

Active Directory: Troubleshooting



WorkshopPLUS

Delivery Options: 4 days [Remote/Onsite]

Difficulty Level: 300 - Advanced

Description

This workshop will provide you with the skills needed to understand and successfully troubleshoot Active Directory (AD) problems, which include AD-related critical services, DNS issues, sign-in failures, Active Directory replication failures, and DFSR-related issues. An optional module on troubleshooting domain controller performance is available. You can learn the tools used in Active Directory troubleshooting to help accelerate the time to resolution.

Note: This workshop does not cover core concepts of AD-familiarity with DNS is assumed.

Objectives

- Introduce you to the Active Directory Critical services. The module covers FSMO roles and key troubleshooting scenarios
- Explain why AD is reliant on DNS and what AD administrators need to know about how AD uses DNS, which includes the symptoms, causes, and resolution to DNS problems. Focuses specifically on typical performance. To reinforce learning, many common troubleshooting scenarios are introduced and discussed in depth.

Outcomes

- Understand the dependencies of Active Directory on DNS and how to troubleshoot and diagnose DNS issues.
- Understand how to apply the knowledge you acquire to resolve real problems at the workplace

Methodology

Learn by doing

You will work directly with a Microsoft engineer to understand the dependencies of Active Directory on DNS and how to troubleshoot and diagnose DNS issues.

Hands-on labs

- Most of the concepts will be supported by hands-on labs and demos.
- You will have access to resources and labs for up to six months after the workshop.

Scope

Active Directory critical services: AD replication and FSMO roles, DNS, client sign-in and authentication, DFSR, and domain controller performance.

Agenda

Day 1

- Introduction to Active Directory Troubleshooting, troubleshooting Critical Services and Flexible Single Master Operation (FSMO) roles scenarios

Day 2

- Troubleshooting Active Directory issues related to DNS

Day 3

- Troubleshooting Active Directory Replication, troubleshooting Client Sign-in and Authentication

Day 4

- Troubleshooting DFSR and Domain Controller performance

Delivery Outline

Requirements

<p>Participants</p> <ul style="list-style-type: none"> Architects, developers, and IT administrators familiar with Active Directory <p>Skill requirements</p> <ul style="list-style-type: none"> Senior or top-level IT staff with an in-depth understanding of Windows Server up to 2019. Operating-environment infrastructure architects with a solid understanding of AD. Windows Server 2012/2016/2019/2022 administrators with a solid understanding of Active Directory. Escalation support staff (top-tier only). <p>Time commitment</p> <ul style="list-style-type: none"> Four full-day engagements with relevant roles. 	<p>Delivery requirements</p> <ul style="list-style-type: none"> An Intel Core-i5-based PC USB port Microsoft/Windows Live ID to connect to the virtual environment 4-GB RAM 128-GB HDD Supported version of Windows Office 2013 Professional Plus Internet access with at least 1-Mbps bandwidth per participant
--	---

Knowledge Transfer - Troubleshooting

Day 1	Introduction to Active Directory Troubleshooting, Troubleshooting Critical Services and Flexible Single Master Scenarios	<ul style="list-style-type: none"> On-Premises Active Directory and the future, general approach to Active Directory troubleshooting Symptoms and issue diagnosis, common tools and utilities to resolve issues
Day 2	Troubleshooting Active Directory Issues Related to DNS	<ul style="list-style-type: none"> Active Directory dependencies on DNS, DC registration troubleshooting for DNS records and DNS issue resolution using the Netlogon.dns file Record registration and DC Locator based DNS queries Designing DNS for Active Directory
Day 3	Troubleshooting Active Directory Replication, troubleshooting Client Sign-in and Authentication	<ul style="list-style-type: none"> Name resolution and secure channel issues Kerberos authentication issues NTLM authentication issues RODC and other authentication issues
Day 4	Troubleshooting DFSR and Domain Controller Performance	<ul style="list-style-type: none"> Overview of DFS, DFSN Terminology (DFS-N & DFS-R), SYSVOL and DFSN, troubleshooting DFSR, DFSR Migration Common performance issues, hardware components that play a major role in a DC performance

For more information: Contact your Microsoft Representative for more details.