# IT 236 Project Report Form

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| Date: | 10/22/2025 |
| Project Phase | Promoting NV-DC2 as a Second Domain Controller |

## Section 1: Executive Summary

In this phase of the **NewVue Health Infrastructure Modernization Project**, I extended the domain infrastructure by introducing a second Domain Controller (**NV-DC2**) into the existing **newvue.local** domain. Building on the previous setup of **NV-DC1**, this activity enhances **redundancy, replication, and fault tolerance**, ensuring directory services remain available even during maintenance or failure.

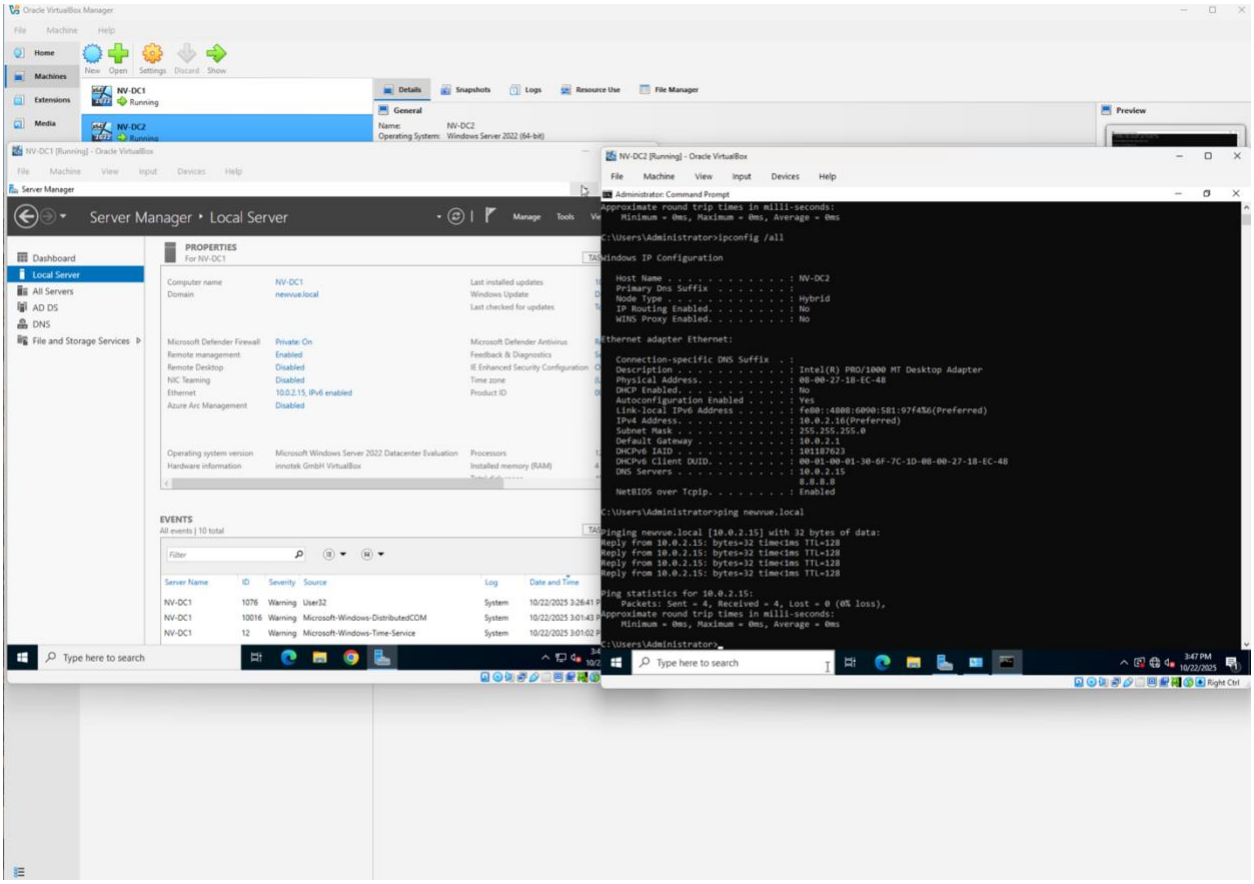
By completing this activity, I successfully joined NV-DC2 to the domain, promoted it as an additional Domain Controller (without DNS or Global Catalog roles), and verified that replication between NV-DC1 and NV-DC2 occurred successfully.

