## 1. Create Virtual Machines in Hyper-V

1. Open **Hyper-V Manager** → Click **New → Virtual Machine**.
2. Enter **Name** (ServerVM / ClientVM).
3. Assign **Memory** (e.g., 4 GB for server, 2 GB for client).
4. Configure **Network** → Attach to Virtual Switch.
5. Create **Virtual Hard Disk**.
6. Select **Installation Media** → choose Windows Server ISO (for server VM) or Windows 10/11 ISO (for client VM).
7. Finish setup and **Start the VM**.

## 🔹 2. Install OS and Configure Network

1. Install Windows on both VMs.
2. Log in to each VM and set **IP Address, Subnet Mask, Gateway, DNS**:
   * Go to **Network & Internet settings** → **Adapter properties** → **IPv4 properties**.
   * Example (Server VM):
     + IP: 192.168.1.10
     + Subnet: 255.255.255.0
     + Gateway: 192.168.1.1
     + DNS: 192.168.1.10 (Domain Controller IP)
   * Example (Client VM):
     + IP: 192.168.1.20
     + Subnet: 255.255.255.0
     + Gateway: 192.168.1.1
     + DNS: 192.168.1.10 (Domain Controller IP).

## 🔹 3. Join Both VMs to Training Domain

1. On **Server VM (Domain Controller)** → Promote to Domain Controller using AD DS.
   * Run **Server Manager → Add Roles and Features → Active Directory Domain Services**.
   * Configure **Domain**: training.com.
2. On **Client VM**:
   * Right-click **This PC → Properties** → **Change settings**.
   * In **System Properties → Computer Name → Change**.
   * Select **Domain** → Enter training.com.
   * Enter domain admin credentials (training\administrator).
   * Restart VM.

### Current Settings in Client PC

* **IP address** → 172.30.0.101
* **Subnet mask** → 255.255.0.0 (Class B subnet, allows many hosts)
* **Default gateway** → 172.30.0.1 (router/gateway or domain controller)
* **Preferred DNS server** → 172.30.0.1

**Disable Firewall (for lab/testing)**

1. Inside each VM → Open **Control Panel → Windows Defender Firewall**.
2. Select **Turn Windows Firewall on or off** → Choose **Turn off** for Domain, Private, Public profiles.

## 🔹 4. Verify in SCCM (Microsoft Configuration Manager)

1. Open **SCCM Console**.
2. Check **Assets and Compliance → Devices**.
3. Both Server VM and Client VM should appear under the domain.

## 🔹 5. Enable Remote Desktop

### On ****Server VM****

1. Log in as **training\Administrator**.
2. Open **Server Manager → Local Server**.
3. Find **Remote Desktop: Disabled** → Click to change.
4. Select ✅ Allow remote connections to this computer.
5. Confirm and apply.

### On ****Client VM****

1. Log in as **sowmeeka** (domain user).
2. Open **This PC → Right-click → Properties**.
3. Click **Advanced system settings** → **Remote tab**.
4. Under Remote Desktop → Select ✅ Allow remote connections to this computer.
5. **Uncheck** Allow connections only with NLA (for lab testing).
6. Apply and OK.