



## Key Data

**Workshop #:** 2210

**Number of Days:** 3

**Format:** Workshop

**Certification Exams:** 70-296

This course helps you prepare for the following Microsoft Certified Professional exams:

- Exam 70-296, *Planning, Implementing, and Maintaining a Microsoft® Windows Server™ 2003 Environment for an MCSE Certified on Microsoft Windows® 2000*

**Certification Track:** MCSE

**This workshop syllabus should be used to determine whether the course is appropriate for the students, based on their current skills and technical training needs.**

**Content, prices, and availability are subject to change without notice.**

# Final Workshop Syllabus

## ***Updating Systems Engineer Skills from Microsoft® Windows® 2000 to Windows Server™ 2003***

*Elements of this syllabus are subject to change.*

This three-day, instructor-led workshop provides students with the knowledge and new skills that they need to plan and maintain a Microsoft® Windows Server™ 2003 networked environment.

This discovery-based workshop consists primarily of labs that provide hands-on experience focused exclusively on the skills and objectives that align with Exam 70-296, *Planning, Implementing, and Maintaining a Microsoft® Windows Server™ 2003 Environment for an MCSE Certified on Windows® 2000*.

### **Audience**

This workshop is intended for Windows 2000 systems engineers with experience planning, implementing, and supporting a Windows 2000-based Microsoft Active Directory® directory service network. The workshop specifically targets students who have practical, hands-on experience using Windows 2000 and who need to quickly learn how to leverage those skills in a Windows Server 2003 environment. This learning product is designed to train people that learn best by doing.

This workshop is also meant as an aid in preparing for Exam 70-296, *Planning, Implementing, and Maintaining a Microsoft® Windows Server™ 2003 Environment for an MCSE Certified on Microsoft Windows® 2000*. Note that this exam will be available only to individuals who hold an MCSE on Windows 2000 certification.

### **At Workshop Completion**

After completing this workshop, students will be able to:

- Plan a Domain Name System (DNS) strategy for an enterprise organization.
- Plan for an implementation of Active Directory and for Active Directory replication.
- Implement Active Directory and DNS.
- Troubleshoot Transmission Control Protocol/Internet Protocol (TCP/IP), name resolution, and Group Policy.
- Plan and implement cross-forest trusts and new security options.
- Use Group Policy in Windows Server 2003 to deploy and restrict software.
- Use Group Policy in Windows Server 2003 to set advanced security settings.
- Plan and implement secure Routing and Remote Access.

### **Prerequisites**

Before attending this workshop, students must have:

- An MCSE on Windows 2000 certification, and equivalent knowledge and skills. Students can gain the prerequisite knowledge and skills by completing the following Microsoft Official Workshop:

*2209, Updating Systems Administrator Skills from Microsoft® Windows® 2000 to Windows Server™ 2003*

### **Student Materials**

The student kit includes a workbook and other necessary materials for this class.

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**For a referral to a Microsoft Certified Technical Education Center in your area, see the Microsoft Training and Certification Web site at <http://www.microsoft.com/traincert>. Call your local Microsoft Certified Technical Education Center for more information and to register for classes.**

The following software is provided in the student kit:

- Evaluation copy of Windows Server 2003, Enterprise Edition (for educational use only)

## **Unit 1: Introduction to Performing Systems Engineer Skills in Windows Server 2003**

This unit explains the systems engineer tasks that are new or different from those performed in Windows 2000 and introduces the scenarios and tools that will be used throughout the workshop.

### **Unit Objectives**

After completing this unit, students will be able to:

- Describe, at a high level, the new features in Windows Server 2003 that pertain to the systems engineer job role.
- Use the lab environment and locate key resources that are used to complete the labs.

## **Unit 2: Planning a DNS Namespace Design**

This unit shows students the new features of DNS in Windows Server 2003, focusing on planning issues regarding improving fault tolerance in DNS, ensuring DNS resolution across forests, planning for \_MSDCS zone availability and security to DNS servers in a forest, and creating DNS zones securely and with the least administrative effort.