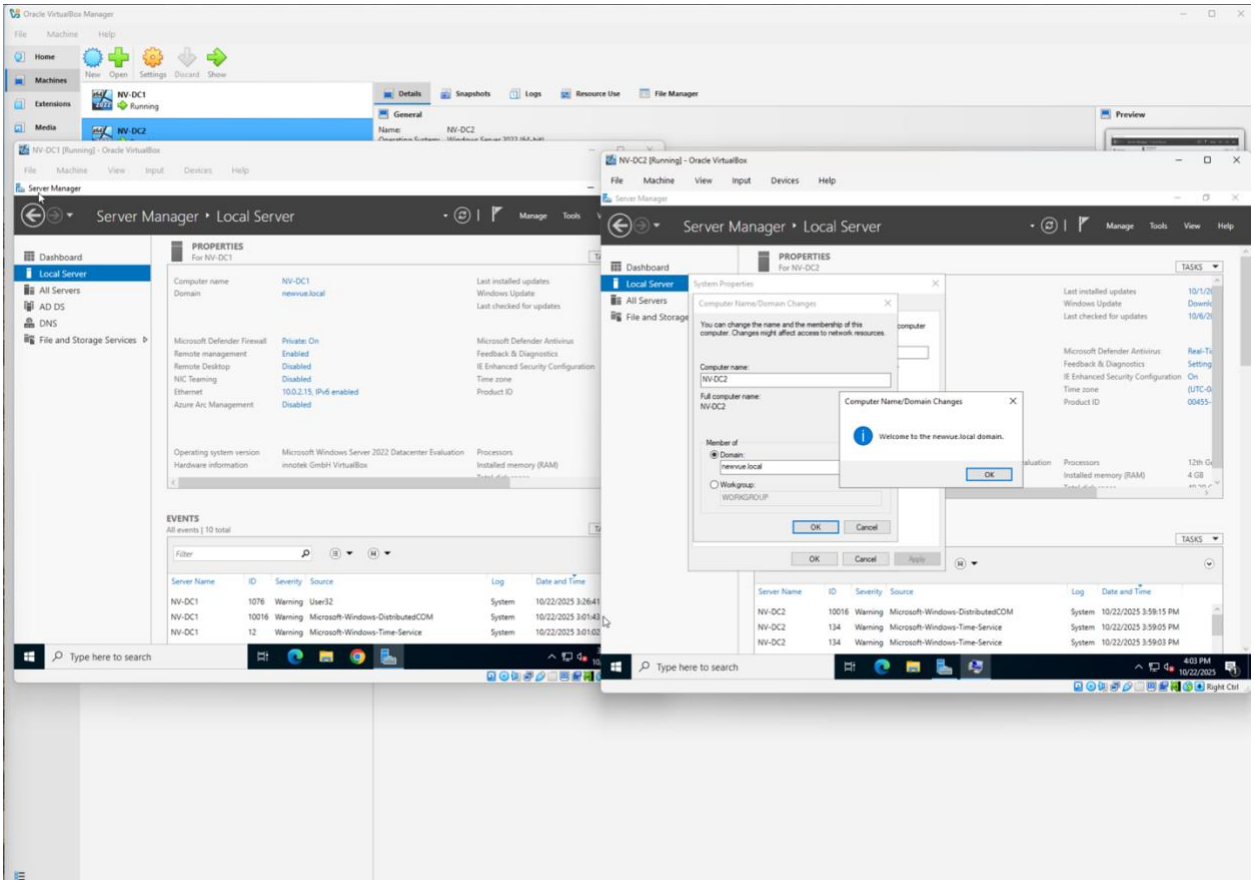
## Section 2: Task-Joining NV-DC2 to the Domain (10 points)

In this section, I configured DNS on **NV-DC2** to point to **NV-DC1**, verified name resolution, and joined the server to the existing **newvue.local** domain.

### Evidence

- **Evidence 1:** Screenshot showing both ipconfig /all and ping newvue.local results from NV-DC2, confirming DNS configuration and successful domain join.



