



Microsoft® Premier Educate Program

Get hands-on experience troubleshooting a wide range of issues in Windows Server 2003 and Windows Server 2008 Active Directory.

This will effectively reduce time to finding resolutions by teaching support staff key skills to effectively diagnose critical problems.

Windows Server 2003/2008: Active Directory Troubleshooting

Overview

The updated WorkshopPLUS – **Windows Server 2003/2008: Active Directory Troubleshooting** 4-day WorkshopPLUS course now covers Windows Server 2003, Windows Server 2008 and selected topics in Windows Server 2008 R2. The course provides participants with the skills required to understand and successfully troubleshoot Active Directory problems, including AD-related critical services, DNS issues, logon failures, Active Directory replication failures, as well as FRS and DFSR related issues. There is an optional module on troubleshooting domain controller performance. Students learn the tools used in Active Directory troubleshooting to help them accelerate time to resolution. Hands-on lab exercises reinforce key learnings. Advice about general disaster planning and server management is not included (see the Active Directory: Backup and Disaster Recover WorkshopPLUS course for disaster recovery planning).

This workshop contains Level 300 content. Students are expected to already know Active Directory concepts. Students who do not have this knowledge might be very unsatisfied since this course does not teach core concepts, except those needed specifically to understand troubleshooting. Please review the student criteria information (on the next page) and contact your Microsoft Services representative to ensure that this workshop is appropriate to the student's experience and technical expertise.



Technical Highlights

After completing this course, students will be able to understand:

- The dependencies of Active Directory on DNS, and how to troubleshoot and diagnose DNS issues, including Windows Server 2008 RODC features.
- How to identify Client Logon Authentication problems such as Tokensize.
- The processes supporting directory replication and troubleshooting.
- How to diagnose and correct common FRS and DFSR problems that lead to Sysvol replication issues.
- How to identify and troubleshoot key domain controller performance issues (optional, as time allows in the class).

Target Audience

To ensure the high-quality knowledge transfer students expect from this 4-day workshop, class size is limited to a maximum of 16 students who meet the following criteria:

- Senior or top-level IT staff possessing at a minimum MCSE-level certification in Microsoft Windows 2003 and/or MCITP in Windows 2008.
- Operating-environment infrastructure architects with a solid understanding of AD.
- Windows 2000/2003 Server administrators with solid understanding of AD.
- Escalation support staff (top-tier only)

Syllabus

This workshop runs a FULL 4 days. Students should anticipate consistent start and end times for each day. Early departure on any day is not recommended.

Module 1: Introduction to Active Directory

Troubleshooting. Introduces the basic methodology for troubleshooting Active Directory issues.

Module 2: Troubleshooting Critical Services and

Flexible Single Master Scenarios. Introduces students to the Active Directory Critical services. The module covers FSMO roles and key troubleshooting scenarios.

Module 3: Troubleshooting Active Directory Issues

Related to DNS. Explains why AD is reliant on DNS and covers what AD administrators need to know about how AD uses DNS including the symptoms, causes, and resolution to DNS problems. Note: this workshop assumes the student is already familiar with DNS.

Module 4: Troubleshooting Client Logon and

Authentication. Guides students through common logon scenarios for client logon and authentication issues, including Secure Channel, Kerberos, and Tokensize problems. The module also covers auditing AD and delegation of administration.

Module 5: Troubleshooting Active Directory

Replication. Focuses on the replication topology and the tools and methods used to diagnose and resolve AD replication issues. A wide range of troubleshooting scenarios are discussed along with solutions. The module builds on the troubleshooting tools covered in previous modules. RODC replication and troubleshooting are explained. There is an in-depth discussion of common issues with USN Rollback, Lingered Objects, Secure Channels and trusts.

Module 6: Troubleshooting FRS and DFSR.

Covers the role of FRS and DFSR in an Active Directory domain and the replication process. The module discusses a range of troubleshooting scenarios, tools, and solutions for both FRS and DFSR.

Module 7 (Optional, as time allows): Troubleshooting

Domain Controller Performance. Focuses specifically on typical performance issues and causes. The module identifies operating system performance and hardware issues. Third-party drivers and agents issues are discussed. Performance troubleshooting tools are introduced and explained. To reinforce learning, many common troubleshooting scenarios are introduced and discussed in depth.