Install and configure ADDS on Windows Server 2022 Core in Azure (Part 1)

markswinkels.nl/install-and-configure-adds-on-windows-server-2022-core-in-azure-part-1

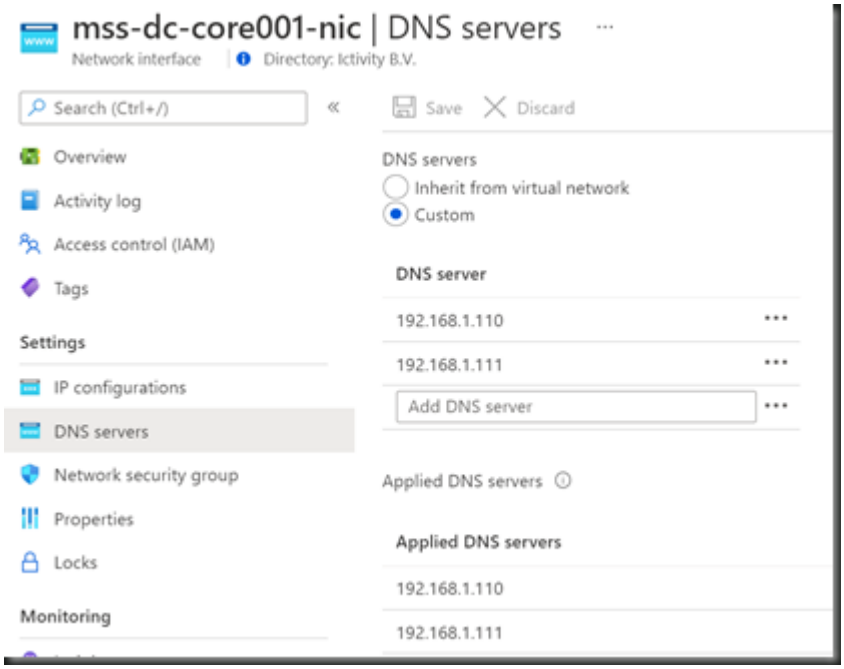
Mark December 27, 2021

Today, I'm going to show you how to install and configure Active Directory Domain Services on Windows Server 2022 Core edition on Azure.

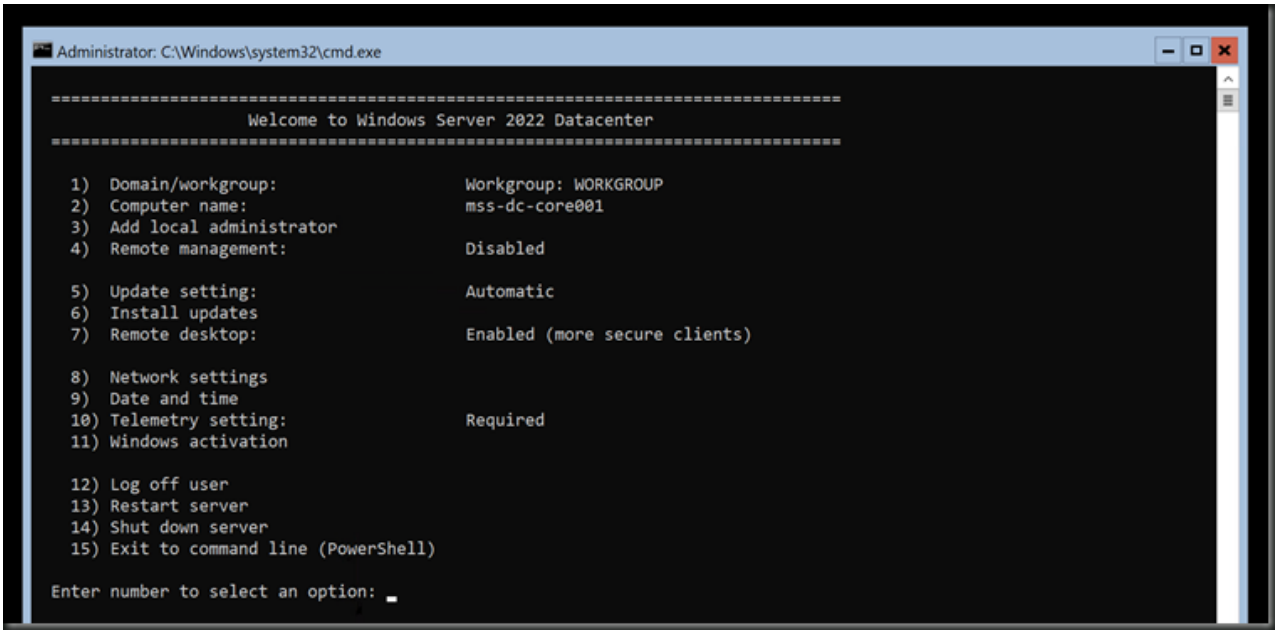
I've used some ARM templates to deploy my two domain controllers in Azure, based on Windows Server 2022 Core edition. These servers are in a separate subnet within my Azure environment. In this example, Í've two domain controllers, mss-dc-core001 and mss-dc-core002.