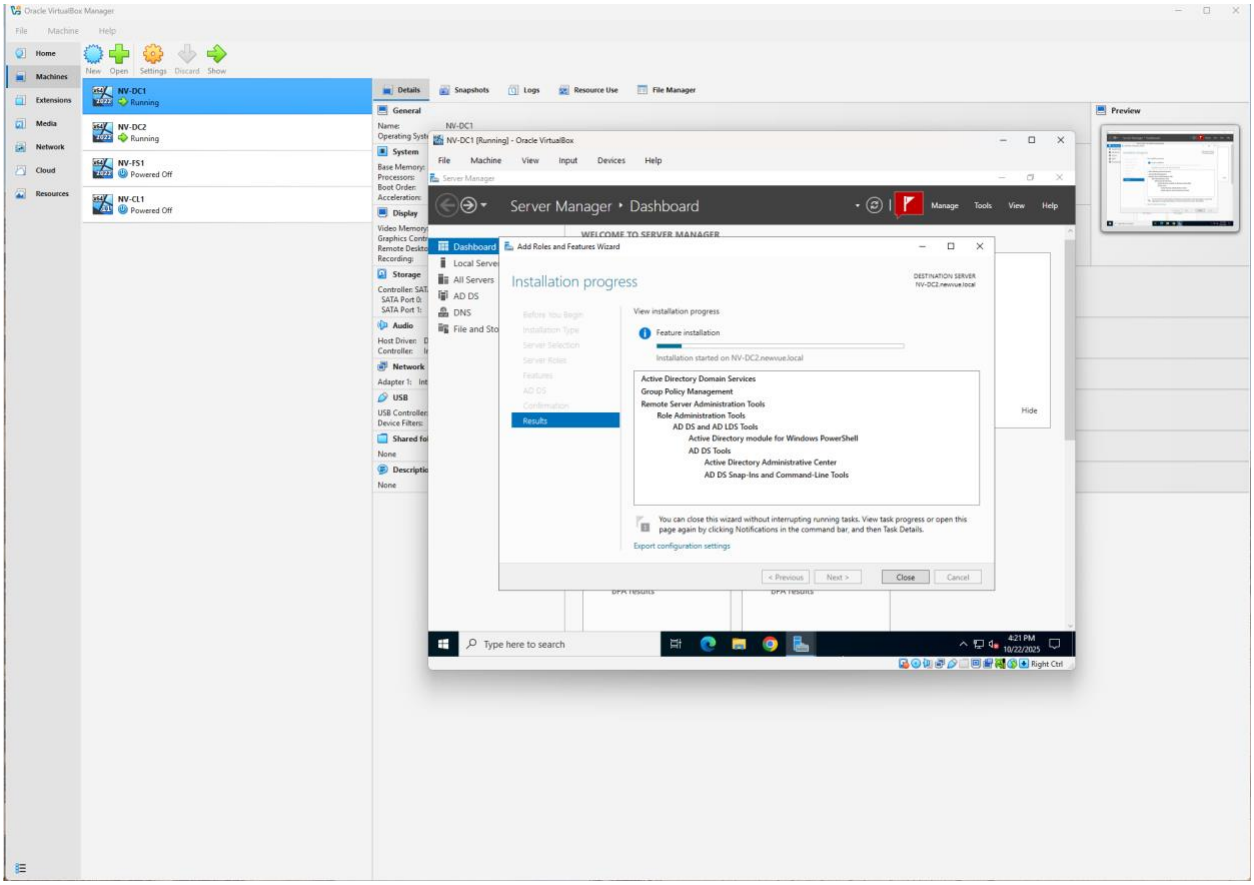

Oracle VirtualBox Manager
NV-DC1
Running
NV-DC2
NV-DC1 [Running] - Oracle VirtualBox
Server Manager
Server Manager • Local Server
Dashboard
Local Server
All Servers
AD DS
DNS
File and Storage Services
PROPERTIES
For NV-DC1
Computer name NV-DC1
Domain newvue.local
EVENTS
All events | 10 total
NV-DC2 [Running] - Oracle VirtualBox
Server Manager • Local Server
PROPERTIES
For NV-DC2
System Properties
Computer Name/Domain Changes
You can change the name and the membership of this computer. Changes might affect access to network resources.
Computer name:
NV-DC2
Full computer name:
NV-DC2
Member of
Domain:
newvue.local
Workgroup:
WORKGROUP
OK
Cancel
Computer Name/Domain Changes
Welcome to the newvue.local domain.
OK
Type here to search

## Section 3: Task — Installing the AD DS Role (10 points)

Here, I installed the **Active Directory Domain Services (AD DS)** role on NV-DC2 to prepare it for promotion.

### Evidence

- **Evidence 2:** Screenshot showing successful installation or completion screen for **Active Directory Domain Services** on NV-DC2.

