lessons

- Installing Windows Server 2008
- Managing Server Roles and Features
- Overview of the Server Core Installation Option

Lab : Installing and Configuring Servers and Server Roles

service and accountability. Our consulting division is one of the fastest-growing around. Why? Clients trust us to provide excellent service and expertise. Visit our [consulting section](#) for more information.

Classroom and Computer Rentals

Need space and equipment to conduct specialized presentations or classes? We can help. With our world class classrooms and state of the art projection and presentation equipment, we take care of the details so you can have a successful presentation.

Exercise 1: Identifying Server Types

Exercise 2: Installing and Configuring Server Roles and Features

Exercise 3: Configuring Server Core and Performing Basic Management Tasks

After completing this module, students will be able to:

Identify the system requirements and process for installing Windows Server 2008.

Describe the difference between server roles and features.

Describe the benefits of and roles supported by a Server Core installation.

Module 2: 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.

Lessons

Installing the DNS Server Role

Configuring the DNS Server Role

Configuring DNS Zones

Configuring DNS Zone Transfers

Managing and Troubleshooting DNS

Lab : Configuring and Verifying a DNS Solution

Exercise 1: Configuring a DNS Infrastructure

Exercise 2: Monitoring and Troubleshooting DNS

After completing this module, students will be able to:

Install the DNS Server role.

Configure the DNS Server role to support various query types.

Configure DNS zones.

Configure DNS zone transfers.

Manage DNS zone records and troubleshoot DNS using various tools.

Module 3: Configuring and Managing WINS

This module explains how to configure, manage and troubleshoot WINS servers.

Lessons

Overview of the Windows Internet Name Service

Managing the WINS Server

Configuring WINS Replication
Migrating from WINS to DNS

Lab : Configuring a WINS Infrastructu

Exercise 1: Installing WINS
Exercise 2: Configuring WINS Burst Handling
Exercise 3: Configuring WINS Replication
Exercise 4: Migrating from WINS to DNS

After completing this module, students will be able to:

Install and configure the Windows Internet Name Service.
Manage WINS client records.
Configure and manage WINS replication.
Migrate a WINS infrastructure to DNS.

Module 4: Configuring and Troubleshooting DHCP

This module explains how to configure, manage and troubleshoot a DHCP environment supporting an IPV4 infrastructure.

Lessons

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

Lab : Configuring and Troubleshooting the DHCP Server Role

Exercise 1: Installing and Authorizing the DHCP Server Role
Exercise 2: Configuring a DHCP Scope
Exercise 3: Troubleshooting Common DHCP Issues

After completing this module, students will be able to:

Describe how DHCP works.
Configure DHCP scopes and options.
Manage a DHCP database.
Monitor and troubleshoot DHCP.
Secure DHCP.

Module 5: 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.

Lessons

- Overview of IPv6
- Coexistence with IPv6
- IPv6 Tunneling Technologies
- Transitioning from IPv4 to IPv6
- Troubleshooting IPv6

Lab : Lab A: Configuring an ISATAP Router

- Exercise 1: Configuring a New IPv6 Network and Client
- Exercise 2: Configuring an ISATAP Router to Enable Communication Between an IPv4 Network and an IPv6 Network

Lab : Lab B: Converting the Network

- Exercise 1: Transitioning to an IPv6-Only Network

After completing this module, students will be able to:

- Describe the benefits and considerations of IPv6.
- Describe how IPv6 can coexist with IPv4 environments.
- Describe IPv6 tunneling technologies used to interoperate with IPv4 networks.
- Describe the process used to migrate from IPv4 to IPv6.
- Troubleshoot IPv6 connectivity.

Module 6: Configuring and Troubleshooting Routing and Remote Access

This module explains how to configure and troubleshoot Routing and Remote Access Services.

Lessons

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

Lab : Configuring and Managing Network Access

- Exercise 1: Configuring Routing and Remote Access as a VPN Remote Access Solution
- Exercise 2: Configuring a Custom Network Policy
- Exercise 3: Configuring Logging
- Exercise 4: Configuring a Connection Profile

After completing this module, students will be able to:

- Install and configure the Routing and Remote Access service.
- Configure VPN access.
- Configure network policies.
- Configure a connection profile using the Connection Manager Administration Kit.
- Troubleshoot Routing and Remote Access.

Module 7: 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.