The first step is to configure the following things:

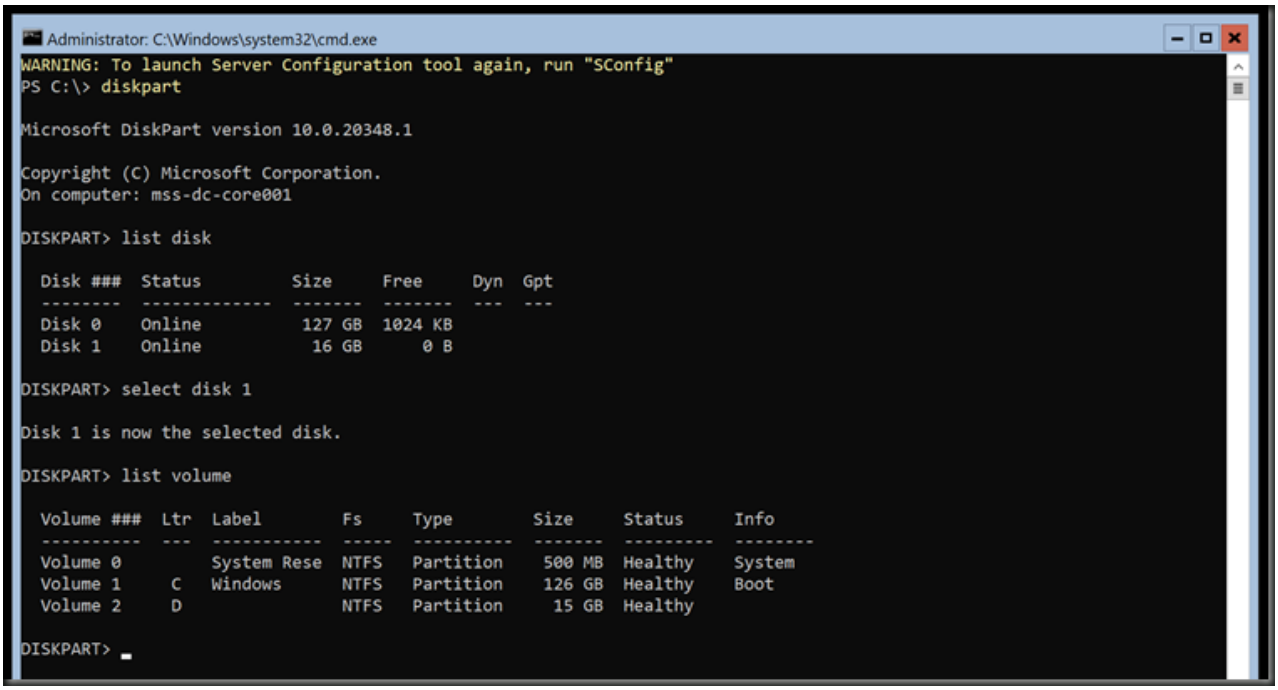
- Machine name
- Static IP from the Azure Portal (NOT within the VM)
- Static DNS from the Azure Portal (NOT within the VM)
- Date and Time
- Install all the latest updates



After logging in to the first domain controllers, there's just one big black screen with 'SCONFIG' open, that's all!

