55152: Fundamentals of Active Directory®

Duration: 1 Day

Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

In this course, participants will learn how and why Active Directory (AD) was developed by Microsoft. They will also learn the fundamental architecture, basic design, and management for AD. Participants will learn about the security, and fundamentals of cloud integration with services like Azure ® as well.

Target Audience

This course is intended for:

- Desktop Support Personal,
- Exchange Administrators,
- Help Desk Personnel,
- Network Support Personnel,
- Novice and Experienced IT Professionals,
- Managers that oversee IT personnel,
- Network Administrators new to Active Directory,
- Developers that create products that interact with Active Directory.

Prerequisites

To attend this course, candidates must have:

- Basic understanding of networking concepts.
- Basic Windows[®] knowledge.
- Basic understanding of security concepts such as authentication and authorization.





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Course Objectives

Upon successful completion of this course, attendees will be able to:

- Understand the industry standards used in Active Directory and their importance.
- Recognize the functionality of Domain Controllers and Active Directory Replication mechanisms.
- Understand Forest, Domain, and OU structure.
- Recognize and understand the role of Active Directory Sites.
- Determine Domain Controller Server versions, Forest, and Domain Functional levels.
- Describe authentication Mechanisms in Active Directory NTLM and Kerberos.
- Optimize and maintain Group Policy Objects (GPO) used in Active Directory.
- Understand the functioning of Active Directory Partitions and the Global Catalogue.
- Use their fundamental understanding when using Active Directory with Cloud Services like Federation Services and Azure.

Course Topics

Module 1: Principles of Active Directory

- Development of Active Directory
- What is X.500?
- LDAP
- Active Directory Architecture
- NTLM and Kerberos
- Managing Operating Systems with GPOs, Workplace Join and InTune
- Active Directory Groups: Domain Local, Global and Universal
- Using and Managing Active Directory Domain Controllers
- Forest and Domain Functional Levels
- Introduction to Active Directory Partitions and the Global Catalogue
- Basic Forest Structure and Design
- Basic Domain Structure and Design
- Basic OU Structure and Design

Module 2: Fundamentals of WAN Management with Active Directory

- Understanding AD Sites and WAN Traffic Management
- Basic AD Sites and Logon Traffic
- Introduction to AD Sites and Replication Traffic
- Bridgehead Servers and Site Link Objects
- Site Aware Applications





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Course Topics Continued

Module 3: Introduction to Active Directory Group Policy Objects

- Introduction to Group Policy
- Administrative Templates
- Fundamental Concepts of GPO Scripts
- Introduction to Creating and Using GPOs
- Principles of Managing Multiple GPOs
- Block, Enforce and Inheritance
- GPOs and Active Directory Versions
- Introduction to Controlling and Installing Software with GPOs, SRP, and App Locker

Module 4: Principles of Active Directory Integration

- Active Directory and "The Cloud"
- User Principal Names, Authentication and Active Directory Federated Services
- Conclusion, Additional Resources, Labs, and Exercises

LABS INCLUDED





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