Promoting Windows Server 2019 using the Graphical User Interface

Part A: Requirements

- A Hypervisor: Oracle VirtualBox
- Host Name: GaryDC
- OS Type: Microsoft Windows
- OS Version: Microsoft Windows 2019 (64 bits)
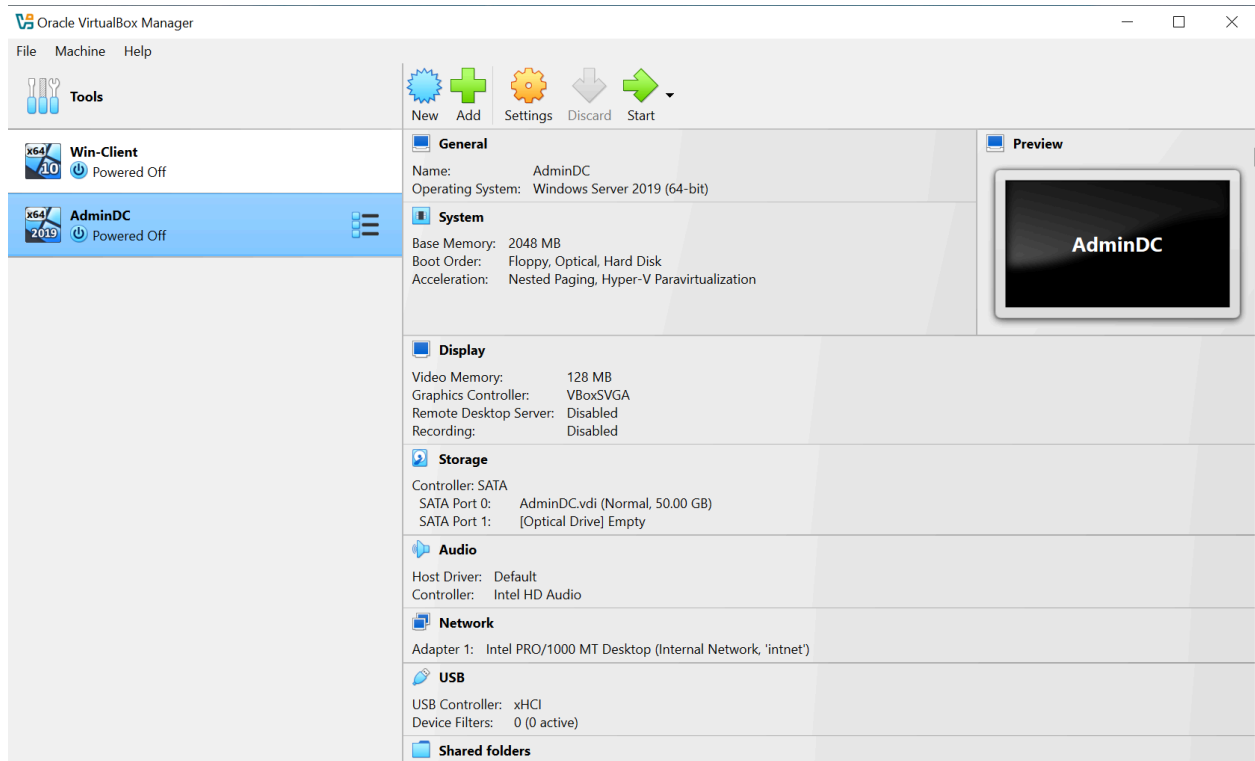- RAM: 2 GB (2048MB)
- HD Space: 15 GB

Figure 1: Oracle VirtualBox Manager (source: personal collection)

Promoting the Server

Promotion Requirements:
- A Windows Server (2019 server)
- Assigning a Static IP address to the server (IP:192.168.25.1)
- Changing the computer's name to a Fully Qualified Domain Name (FQDN) (RootDC.Mydomain.local), creating a Forest (Mydomain.local), NetBIOS Name (MYDOMAIN).
- Installing and configuring DNS. (Active Directory Domain Services need this).
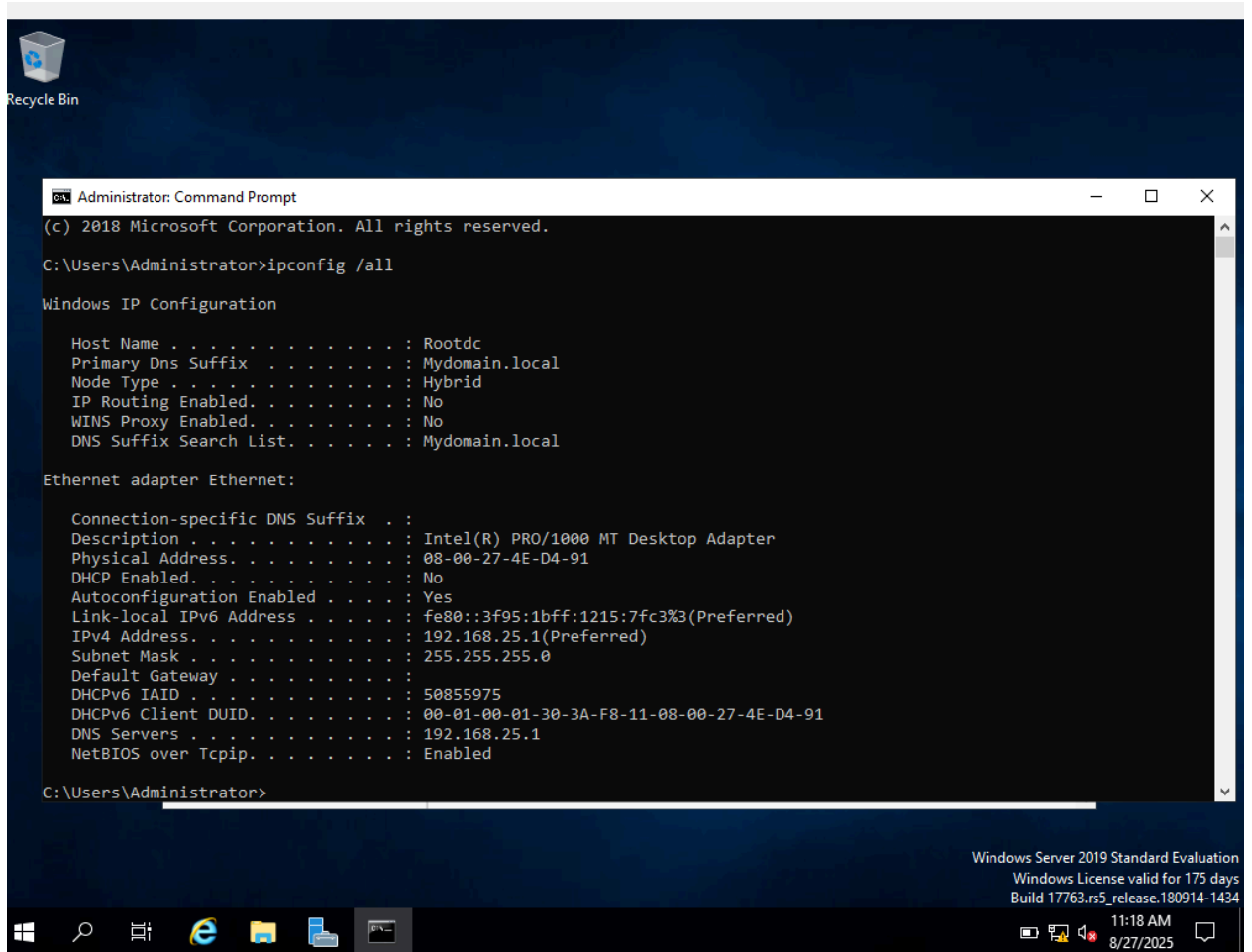- Installing the Active Directory Domain Services Role