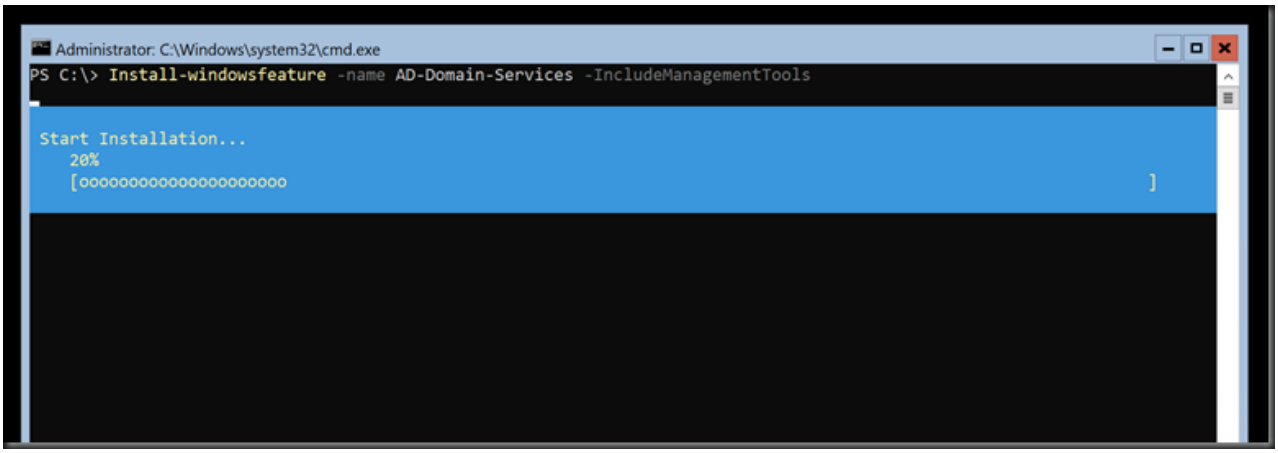


The next step is to prepare the data partition on our second disk to place the ADDS database, NETLOGON and SYSVOL directories. For this configuration, we are using DISKPART. We have created a new volume on the second disk It's drive D: with 16 GiB storage and disk caching is disabled.