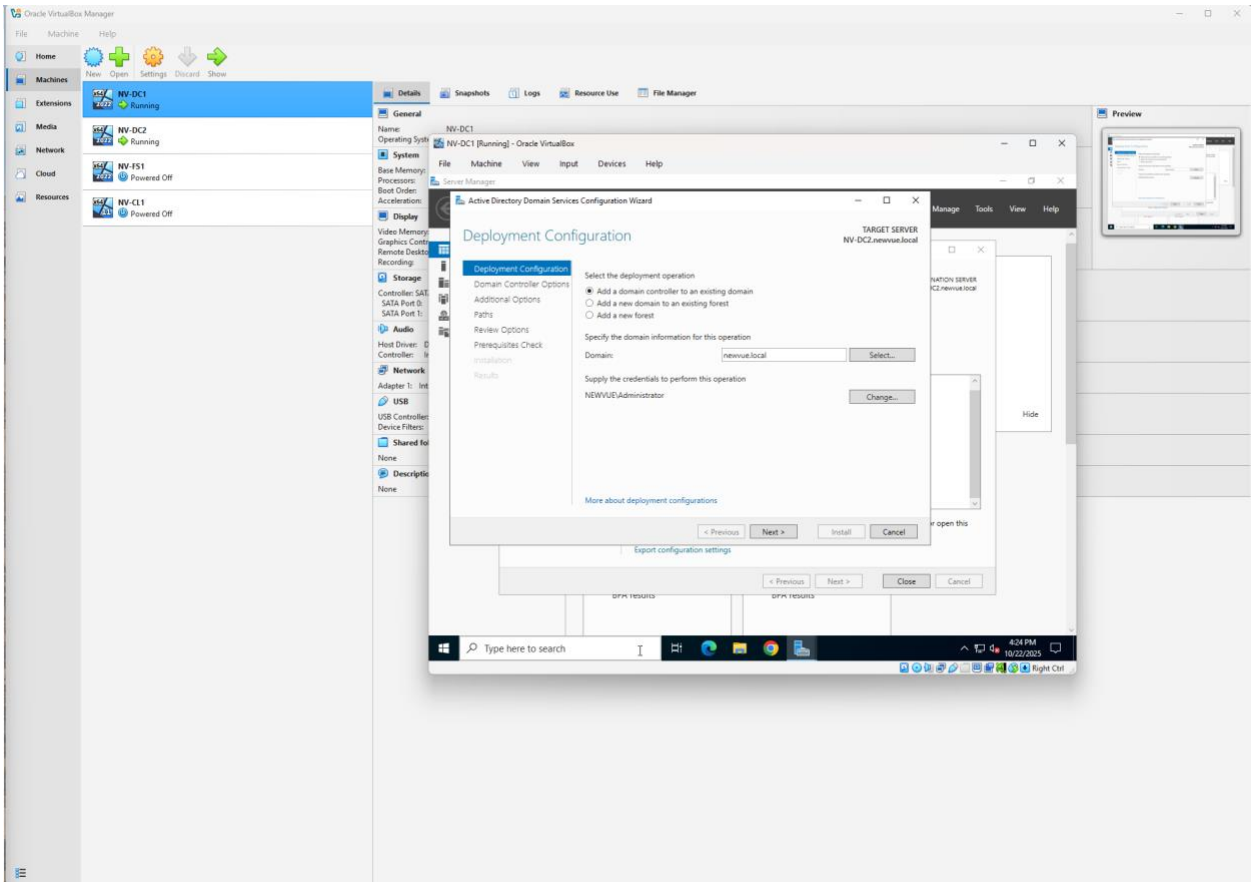


## Section 4: Task — Promoting NV-DC2 to a Domain Controller (15 pts)

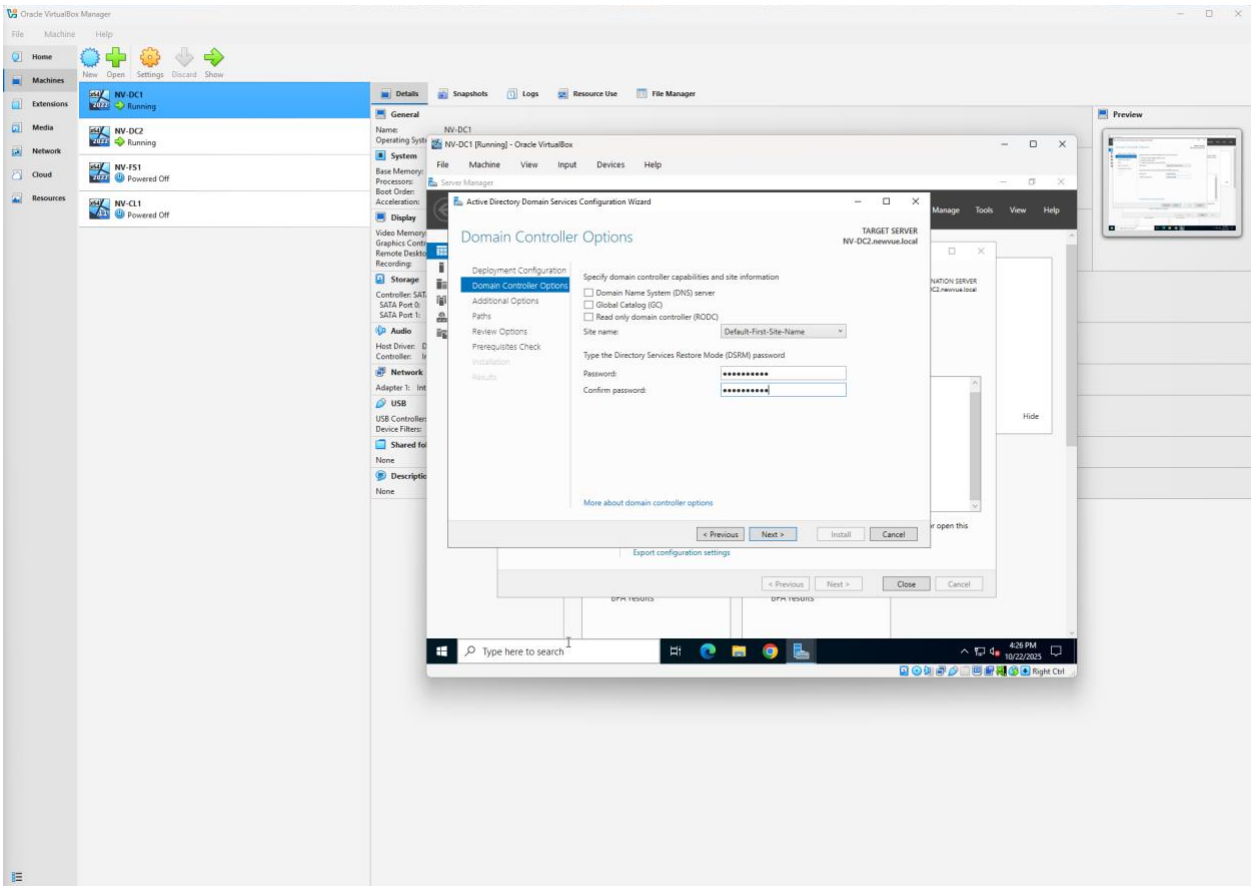
In this section, I promoted NV-DC2 to an additional Domain Controller in the **newvue.local** domain, intentionally leaving the **DNS** and **Global Catalog** roles unchecked for configuration in a later lab.