Configurations

1. **Assigning a Static IP Address to the server**

IP address	Subnet Mask	Default Gateway	Preferred DNS server	Alternate DNS Server
192.168.25.1	255.255.255.0	N/A	192.168.25.1	N/A

2. Verification

I used the command ip config/all to verify if the IP address was assigned correctly, and verified other information.

Figure 2: Verifying network information (source: personal collection)

3. FQDN verification

Figure 4: Local Server overview (source: personal collection)

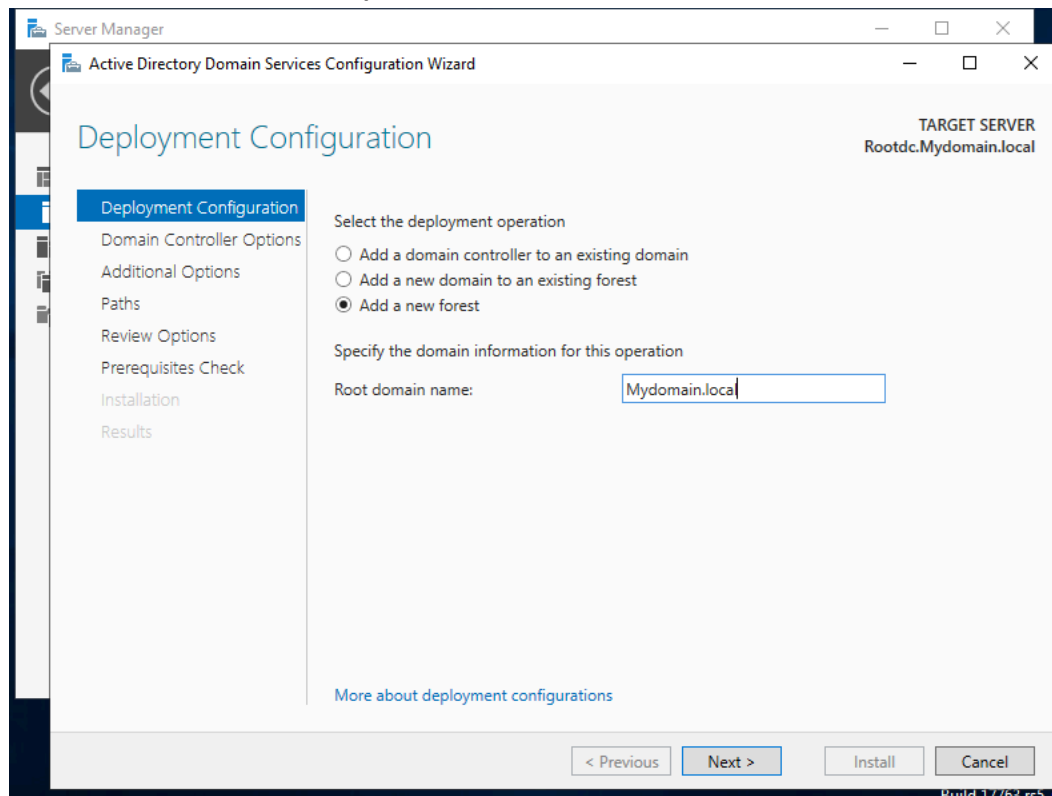## 4. Forest creation and BIOS setup

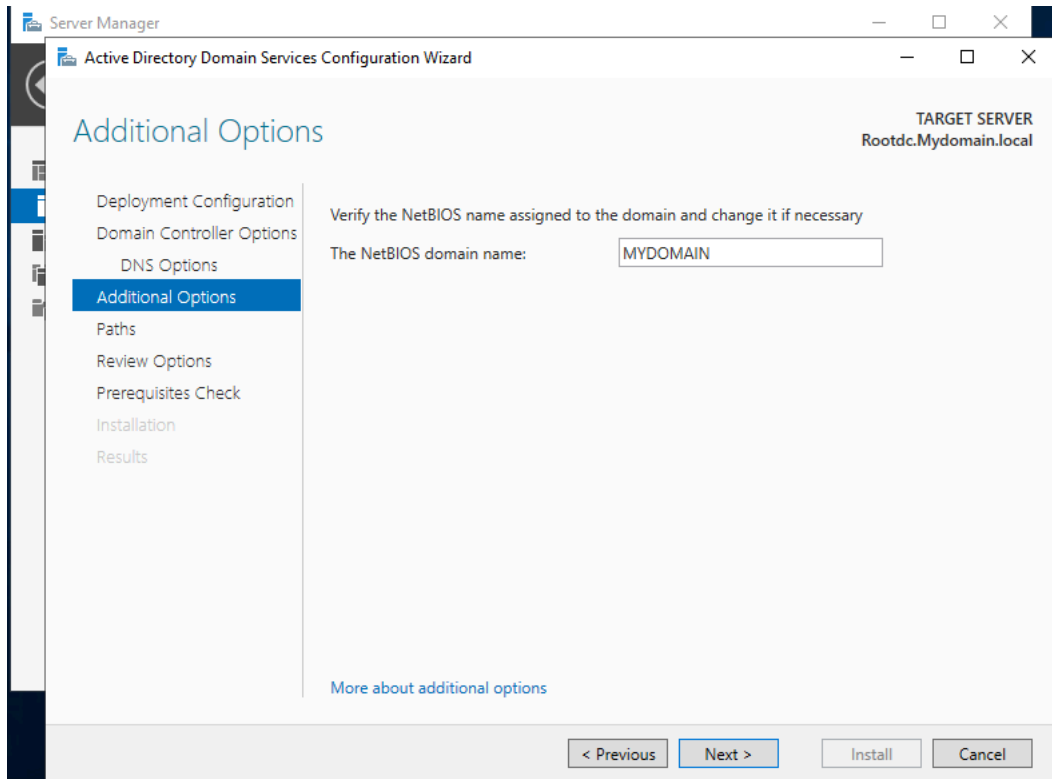Figure 5: Forest creation (source: personal collection)