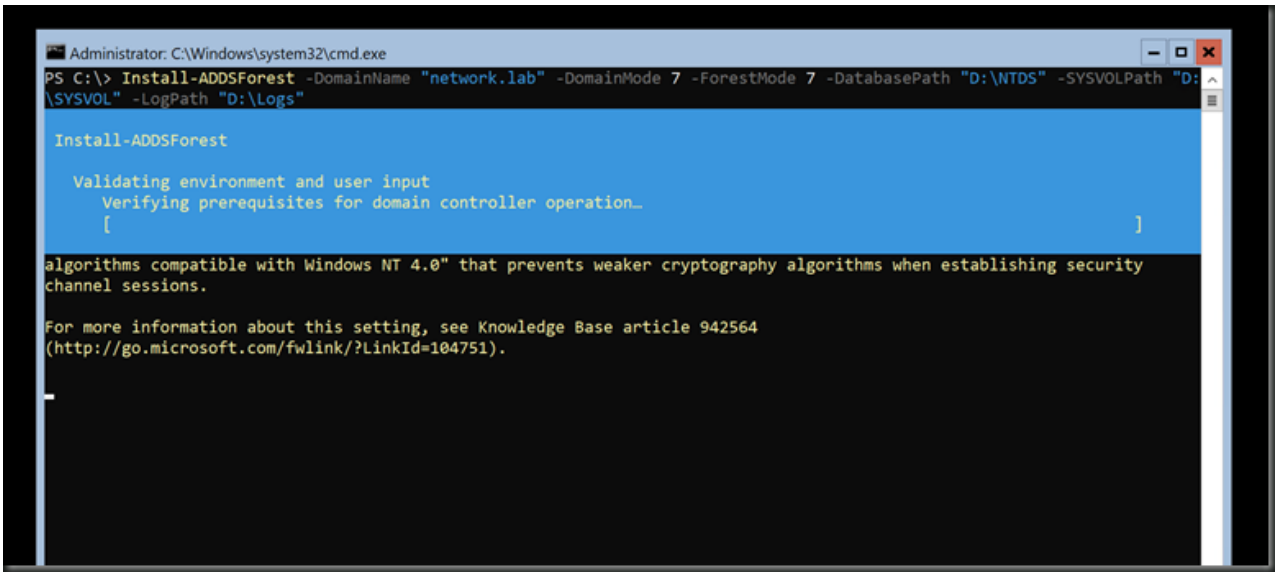


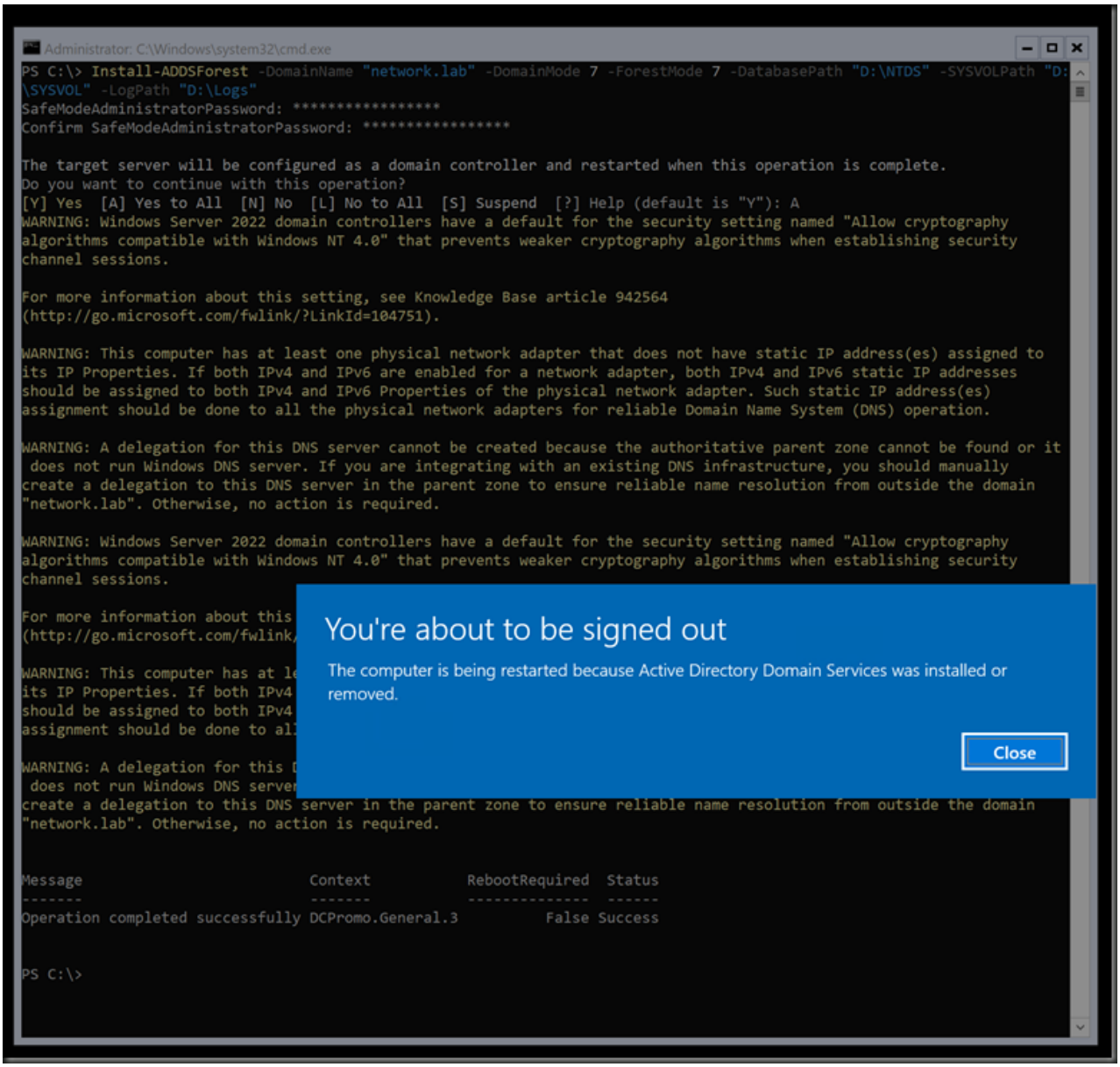
After the first configuration of the servers, we are ready to start the installation of the necessary services and features. Press ‘15’ to enter Powershell.

