

Case Study: Windows 10 Domain Join to Active Directory

Overview:

This case study demonstrates how to join a Windows 10 workstation to a domain controlled by a Windows Server 2019 Active Directory setup. The client system was successfully configured to communicate with the domain controller and authenticated a domain user account.

Environment:

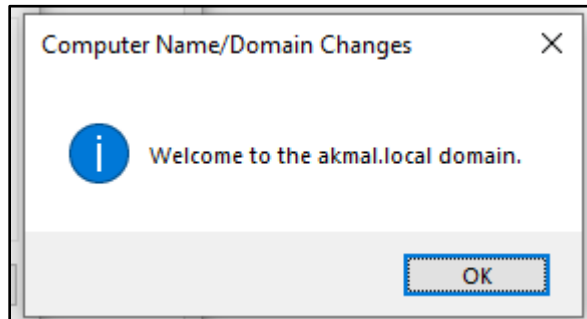
- Domain Controller: Windows Server 2019 (akmal.local)
- Client: Windows 10 Pro VM
- Network: VirtualBox Internal Network (ADNet)
- IP Configuration:
 - Server: 192.168.10.1
 - Client: 192.168.10.2
 - Subnet: 255.255.255.0
 - DNS: 192.168.10.1 (server's IP)

Steps Taken:

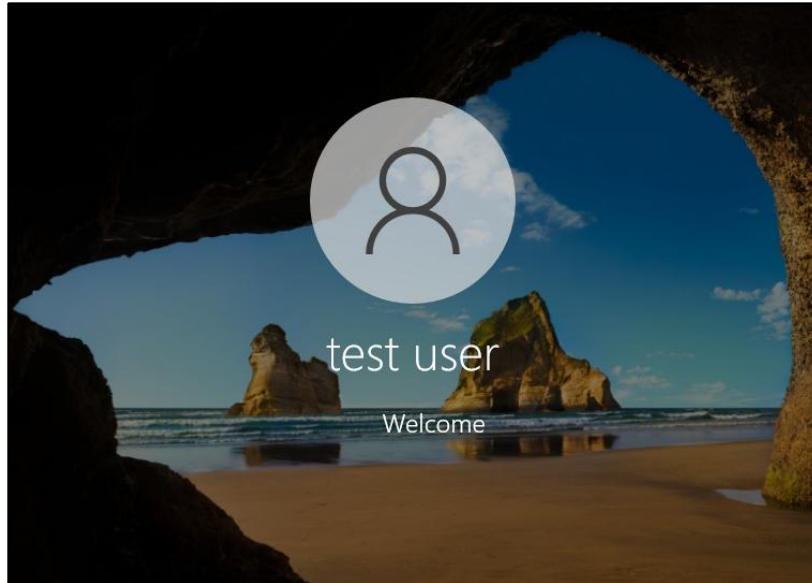
1. Confirmed network connectivity between client and server via ping
2. Set static IP address and DNS server on Windows 10 client
3. Opened System Properties and joined domain: akmal.local
4. Entered domain admin credentials to complete join
5. Restarted client and logged in with domain user: [testuser@akmal.local](#)

Screenshots:

- win10_joined_to_domain.png: Confirmation of successful domain join



- domain_login_success.png: Logged in to Windows 10 using domain user credentials



Result:

- Windows 10 client successfully joined to the Active Directory domain
- Domain user login and profile creation confirmed
- Demonstrated understanding of AD networking, DNS, and authentication flow

Tools Used:

- VirtualBox
- Windows Server 2019
- Windows 10 Pro
- Command Prompt
- System Properties