Figure 6: NetBIOS configuration (source: personal collection)

5. Active Directory Domain Services installation & promotion

I used the manage button to "add roles and features". Then I followed the instructions in the wizard for the prerequisite configurations as follows:
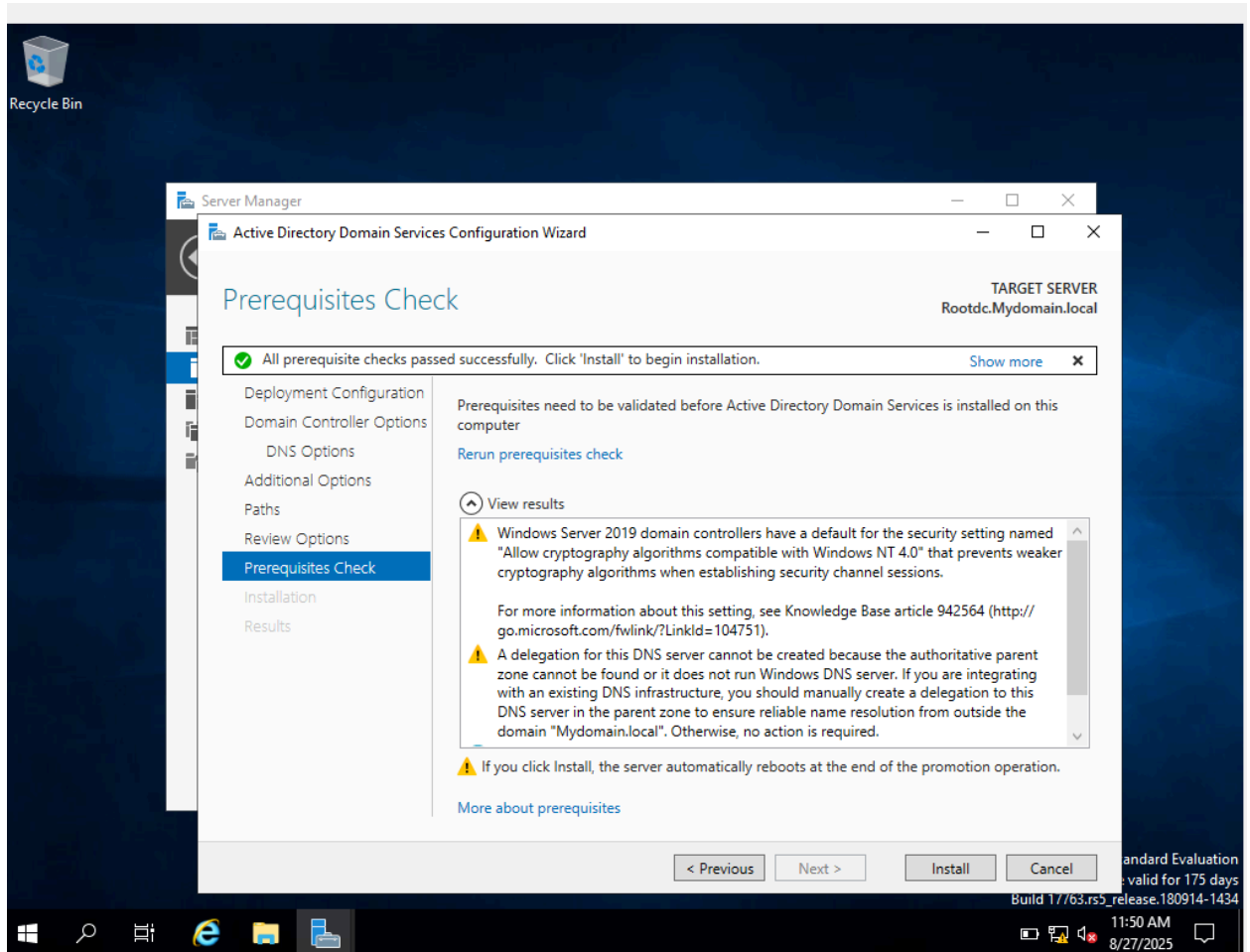