Install-windowsfeature -name AD-Domain-Services -IncludeManagementTools

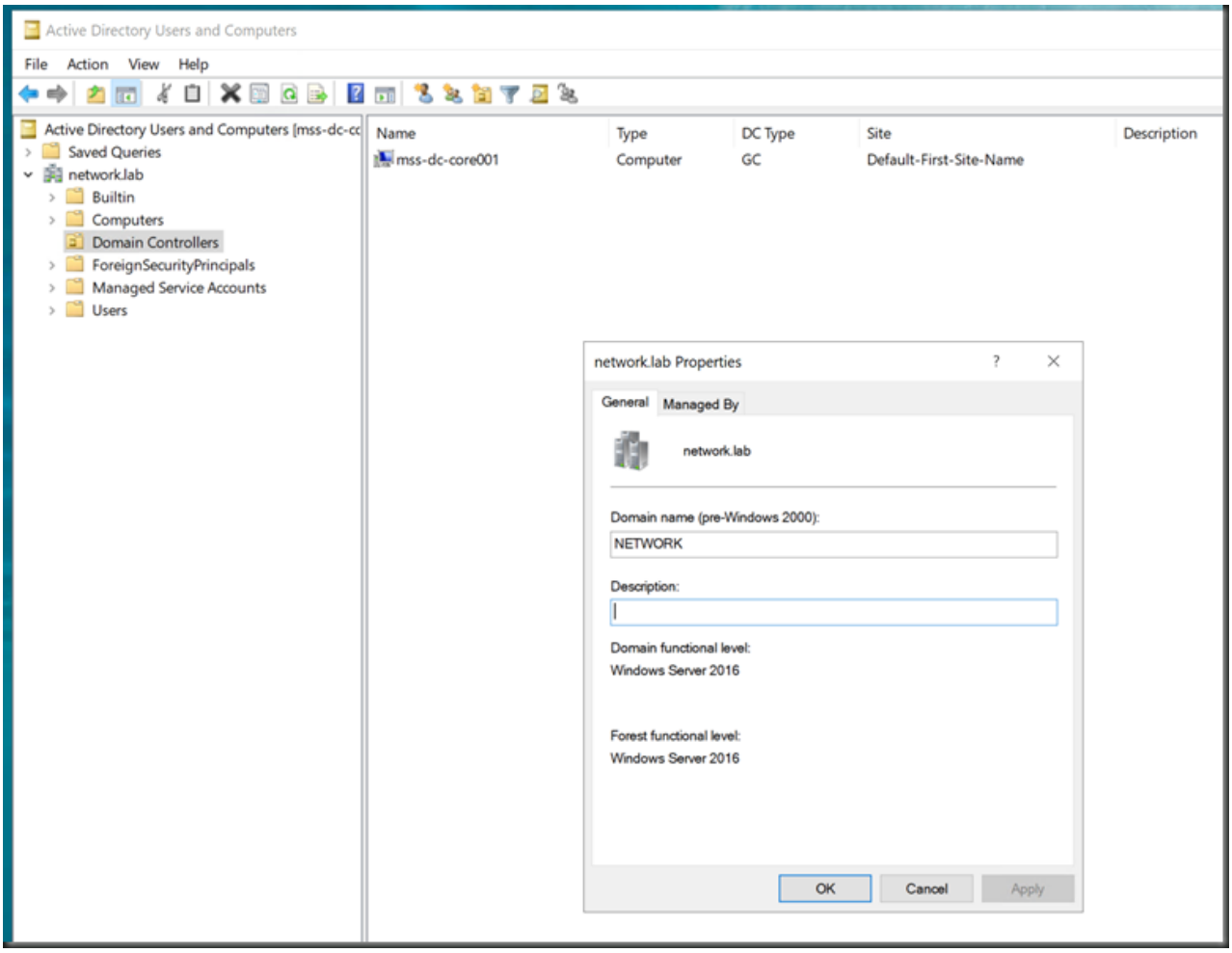


Install-ADDSForest -DomainName “network.lab” -DomainMode 7 -ForestMode 7 -DatabasePath “D:\NTDS” -SYSVOLPath “D:\SYSVOL” -LogPath “D:\Logs”



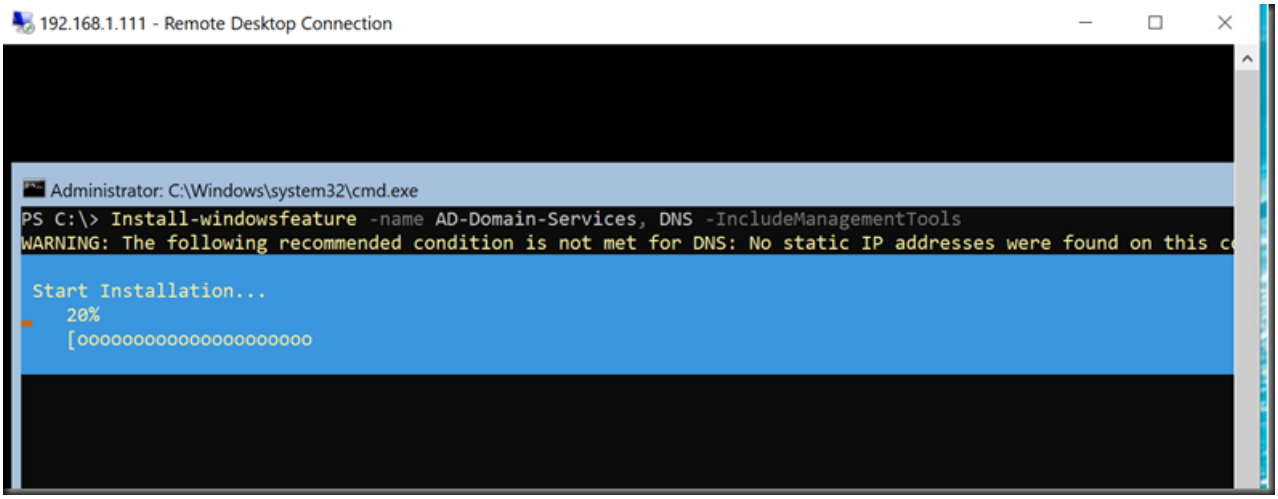


Because we are using Windows Core edition, we don't have any graphical management tools on the domain controllers. Therefore, we have installed the Remote Server Administration Tools or RSAT on a management server.

