CYBERROOKIE

CyberRookie Project - Learning Cyber Skills By Building A HomeLab

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Week 4 Lesson - AD DS/MS365/AAD

Overview

1. Windows Active Directory Domain Service (AD DS)

2. MS365 Portal

3. Azure Active Directory

4. Resources

5. LAB Practice

6. Hardening

AD DS

1. What is a Windows Active Directory Domain service
    https://docs.microsoft.com/en-us/windows-server/identity/ad-ds/get-started/virtual-dc/active-directory-domain-services-overview

2. What is the Group Policy Object

    https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2012-r2-and-2012/hh831791(v=ws.11)

3. What is the Event Viewer

    https://www.loggly.com/ultimate-guide/windows-logging-basics/

MS365

1. **Microsoft 365 Portal**

   Users can access web-based services here and also manage installations of Office desktop apps.

2. **Microsoft 365 Admin Center**

   For those users who have also been assigned administrator roles, this portal includes configuration options for managing users and groups, licenses, and billing. Options at the bottom of the navigation pane allow access to admin centers for specific services, such as Exchange Online and OneDrive for Business.

3. **Azure Active Directory Admin Center**

   Every Microsoft 365 business subscription also includes a free Azure Active Directory account. Administrators can manage users and devices from this portal and can also configure relationships with outside organizations and existing local servers. Note that AAD is not active directory service.

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Resources

1. **Active Directory Domain Services**
   CYBRARY:Microsoft Active Directory Domain Services
   https://app.cybrary.it/immersive
   Microsoft Learning Path: Active Directory Domain Services
   https://docs.microsoft.com/en-us/learn/paths/active-directory-domain-services/

2. **Microsoft 365**
   Microsoft Learning Path: Introduction to Microsoft 365 core services and features
   https://docs.microsoft.com/en-us/learn/modules/intro-to-m365-core-services/
   Additional:
   Microsoft 365 Certified: Enterprise Administrator Expert
   https://docs.microsoft.com/en-us/learn/certifications/m365-enterprise-administrator/

Resources

3. Azure Active Directory

Microsoft Learning Path: Protect identity and access with Azure Active Directory

https://docs.microsoft.com/en-us/learn/paths/m365-identity/

Azure Active Directory

https://mindmajix.com/azure-active-directory

4. GPO

Top 10 Most Important Group Policy Settings for Preventing Security Breaches

https://www.lepide.com/blog/top-10-most-important-group-policy-settings-for-preventing-security-breaches/

Additional:

Best Practices for Designing and Consolidating Group Policy - Darren Mar-Elia

http://sdmsoftware.com/dl/BestPractices-GPDesign.pdf

Group Policy Central

https://www.grouppolicy.biz/

LAB Practice

#1 Deploy AD DS

1. Download windows server 2019 Evaluations version | 180Days Free
   https://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-2019

2. Deploy windows server into ESXi Server vlan

3. set up windows Active Directory Domain Services
   Step 1: Install Active Directory Domain Services (ADDS)
   Step 2: Promote the server into a domain controller

4. Create the Group policy Object with best practice

5. Check out the event viewer log

LAB Practice

#2 Add PC into AD DS

1. Download windows 10 enterprise evaluation version | 90 Days Free
   https://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-2019

2. Deploy windows enterprise version into ESXi Server vlan

3. Add windows enterprise into AD DS

LAB Practice

#3 Implement Microsoft 365

1. Apply Microsoft 365 E3/E5 1 month free trial
    Microsoft 365 E3/E5 1 month free trial 25 licenses, 30-day free trial
    E3:https://www.microsoft.com/en-ca/microsoft-365/compare-microsoft-365-enterprise-plans
    E5:https://www.microsoft.com/en-ca/microsoft-365/enterprise/office-365-e3?activetab=pivot%3aoverviewtab

2. Apply free azure active directory subscription

3. Using Azure AD Connect to link AD DS to Azure Active Directory
    Microsoft 365 integration with on-premises environments
    https://docs.microsoft.com/en-us/microsoft-365/enterprise/microsoft-365-integration?view=o365-worldwide

LAB Practice

#3 Implement Microsoft 365

1. Apply Microsoft 365 E3/E5 1 month free trial
   Microsoft 365 E3/E5 1 month free trial 25 licenses, 30-day free trial
   E3:https://www.microsoft.com/en-ca/microsoft-365/compare-microsoft-365-enterprise-plans
   E5:https://www.microsoft.com/en-ca/microsoft-365/enterprise/office-365-e3?activetab=pivot%3aoverviewtab

2. Apply free azure active directory subscription

3. Using Azure AD Connect to link AD DS to Azure Active Directory
   Microsoft 365 integration with on-premises environments
   https://docs.microsoft.com/en-us/microsoft-365/enterprise/microsoft-365-integration?view=o365-worldwide

Hardening

CIS_Microsoft_Windows_Server_2019_Benchmark_v1.2.0.pdf

CIS_Microsoft_Windows_10_Enterprise_Release_20H2_Benchmark_v1.10.0.pdf

CIS_Microsoft_Azure_Foundations_Benchmark_v1.3.0.pdf

CIS_Microsoft_365_Foundations_Benchmark_v1.2.0.pdf

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Homework Requirements

1. Understand AD DS/GPO/Event Viewer

2. Complete Lab Practice

3. Hardening Windows server/MS365/AAD based on Hardening Documentations

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Q&A

Look forward to your feedbacks and suggestions.
Contact: CyberRookieProject@gmail.com

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Thank You