Lessons

- 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

- Exercise 1: Installing and Configuring the Network Policy Server Role Service
- Exercise 2: Configuring a RADIUS Client
- Exercise 3: Configuring Certificate Auto-Enrollment

After completing this module, students will be able to:

- Install and configure the Network Policy Server role.
- Configure a RADIUS client and server.
- Describe NPS authentication methods.
- Monitor and troubleshoot a Network Policy server.

Module 8: Configuring Network Access Protection

This module explains how to configure and manage NAP for DHCP, VPN, and 802.1X.

Lessons

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

Lab : Configuring NAP for DHCP and VPN

Exercise 1: Configuring NAP for DHCP Clients
Exercise 2: Configuring NAP for VPN Clients

After completing this module, students will be able to:

Describe the benefits and uses of NAP.
Describe how NAP works in various access scenarios.
Configure NAP.
Monitor and troubleshoot NAP.

Module 9: Configuring IPsec

This module explains how to configure and test IPsec.

Lessons

Overview of IPsec
Configuring Connection Security Rules
Configuring IPsec NAP Enforcement

Lab : Configuring IPsec NAP Enforcement

Exercise 1: Preparing the Network Environment for IPsec NAP Enforcement
Exercise 2: Configuring and Testing IPsec NAP Enforcement

After completing this module, students will be able to:

Describe the benefits and uses of IPsec.
Configure Connection Security rules.
Configure IPsec NAP enforcement.

Module 10: Monitoring and Troubleshooting IPsec

This module explains how to monitor and troubleshoot IPsec.

Lessons

Monitoring IPsec Activity

Troubleshooting IPsec

Lab : Monitoring and Troubleshooting IPsec

Exercise 1: Monitoring IPsec Connectivity

Exercise 2: Configuring Connection Security

Exercise 3: Troubleshooting IPsec

After completing this module, students will be able to:

Monitor IPsec activity.

Troubleshoot IPsec.

Module 11: Configuring and Managing Distributed File System

This module explains how to configure and manage Distributed File System.

Lessons

DFS Overview

Configuring DFS Namespaces

Configuring DFS Replication

Lab : Configuring DFS

Exercise 1: Installing the Distributed File System Role Service

Exercise 2: Creating a DFS Namespace

Exercise 3: Configuring Folder Targets and Folder Replication

Exercise 4: Viewing Diagnostic Reports for Replicated Folders

After completing this module, students will be able to:

Describe the Distributed File System.

Manage DFS namespaces.

Configure DFS replication.

Module 12: Configuring and Managing Storage Technologies

This module explains how to configure and troubleshoot file system storage technologies included with Windows Server 2008.

Lessons

Windows Server 2008 Storage Management Overview

Managing Storage Using File Server Resource Manager

Configuring Quota Management

Implementing File Screening
Managing Storage Reports

Lab : Configuring and Managing Storage Technologies

Exercise 1: Installing the FSRM Role Service
Exercise 2: Configuring Storage Quotas
Exercise 3: Configuring File Screening
Exercise 4: Generating Storage Reports

After completing this module, students will be able to:

Describe storage management solutions included in Windows Server 2008.
Manage storage using File Server Resource Manager (FSRM).
Configure quota management using FSRM.
Implement file screening using FSRM.
Manage storage reports.

Module 13: Configuring Availability of Network Resources and Content

This module explains how to describe and configure backup and recovery methods.

Lessons

Backing Up Data
Configuring Shadow Copies
Providing Server and Service Availability

Lab : Configuring Availability of Network Resources

Exercise 1: Configuring Windows Server Backup and Restore
Exercise 2: Configuring Shadow Copying
Exercise 3: Configuring Network Load Balancing

After completing this module, students will be able to:

Back up data.
Configure shadow copies.
Provide server and service availability.

Module 14: Configuring Server Security Compliance

This module explains how to configure and analyze server security and security update compliance.

Lessons

Securing a Windows Infrastructure
Using Security Templates to Secure Servers
Configuring an Audit Policy
Overview of Windows Server Update Services
Managing WSUS

Lab : Configuring Server Security Compliance

Exercise 1: Configuring and Analyzing Security
Exercise 2: Analyzing Security Templates
Exercise 3: Configuring Windows Software Update Services

After completing this module, students will be able to:

Secure a server role within a Windows infrastructure.
Secure servers using security templates.
Configure an audit policy.
Describe the use of Windows Server Update Services.
Manage updates using WSUS.