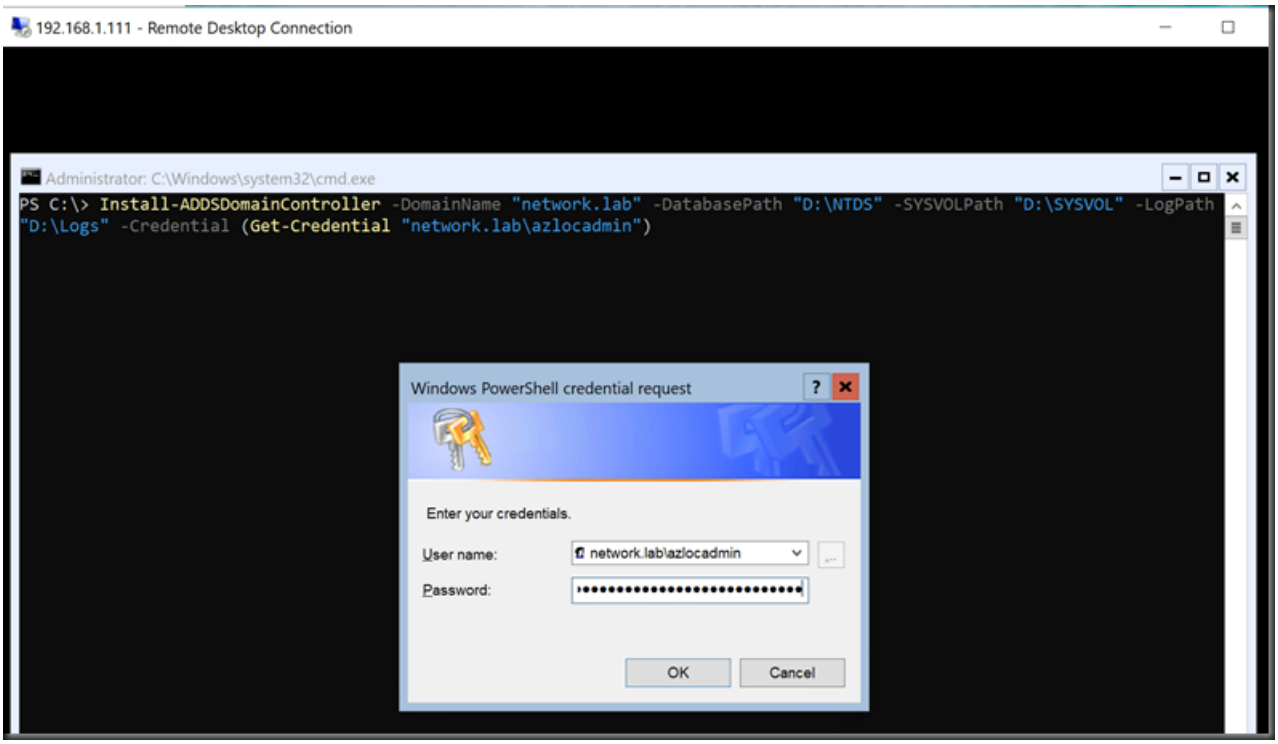


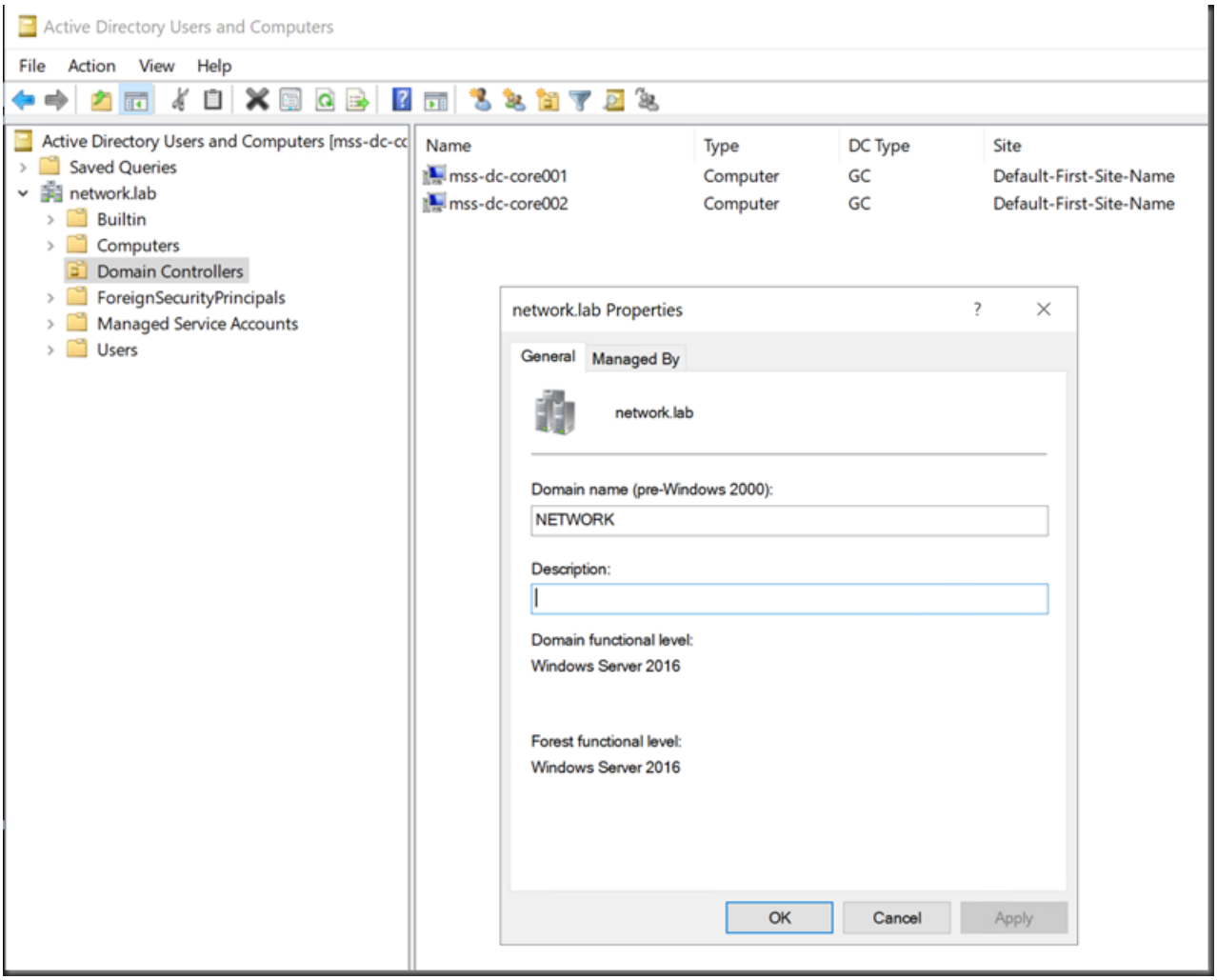
Here we can start ‘Active Directory Users & Computers’ to take a look into our new created Active Directory environment.