### Evidence

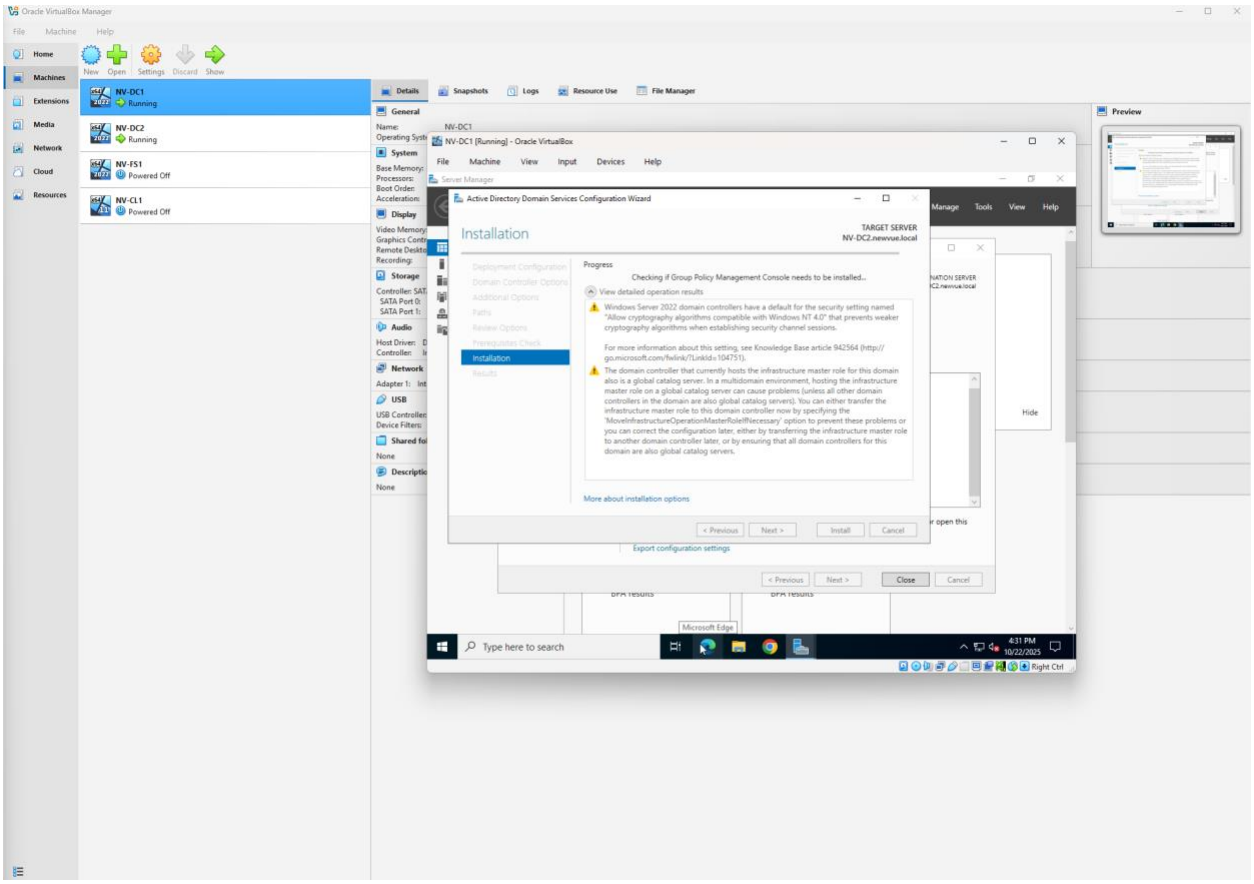
- **Evidence 3:** Screenshot of the **Deployment Configuration** window showing *Add a domain controller to an existing domain*.



- **Evidence 4:** Screenshot of the **Domain Controller Options** page with both **DNS** and **Global Catalog** unchecked.



- **Evidence 5:** Screenshot of the **Review Options / Installation Summary** screen before reboot.