Figure 7: Add Roles & Features Wizard configuration (source: personal collection)
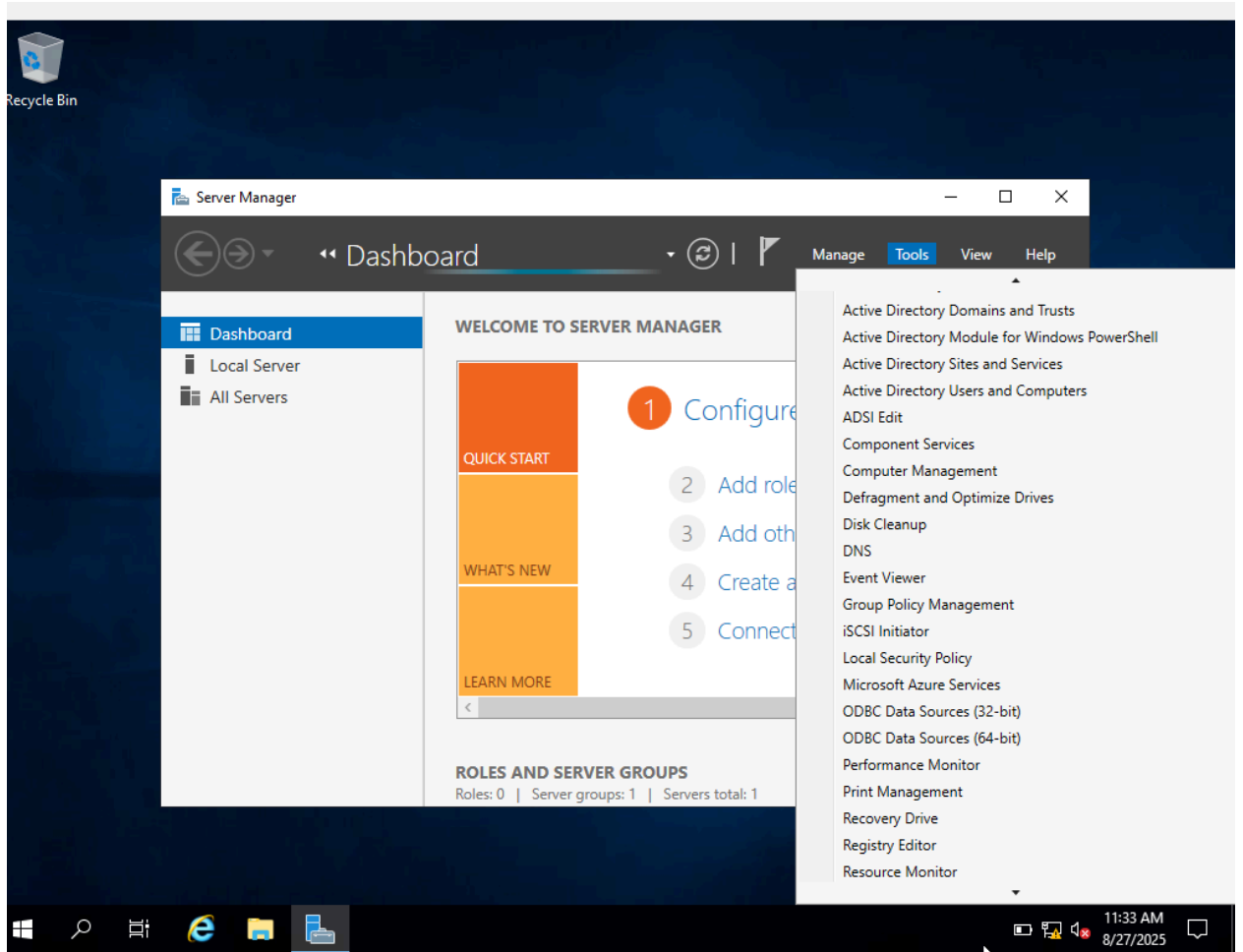
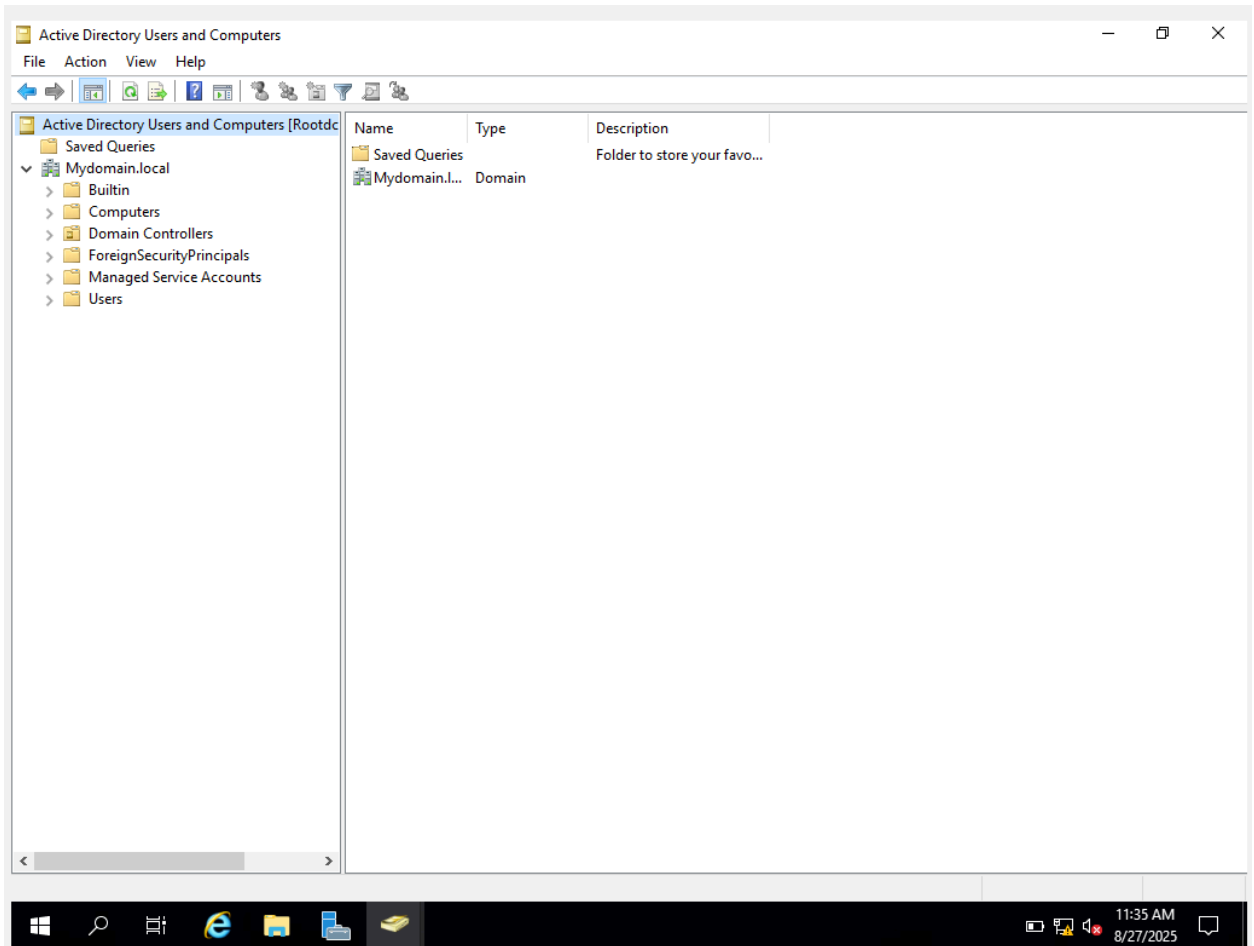Figure 8: AD DS successful installation (source: personal collection)

Figure 9: Active Directory Users and Computers overview (source: personal collection)