Install-windowsfeature -name AD-Domain-Services, DNS -IncludeManagementTools

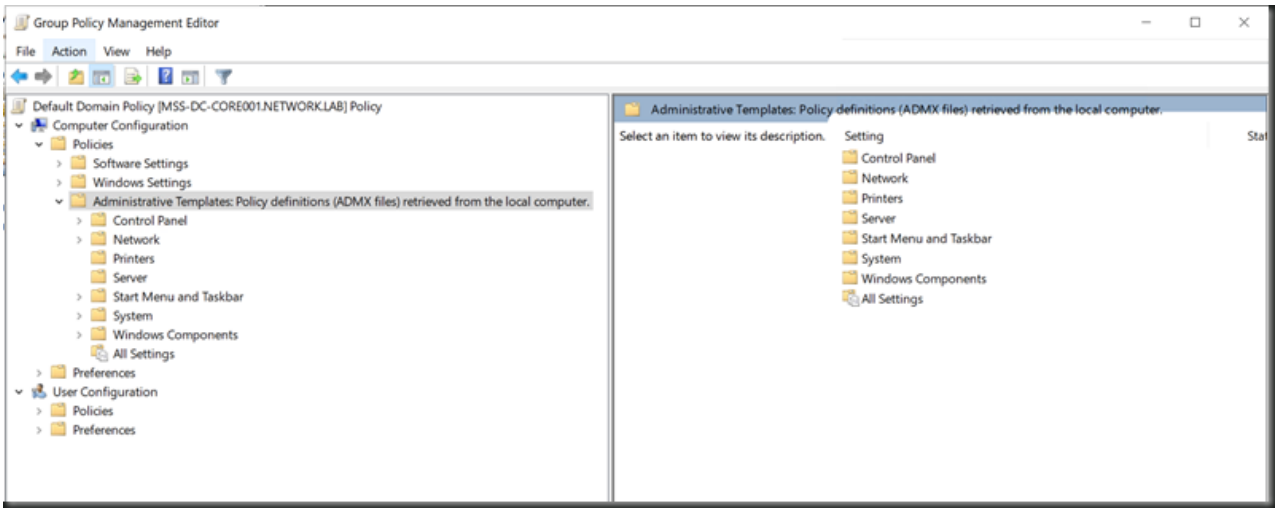


Install-ADDSDomainController -DomainName “network.lab” -DatabasePath “D:\NTDS” -SYSVOLPath “D:\SYSVOL” -LogPath “D:\Logs” -Credential (Get-Credential “network.lab\azlocadmin”)

