

Learn and Apply Active Directory Domain Services Project

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PROJECT OVERVIEW

The purpose of this project is to help the users learn active directory domain services by applying it in a virtual environment. The goal of this project is to help learn:

- Active Directory Setup
 - Install and configure a new Active Directory domain for ADDS.
 - Set up DNS and DHCP services to support the AD environment.

- User and Group Management
 - Create user accounts for various departments within the organization (e.g., Finance, IT, Sales).
 - Organize users into security groups based on their roles.
 - Implement Organizational Units (OUs) to reflect the company's organizational structure.

- Group Policies Implementation
 - Create and enforce a Group Policy Object (GPO) that establishes password policies for user accounts.
 - Implement a GPO to control desktop settings, including wallpaper, screensaver, and other configurations.

- Security and Permissions
 - Set up NTFS permissions on file shares for different departments.
 - Create security groups to control access to specific resources.
 - Implement account lockout policies to enhance security

- Integration with other Services (optional)
 - Integrate Active Directory with Microsoft Exchange for email services.
 - Configure SharePoint integration for document collaboration.
 - Implement single sign-on (SSO) using Active Directory Federation Services (ADFS) for external applications.

- Backup and Recovery
 - Establish a regular backup schedule for Active Directory.
 - Simulate a disaster recovery scenario and restore AD from backups.
- Monitoring and Troubleshooting
 - Set up monitoring for AD events using Event Viewer.
 - Implement automated alerts for critical AD events.
 - Troubleshoot and resolve common issues such as replication problems or login failures.
- Testing

Organisation Structure

The organisation (ADDS) has an executive management with:

- CEO (Chief Executive Officer)
- CFO (Chief Financial Officer)
- CTO (Chief Technology Officer)
- CHRO (Chief Human Resources Officer)

ADDS has the following departments and roles:

- Financial Department
 - Finance Manager
 - Accountants
 - Financial Analysts
- IT Department
 - IT Manager
 - System Administrators
 - Network Administrators
 - Help Desk Staff

- Sales Department
 - Sales Manager
 - Sales Representatives
 - Sales Support

- Marketing Department
 - Marketing Manager
 - Marketing Specialists
 - Graphic Designers

- Human Resources Department
 - HR Manager
 - HR Generalists
 - Recruitment Specialists

ACTIVE DIRECTORY STRUCTURE

Forest only has 1 domain: adds.com

Root Domain: adds.com

Organisation Unit:

- Adds_Users
 - Executive
 - CEO
 - CFO
 - CTO
 - CHRO
 - Finance
 - Finance_Manger
 - Finance_Accountant
 - Finance_Accounts_Clerk
 - IT
 - IT_Manager
 - IT_Systems_Admin
 - IT_Network_Sec_Admin
 - IT_Help_Desk
 - Sales
 - Sales_Manager
 - Sales_Rep
 - Sales_Support
 - Marketing
 - Marketing_Manager
 - Marketing_Specialist
 - Marketing_Socials_Admin
 - HR
 - HR_Manager
- HR_General
- HR_Recruitment_Specialist

- Adds_Groups
- All_Users
- Executives
- Managers
- Finance
- IT
- IT_Admins
- IT_HelpDesk
- Sales
- Marketing
- HR
- Distr_Executives
- Distr_Finance
- Distr_IT
- Distr_Sales
- Distr_Marketing
- Distr_HR

- Adds_Servers
- Domain_Controller
- File_Server
- Print_Server
- Email_Server
- Web_Server
- Database_Server
- Application_Server
- Backup_Server
- SecurityMonitoring_Server

Note: Some Servers are hosted on the same server

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INSTALLATION AND CONFIGURATION

USER AND GROUP MANAGEMENT

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SECURITY AND PERMISSIONS

INTEGRATION WITH OTHER SERVICES (optional)

BACKUP AND RECOVERY

MONITORING AND TROUBLE SHOOTING

TESTING AND VALIDATION

REFERENCES

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Document Updates

Date	Changes Made	Changes By
15/06/2024	<ul style="list-style-type: none">- Created Document- Completed layouts- Started Project Overview Section	Erwin Thomas
17/06/2024	<ul style="list-style-type: none">• Finished draft Project Overview Section	Erwin Thomas
21/06/2024	<ul style="list-style-type: none">• Finished Organisation Structure• Started Active Directory Structure	Erwin Thomas
06/07/2024	<ul style="list-style-type: none">• Finished Active Directory Structure	Erwin Thomas
25/07/2024	<ul style="list-style-type: none">• Started User and Group Management	Erwin Thomas