Populating the Active Directory Domain Services with Objects

- Organizational Units (OU): This includes the Domain Controllers (default), Computers (Default), Accounting, Advertising, Returns, Sales, and Technical support.
- Users: This includes users created in the sub-OU Urim Africa, inside the Advertising OU.
- Group users: This includes groups created inside technical support and the Accounting OU.
- Computers: This includes computers (client machines & Member Servers) created in the OU.
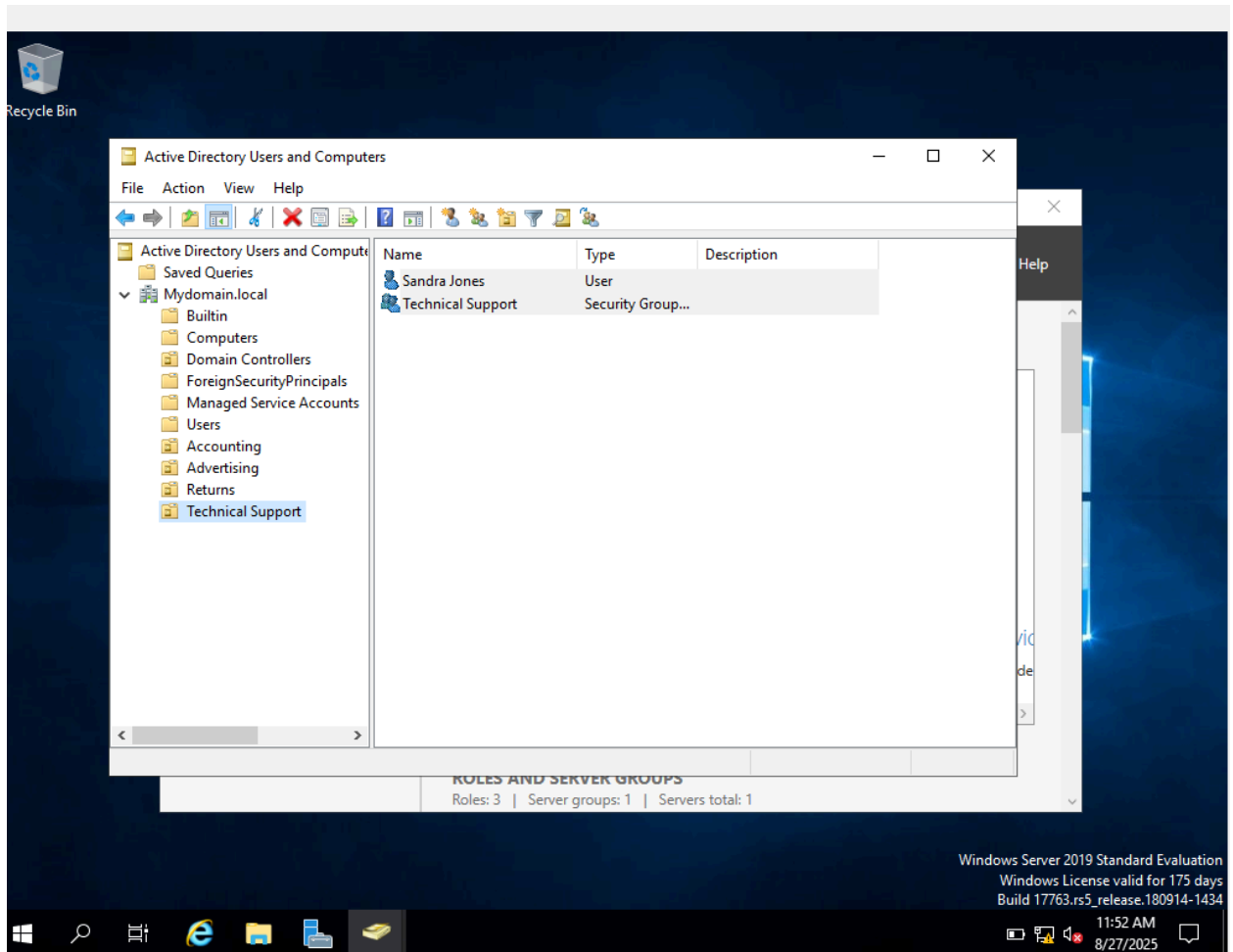

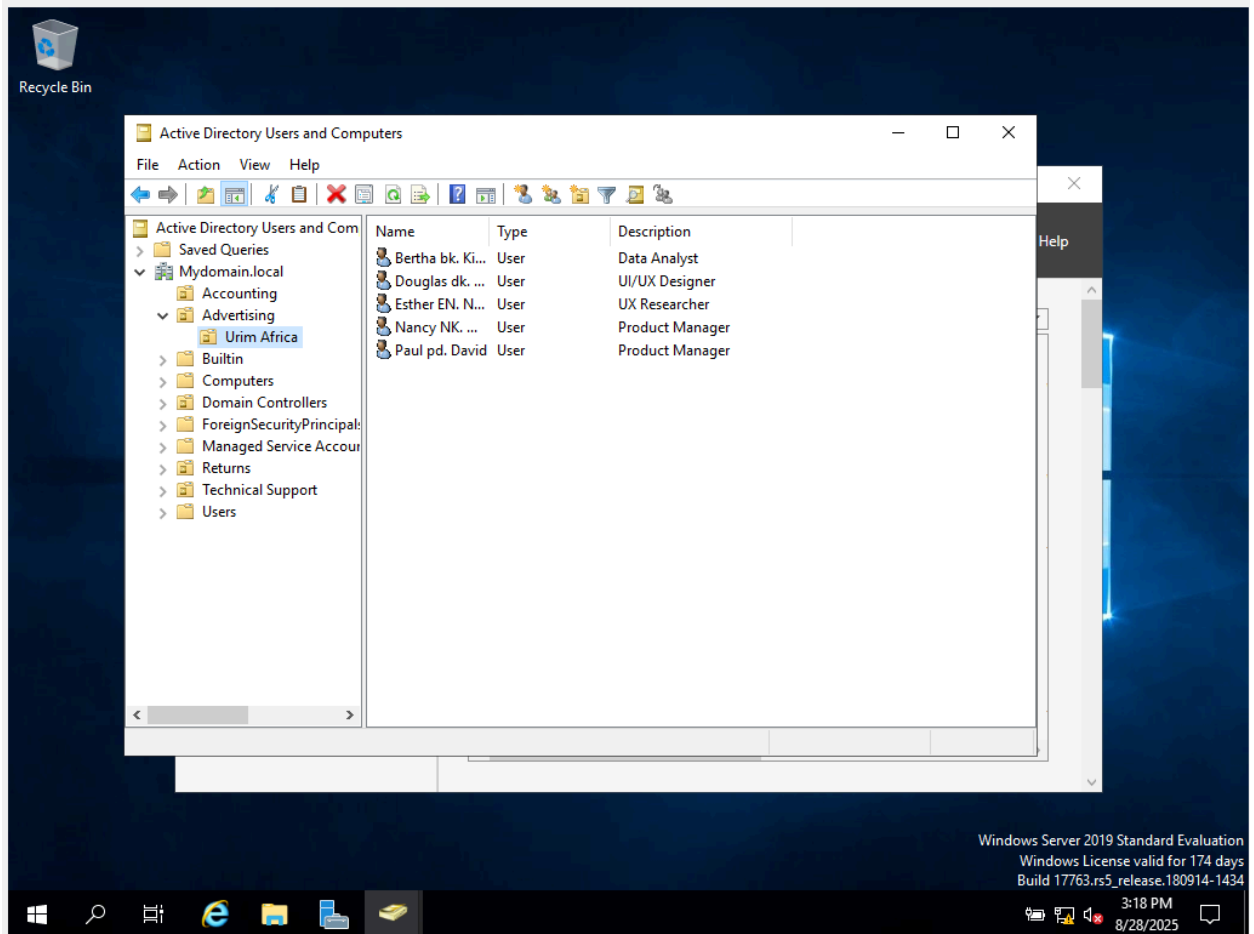Figure 10: Technical Support OU overview (source: personal collection)

