

# **TOPIC : INSTALLING, UPGRADING, AND MIGRATING**

## **SERVERS AND WORKLOADS**

### **Objective:**

- Understand how to install and configure Nano Server.
  - Perform post-installation configuration tasks on Nano Server.
  - Enable remote management and verify Nano Server functionalities (file server and web server).
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### **Pre-requisites:**

- Windows Server 2016 ISO / installation media.
  - Virtual machines:
    - LON-DC1 (Windows Server 2016 Datacenter – GUI).
    - NANO-SVR1 (Nano Server VM).
  - Access to PowerShell with Administrator privileges.
  - User credentials:
    - Username: Administrator
    - Password: Pa\$\$w0rd
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### **Procedure:**

#### **Exercise 1: Installing Nano Server**

##### **Task 1: Copy required PowerShell scripts**

1. On LON-DC1, open PowerShell (Admin).
2. Run:

```
cd\  
md Nano  
copy d:\NanoServer\NanoServerImageGenerator\*.ps* c:\nano
```

## Task 2: Import PowerShell Module

```
Import-Module c:\nano\NanoServerImageGenerator.psm1
```

## Task 3: Create a Nano Server VHDX

```
new-NanoServerImage -Edition Standard -mediapath D:\ -Basepath c:\nano -targetpath
```

```
c:\nano\nano-svr1.vhdx -DeploymentType Guest -computename NANO-SVR1 -storage -packages Microsoft-
```

```
-NanoServer-IIS-Package
```

- Enter password: Pa\$\$w0rd
- Verify file nano-svr1.vhdx exists in C:\Nano.

## Task 4: Sign in to Nano Server VM

- Username: Administrator
- Password: Pa\$\$w0rd

```
Mode                LastWriteTime         Length Name  
----                -  
d-----          8/10/2025   9:03 PM          nano  
  
PS C:\> copy d:\NanoServer\NanoServerImageGenerator\*.ps* c:\nano  
PS C:\> Import-Module c:\nano\NanoServerImageGenerator.psm1  
PS C:\> new-NanoServerImage -Edition Standard -mediapath D:\ -Basepath c:\nano -targetpath c:\nano\nano-svr1.vhdx -DeploymentType Guest -compute  
rname NANO-SVR1 -storage -packages Microsoft-NanoServer-IIS-Package  
  
PS C:\> New-NanoServerImage -Edition Standard -mediapath D:\ -Basepath C:\nano -targetpath C:\nano\nano-svr1.vhdx -DeploymentType Guest -comput  
ername NANO-SVR1 -storage -package Microsoft-NanoServer-IIS-Package  
  
cmdlet New-NanoServerImage at command pipeline position 1  
Supply values for the following parameters:  
AdministratorPassword:   
Done. The log is at: C:\nano\Logs\2025-08-10_21-21-03-39  
PS C:\>
```

## Exercise 2: Post-installation tasks

### Task 1: Use Nano Recovery Console

- Verify computer name = NANO-SVR1.
- Note IP address from DHCP.

### Task 2: Join Nano Server to Domain

On **LON-DC1**, run:

```
djoin.exe /provision /domain adatum /machine nano-svr1 /savefile .\odjblob  
Set-Item WSMAN:\localhost\Client\TrustedHosts "172.16.0.X"  
$ip = "172.16.0.X"  
Enter-PSSession -ComputerName $ip -Credential $ip\Administrator  
netsh advfirewall firewall set rule group="File and Printer Sharing" new enable=yes
```

- Copy odjblob to Nano server and apply domain join:

```
djoin /requestodj /loadfile c:\odjblob /windowspath c:\windows /localos  
shutdown /r /t 5
```

- Login again → confirm domain join (Adatum.com).