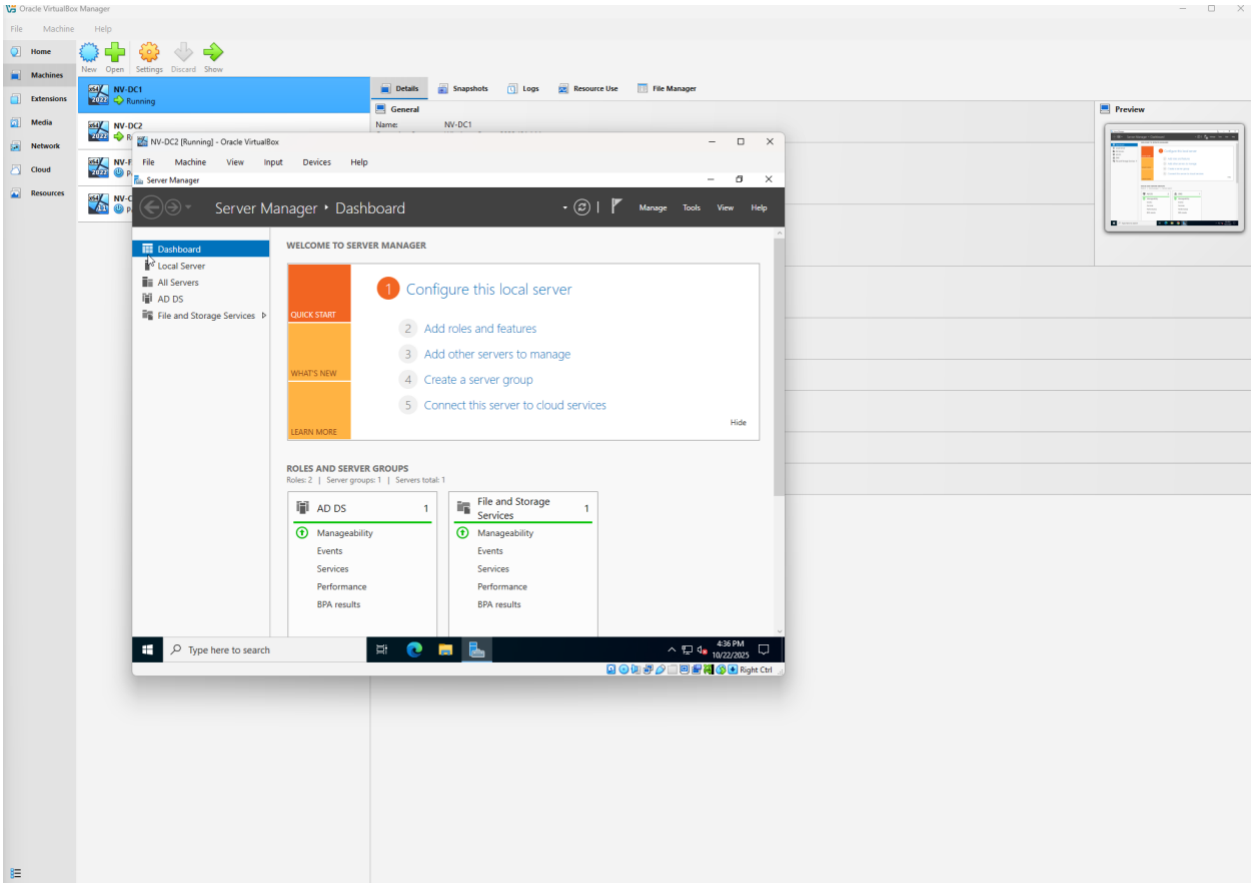


## Section 5 :Task - Verifying Domain Controller Promotion (15 points)

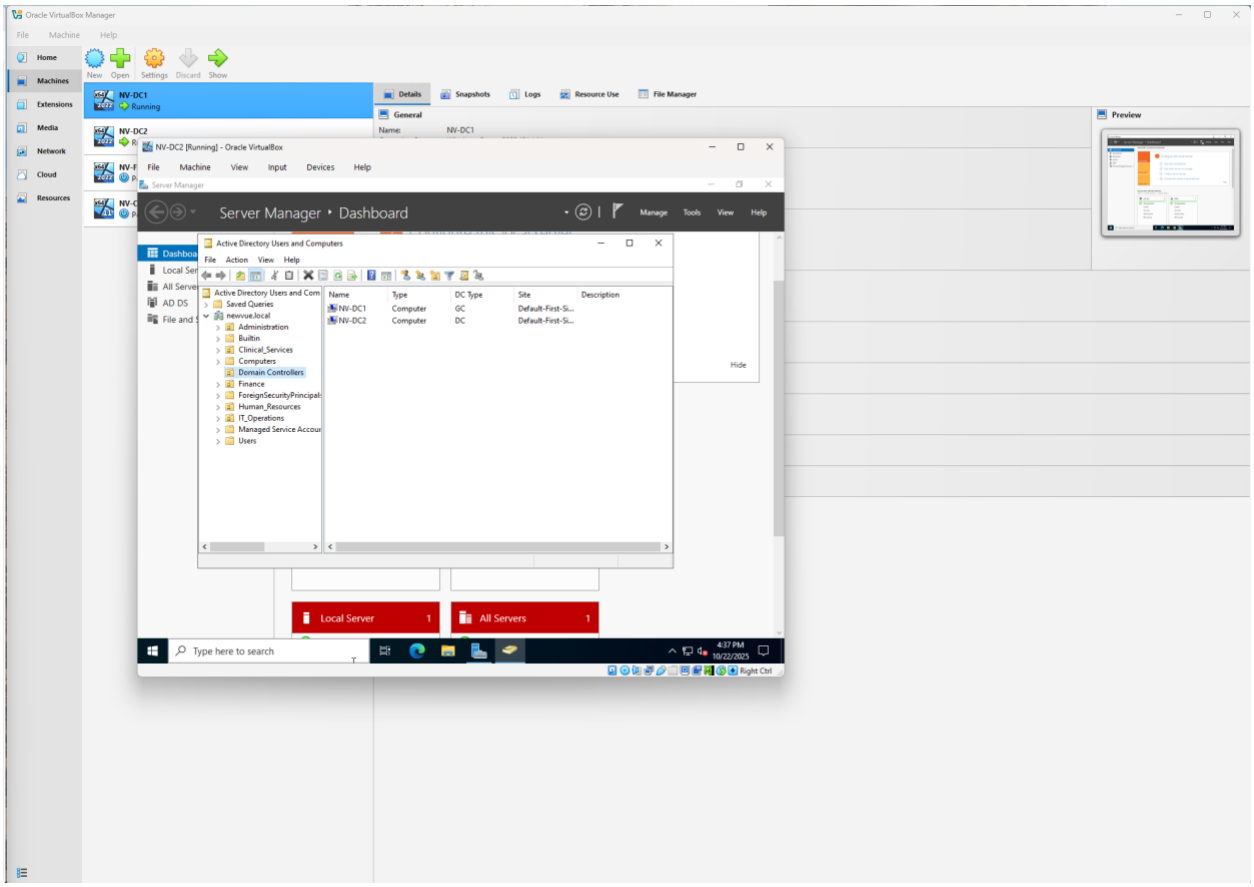
After NV-DC2 restarted, I verified that the AD DS role was active, confirmed domain access, and validated that both NV-DC1 and NV-DC2 appeared under the same site in **Active Directory Sites and Services**.

### Evidence

- **Evidence 6:** Screenshot of **Server Manager → Dashboard** showing only **AD DS** installed (no DNS role).



- **Evidence 7:** Screenshot of **Active Directory Sites and Services** displaying both **NV-DC1** and **NV-DC2** under *Default-First-Site-Name*.