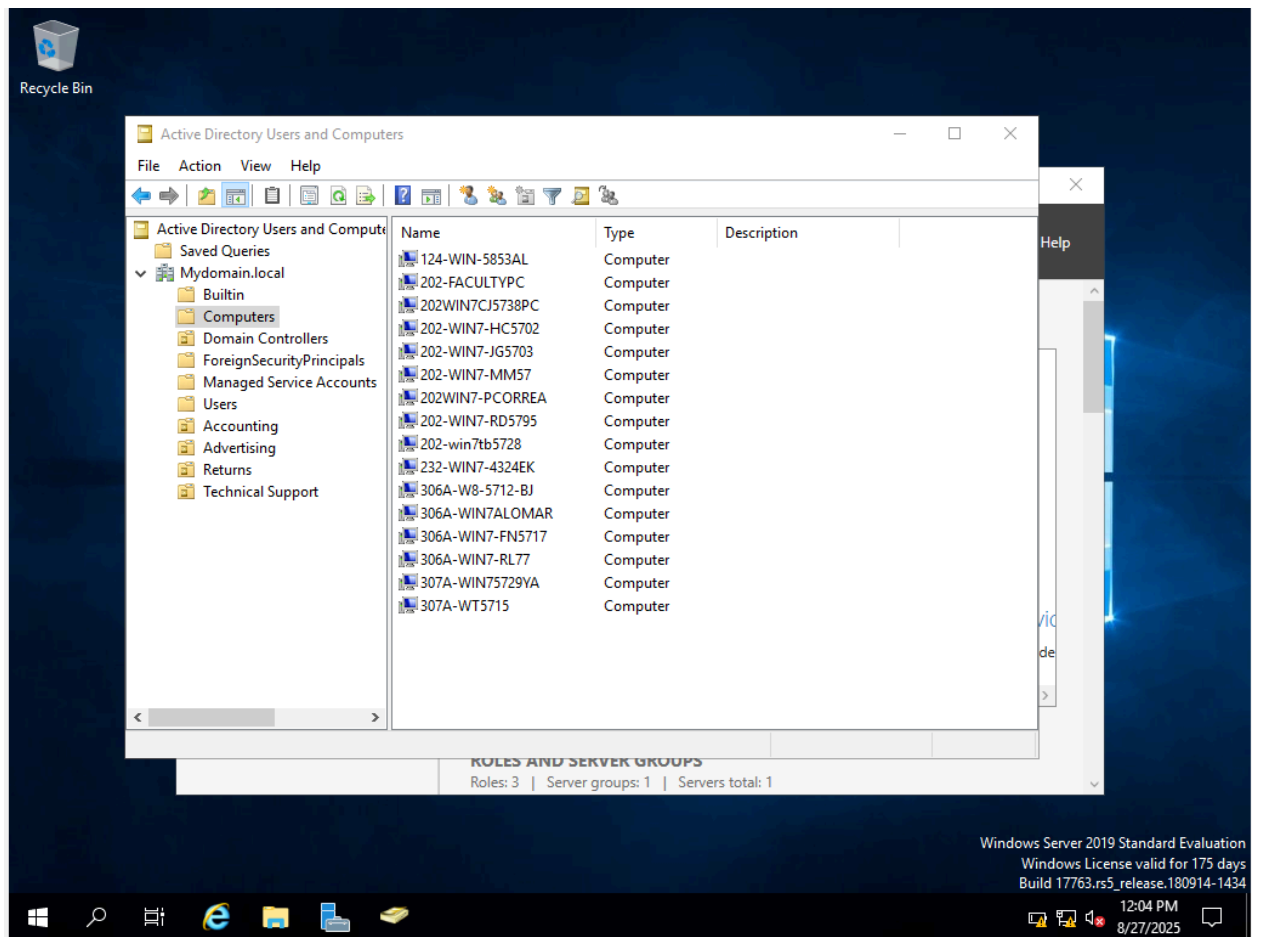Figure 11: Users in Urim Africa sub-OU (source: personal collection)

Figure 12: Computers created in Computers OU (source: personal collection)

Part B: Demoting (removing) the Active Directory

This is the process of retiring the old Domain Controller and restoring it to the "WORKGROUP" from the Domain. For the sake of this lab, I did the following:

- Demote the machine (Remove Active Directory)
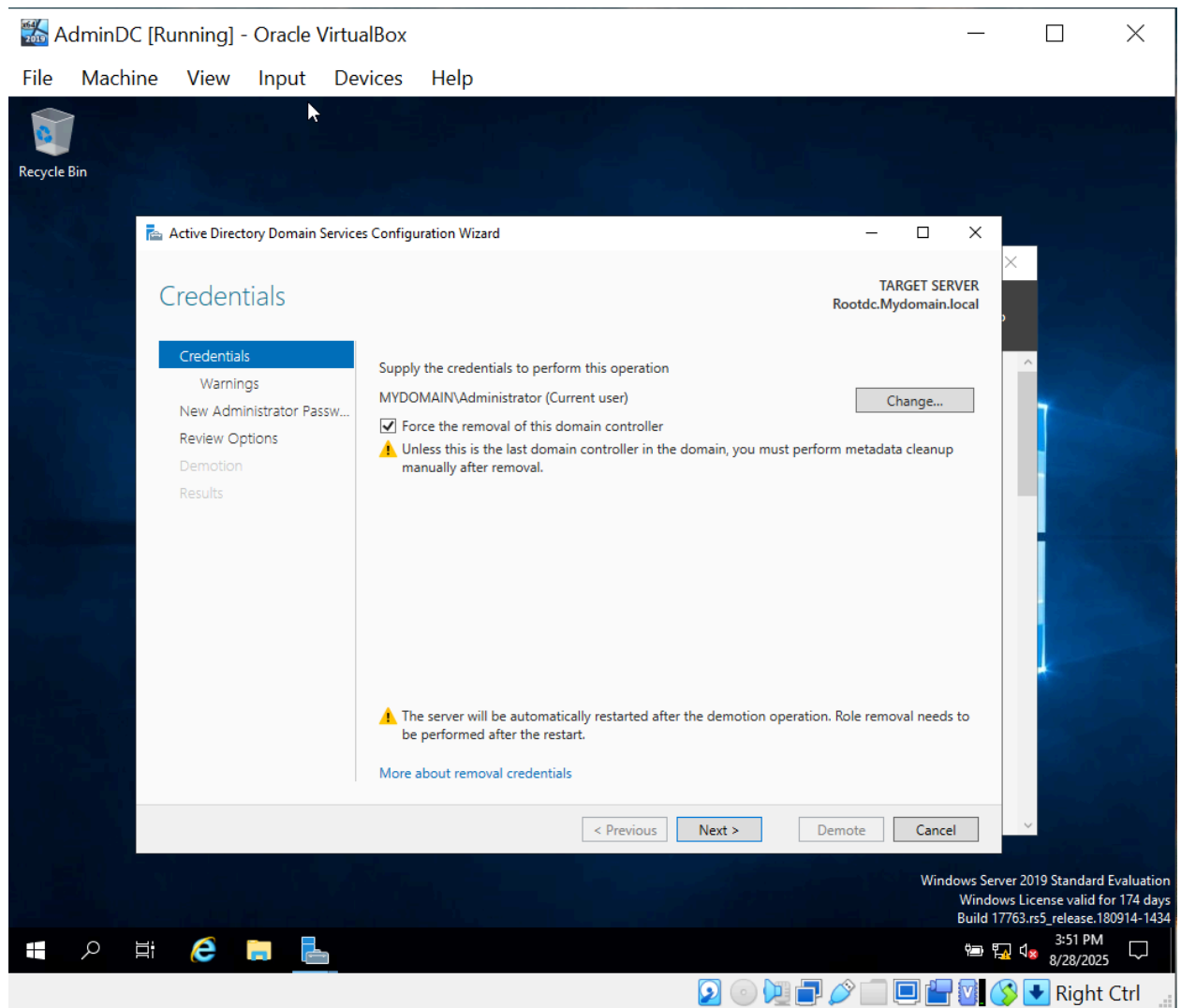- Remove "Active Directory Domain Services Role" and any other roles, such as DNS

