DATA SHEET

Active Directory: Troubleshooting

Acquire hands-on experience trouble-shooting 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.

The updated **Active Directory: Troubleshooting** 4-day Workshop*PLUS* course now covers Windows Server 2003, Windows Server 2008, and Windows Server 2008 R2. The course provides participants with the skills required to understand and successfully troubleshoot Active Directory problems, including DNS issues, File Replication Service issues, logon failures, and Active Directory replication failures. 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 Recovery** Datasheet for disaster-recovery planning.)

This workshop contains Level 300 content. Please review the Target Audience" information (on the next page), and then contact your Microsoft Services representative to ensure that this workshop is appropriate to the student's experience and technical expertise.

Workshop*PLUS* Benefits

Incoming Assessment to baseline knowledge. It is important for students to get feedback on how much they have learned during the Workshop*PLUS* course. To accomplish that end, the Incoming Assessment measures what students know at the beginning of the course. This 25-question assessment was developed by a team of subject matter experts at Microsoft.

Outgoing Assessment to measure knowledge transfer. Students like to know how much they learned as a result of the training. At the end of the Workshop*PLUS* course, students compare their Incoming and Outgoing results. In addition, the instructor reviews the questions and discusses the answers in detail to ensure that students understand the concepts. (Note: Individual results of the Incoming and Outgoing Assessment are not provided to management.)

Action Planning Exercises to take workshop-acquired knowledge and apply them to the workplace. Applying new knowledge to the real world is key to getting the most value out of your training budget. The purpose of the Action Planning Exercises is to identify key problems or proactive opportunities in your workplace — and then to use the skills learned in this course to develop real-world action plans.

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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 Read-Only Doman Controller (RODC) features.
- The processes supporting directory replication and troubleshooting.
- Diagnose and correct common FRS and DFSR problems that lead to Sysvol replication issues.
- How to identify and troubleshoot key Active Directory performance issues.
- How to identify Client Logon Authentication problems such as Tokensize.

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.

Incoming Assessment. Students take a 25-question quiz that measures their baseline knowledge.

Module 1: Active Directory Troubleshooting Process and Active Directory Fundamentals. Introduces the troubleshooting methodology. The module identifies the components involved in troubleshooting AD and the potential business impact of issues within your environment. It introduces some of the concepts on which AD is based, including LDAP basics and the logical and physical structure of the AD database.

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: DNS Concepts and Troubleshooting. Explains why AD is reliant on DNS and covers what AD administrators need to know about how AD uses DNS – including the symptoms and causes of and resolution to DNS problems. It also covers Windows 2008 RODC DNS functionality and Global Name Zones.

Module 4: 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: Replication. Focuses on the mechanics by which directory changes are transferred among domain controllers, A wide range of troubleshooting scenarios are discussed along with their solutions. The module builds on the troubleshooting tools covered in previous modules. RODC replication and troubleshooting are explained. An in-depth discussion covers common issues with USN Rollback, Lingering Objects, Secure Channels, and Trusts.

Module 6: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. A range of common troubleshooting scenarios are introduced and discussed in depth.

Module 7: FRS and DFSR. Covers the role of FRS and DFSR in an Actve Directory domain and the replication process. The module discusses a range of troubleshooting scenarios, tools, and solutions for both FRS and DFSR.

Outgoing Assessment. Students complete the quiz again and compare Incoming and Outgoing results to measure knowledge transfer.

Action Planning Exercises. Students develop Action Plans to improve real-world situations and/or implement proactive measures.

This workshop is just one of many available from Microsoft Services.

For more information, contact your Technical Account Manager or Services Representative.