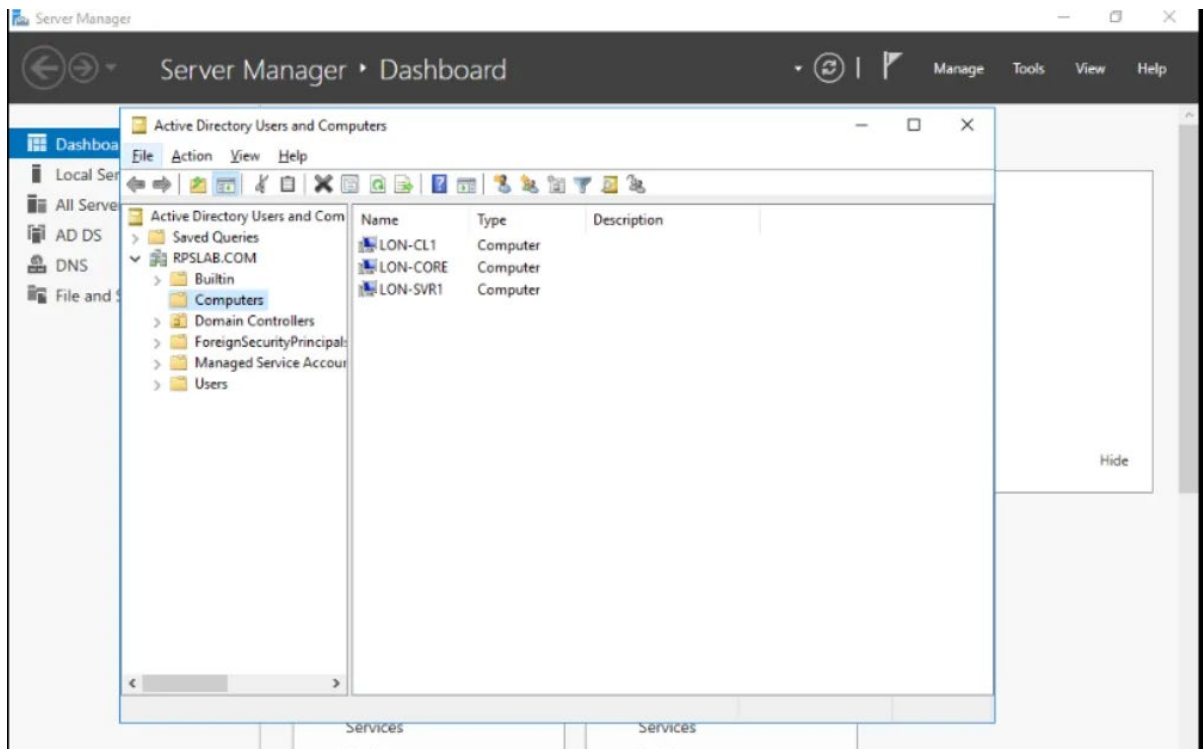
### Task 3: Configure Nano Server

- Install File Server role:

```
install-windowsfeature Fs-fileserver -comp Nano-svr1
```

- Verify network and roles:

```
get-netipaddress  
bcdedit /enum  
net share
```



### Exercise 3: Remote Management

#### Task 1: Enable remote management in Server Manager

- Add Nano-SVR1 in Server Manager.
- Create new SMB Share → Name: Data.

#### Task 2: Test File Server and Web Server

- Map drive:

```
net use z: \\Nano-svr1\c$
```

- Create simple webpage: z:\inetpub\wwwroot\Default.htm  
Content: <H1> Nano Server Website </H1>
- Verify in Internet Explorer → http://nano-svr1.
- Map shared folder:

```
net use y: \\nano-svr1\data
```

- Save a document and verify accessibility.

### **Task 3: Cleanup / Prepare for Next Module**

- Revert VMs (LON-DC1, NANO-SVR1) using Hyper-V Manager.
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### **Conclusion**

By completing this lab, we:

- Installed and configured Nano Server.
- Performed domain join, IP configuration, and role installation.
- Enabled remote management via Server Manager.
- Verified file sharing and web hosting functionality on Nano Server.

Thus, Module 1 successfully demonstrated installation, configuration, and remote management of Nano Server in Windows Server 2016.