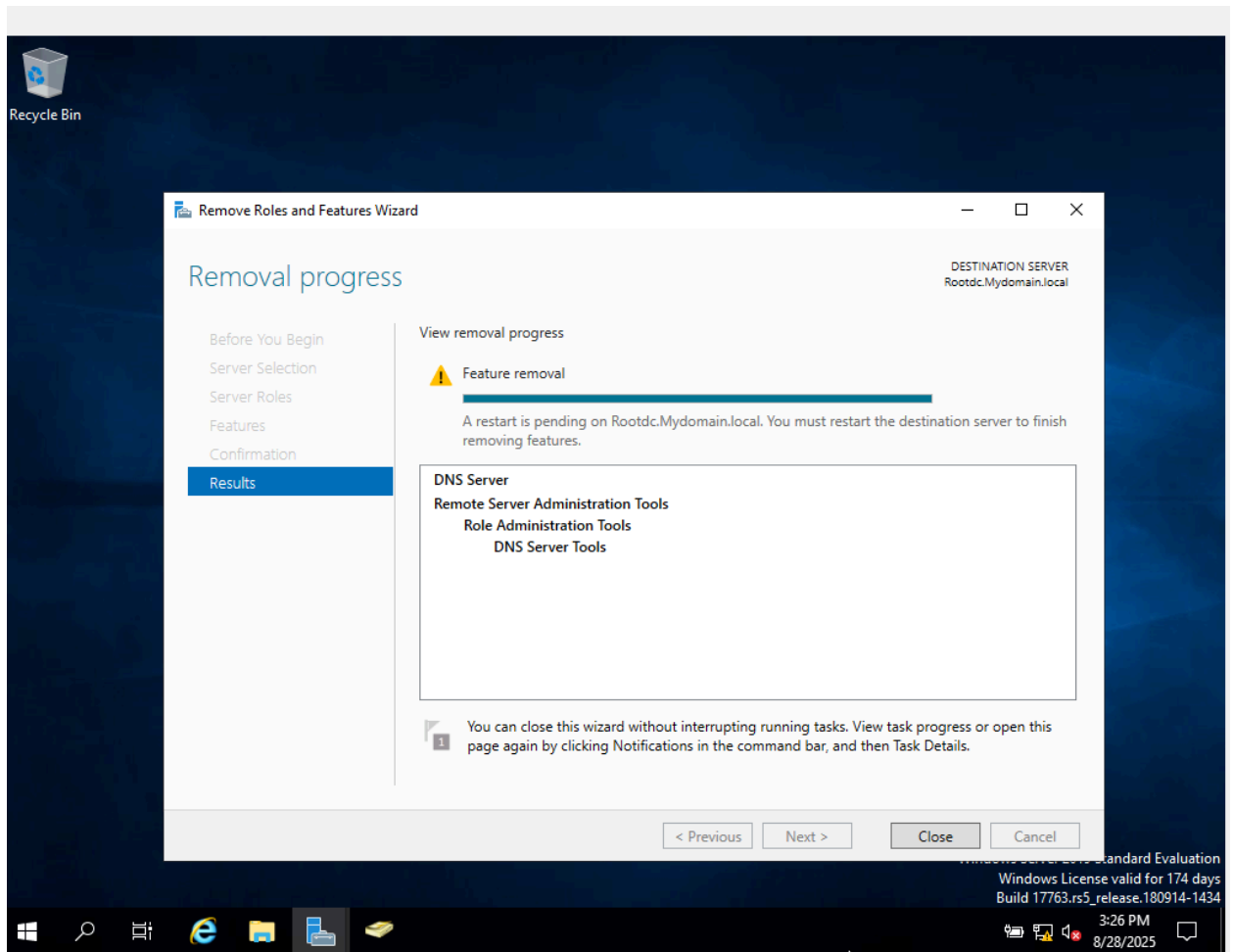Figure 13: Force Removal option (source: personal collection)