### **Unit Objectives**

After completing this unit, students will be able to:

- Evaluate existing DNS infrastructure and determine where new Windows Server 2003 features can improve name resolution.
- Determine when to use stub zones versus conditional forwarding.
- Ensure availability of the \_MSDCS zone.
- Plan Active Directory partitions to replicate zone data when needed.
- Evaluate DNS zone security.

## **Unit 3: Planning Active Directory Deployment**

This unit shows students new features of Active Directory in Windows Server 2003, focusing on planning issues.

### **Unit Objectives**

After completing this unit, students will be able to:

- Evaluate the placement of global catalog servers.
- Plan optimal replication by exploiting the following replication enhancements:
  - Linked value replication (LVR)
  - Partial attribute set (PAS) replication
  - Inter-Site Topology Generator (ISTG) improvements
- Evaluate forest and domain functionality (versioning) levels.

#### **Unit 4: Implementing DNS with Active Directory**

This unit gives students a hands-on opportunity to experience new features of Windows Server 2003 and learn how to use them to implement Active Directory and DNS.

##### **Unit Objectives**

After completing this unit, students will be able to:

- Install Active Directory by using the advanced features of the Active Directory Installation Wizard.
- Install and configure DNS.
- Implement a conditional forwarder.
- Create stub zones.
- Ensure high availability on the \_MSDCS subdomain.
- Create a DNS forward lookup zone.
- Raise domain and forest functionality.
- Create a new application directory partition.
- Set the replication scope of a new application directory partition.

#### **Unit 5: Troubleshooting TCP/IP, Name Resolution, and Group Policy**

This unit gives students a hands-on opportunity to experience new features of Windows Server 2003 and learn how to use them to troubleshoot TCP/IP, name resolution, and Group Policy.

##### **Unit Objectives**

After completing this unit, students will be able to:

- Diagnose and resolve issues related to DNS services.
- Troubleshoot Group Policy.
- Diagnose and resolve issues related to client computer configuration.
- Troubleshoot network connectivity issues.

## **Unit 6: Planning and Implementing Multiple Forests in Active Directory**

This unit asks students to plan and implement multiple forests in Active Directory by using the model of adding a new organization to an existing company. Students will implement cross-forest trust, manage user authentication, identify possible security concerns, and come to understand how to resolve naming conflicts between two forests.

### **Unit Objectives**

After completing this unit, students will be able to:

- Evaluate the need for security identifier (SID) filtering, selective authentication, resolving naming conflicts, and routing name suffixes in a multi-forest environment.
- Establish forest trusts.

## **Unit 7: Using Group Policy in Windows Server 2003 to Deploy and Restrict Software**

This unit gives students a hands-on opportunity to experience new features of Windows Server 2003 pertaining to Group Policy and to learn how they can use it to deploy and restrict software.

### **Unit Objectives**

After completing this unit, students will be able to:

- List reasons for controlling a computer user's environment.
- Create a software restriction policy.
- Deploy software so that an application is completely installed at user logon.
- Use Windows Management Instrumentation (WMI) filters to restrict the application of Group Policy objects (GPOs).

## **Unit 8: Using Group Policy in Windows Server 2003 to Set Advanced Security Settings**

This unit gives students a hands-on opportunity to experience new features of Windows Server 2003 and to learn how to use Group Policy to implement advanced security settings.

### **Unit Objectives**

After completing this unit, students will be able to:

- Configure wireless network settings.
- Configure a user environment.
- Apply Encrypting File System (EFS) enhancements.

## **Unit 9: Planning and Implementing Secure Routing and Remote Access**

This unit gives students a hands-on opportunity to experience new features of Windows Server 2003 and to learn how to use them in implementing Routing and Remote Access.

### **Unit Objectives**

After completing this unit, students will be able to:

- Plan, implement, and maintain Routing and Remote Access.
- Create and implement an Internet Protocol (IP) Security (IPSec) policy.
- Configure IPSec by using Netsh.
- Set up IPSec policy monitoring.

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