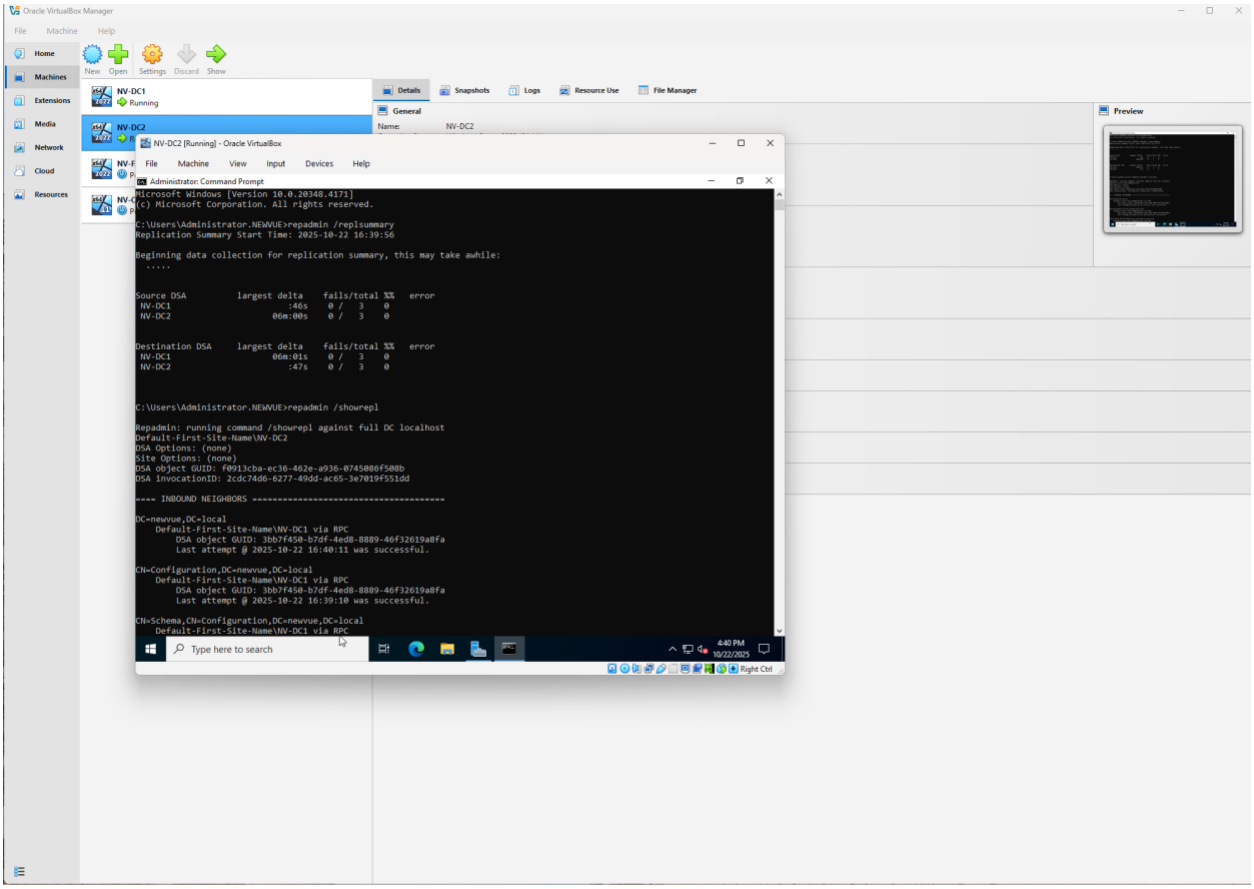


## Section 6 :Task - Verifying Replication Between Domain Controllers (15 points)

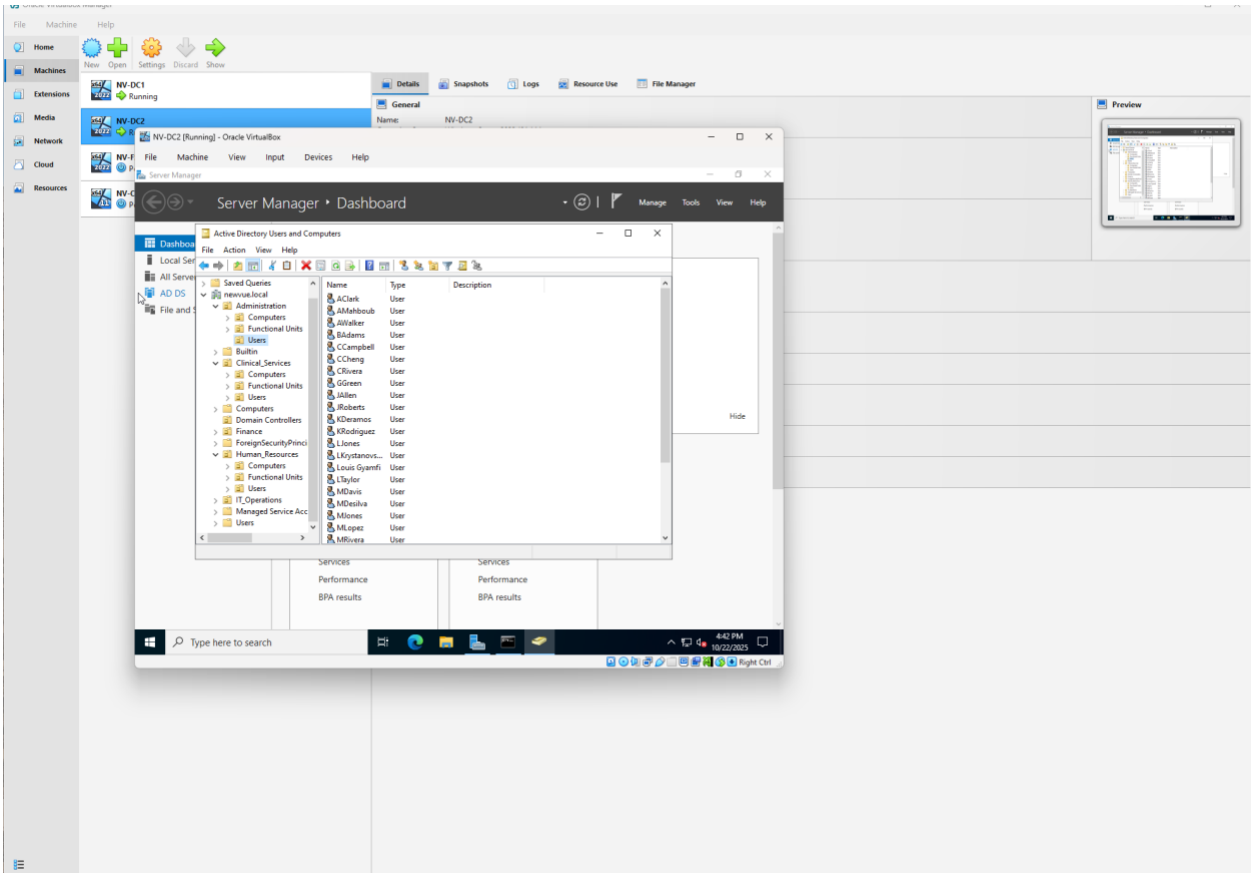
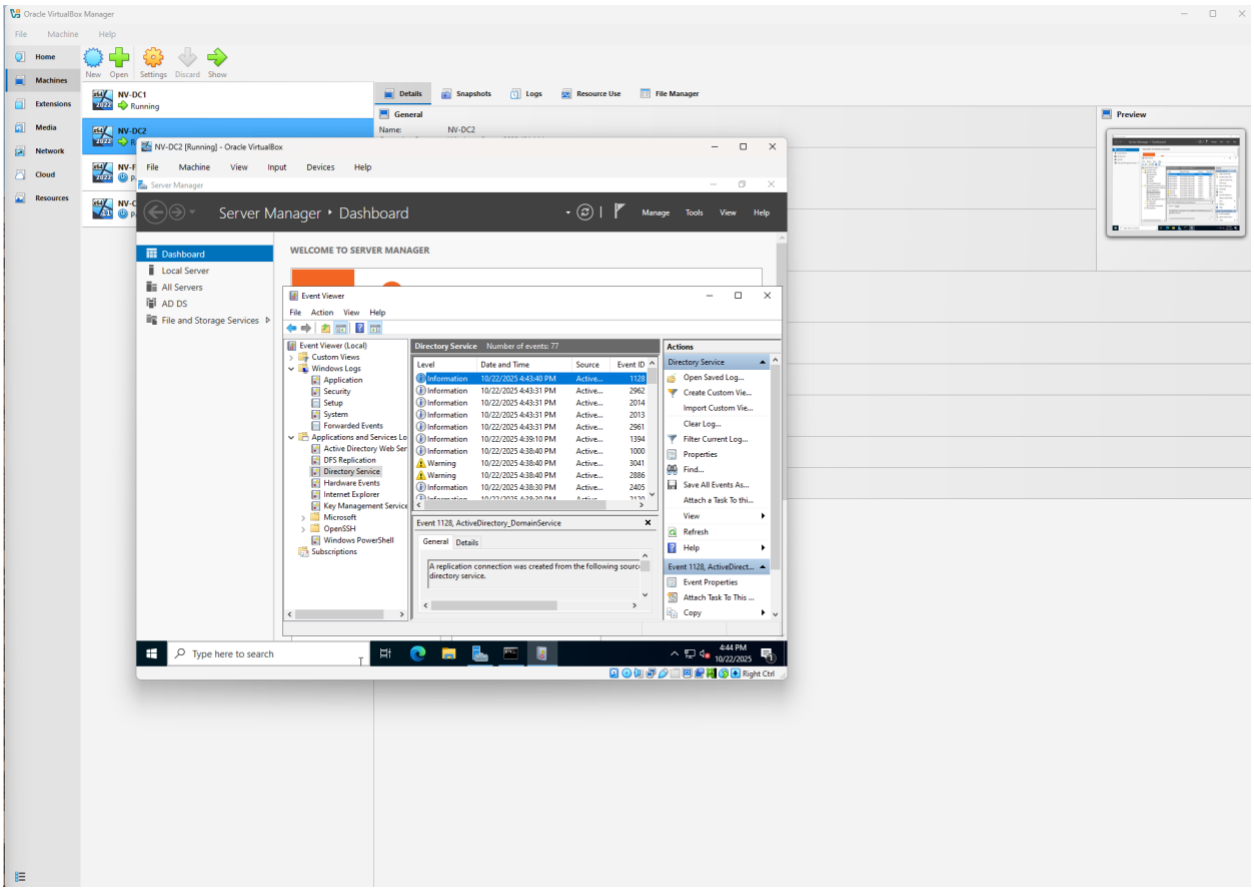
I confirmed that replication between NV-DC1 and NV-DC2 was functioning correctly using the **repadmin** commands and by comparing directory objects in **ADUC**.

### Evidence

- **Evidence 8:** Screenshot showing successful results of repadmin /replsummary or repadmin /showrepl.



- **Evidence 9:** Screenshot showing identical directory structure or synchronized objects between NV-DC1 and NV-DC2 in ADUC.



Note: Last step was Post Replication Review which reviews recent events confirming replication success and domain controller promotion completion