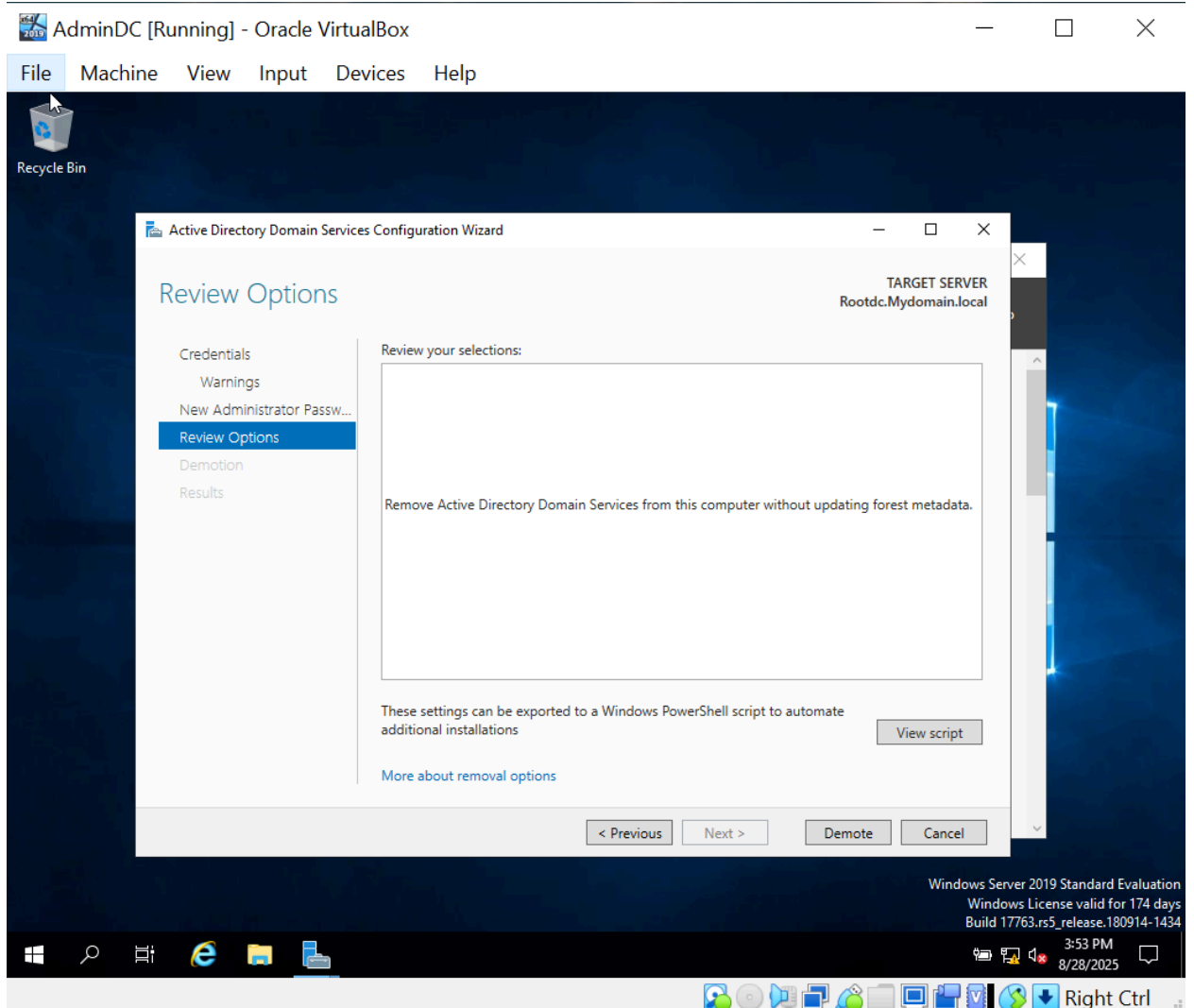Figure 14: Removal Progress (source: personal collection)
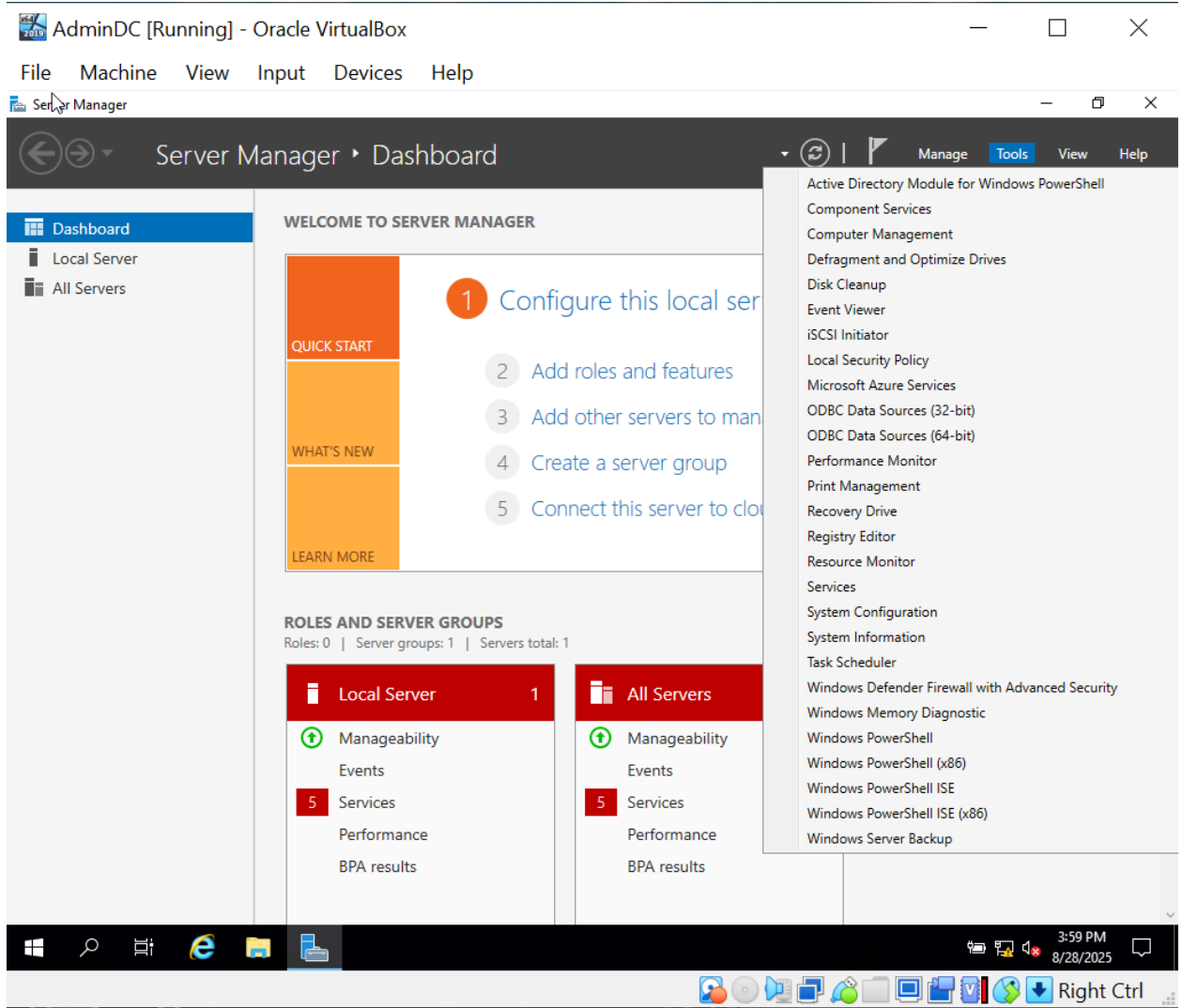
Figure 15: Successfully demoted the AD DS (source: personal collection)

Figure 16: Verification (source: personal collection)