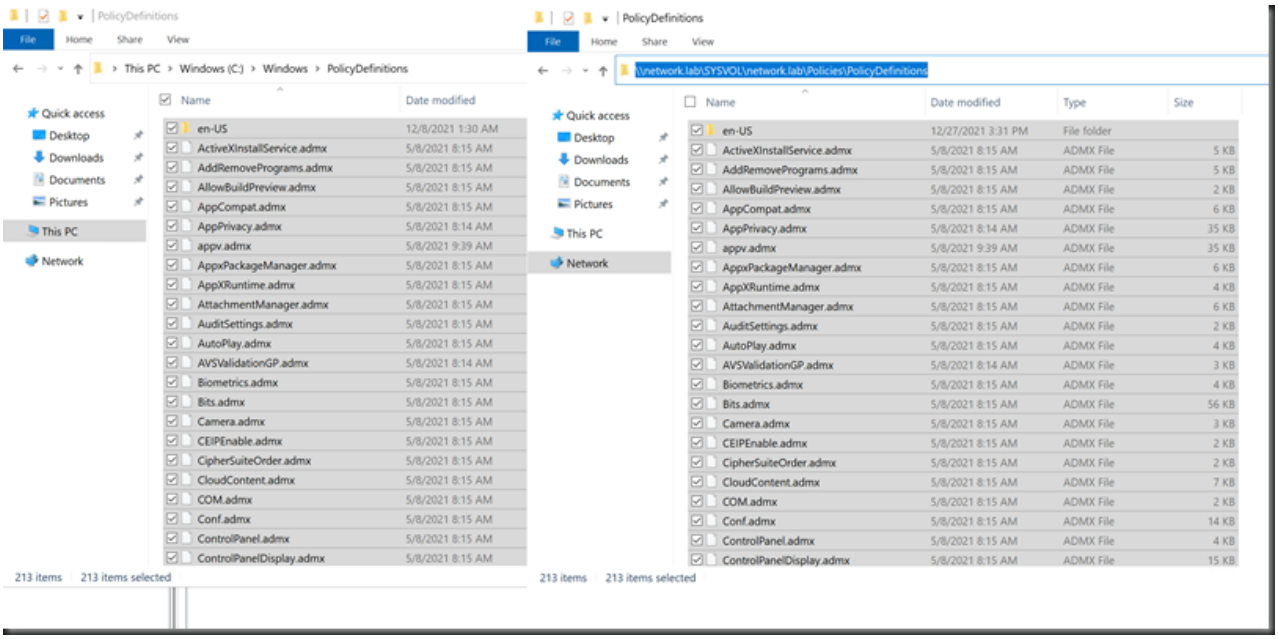




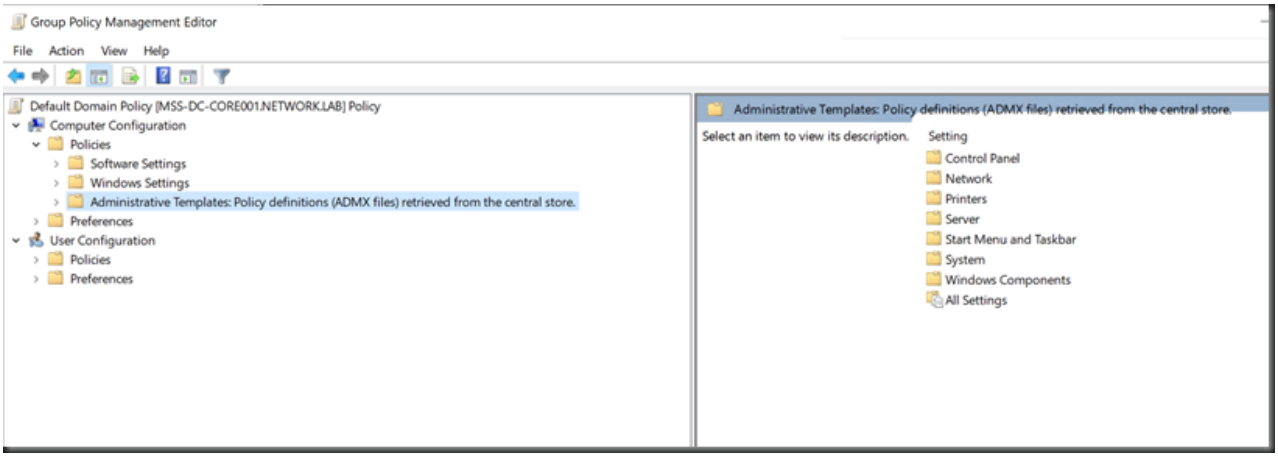
Now we have two active domain controllers in our Active Directory environment, based on Windows Server 2022 Core edition.



Create a Central Store for your group policy ADMX and ADML files. Copy all the files from:
”C:\Windows\PolicyDefinitions” to
“\\network.lab\SYSVOL\network.lab\Policies\PolicyDefinitions”.



Open the Group Policy Editor again and see if the policy definitions are loaded from the Central Store.



Wrap up:

We have created two domain controllers in Azure, based on Windows Server 2022 Core edition (no graphical user interface). We have created a new Active Directory Forest with a single domain ‘network.lab’. And last we have created the Central Store for storing the group policy definitions (ADMX and ADML) files.

In the next parts we are going to harden some security settings, configure Log Analytics for monitoring and configure Azure Backup for Back-up and Disaster Recovery.