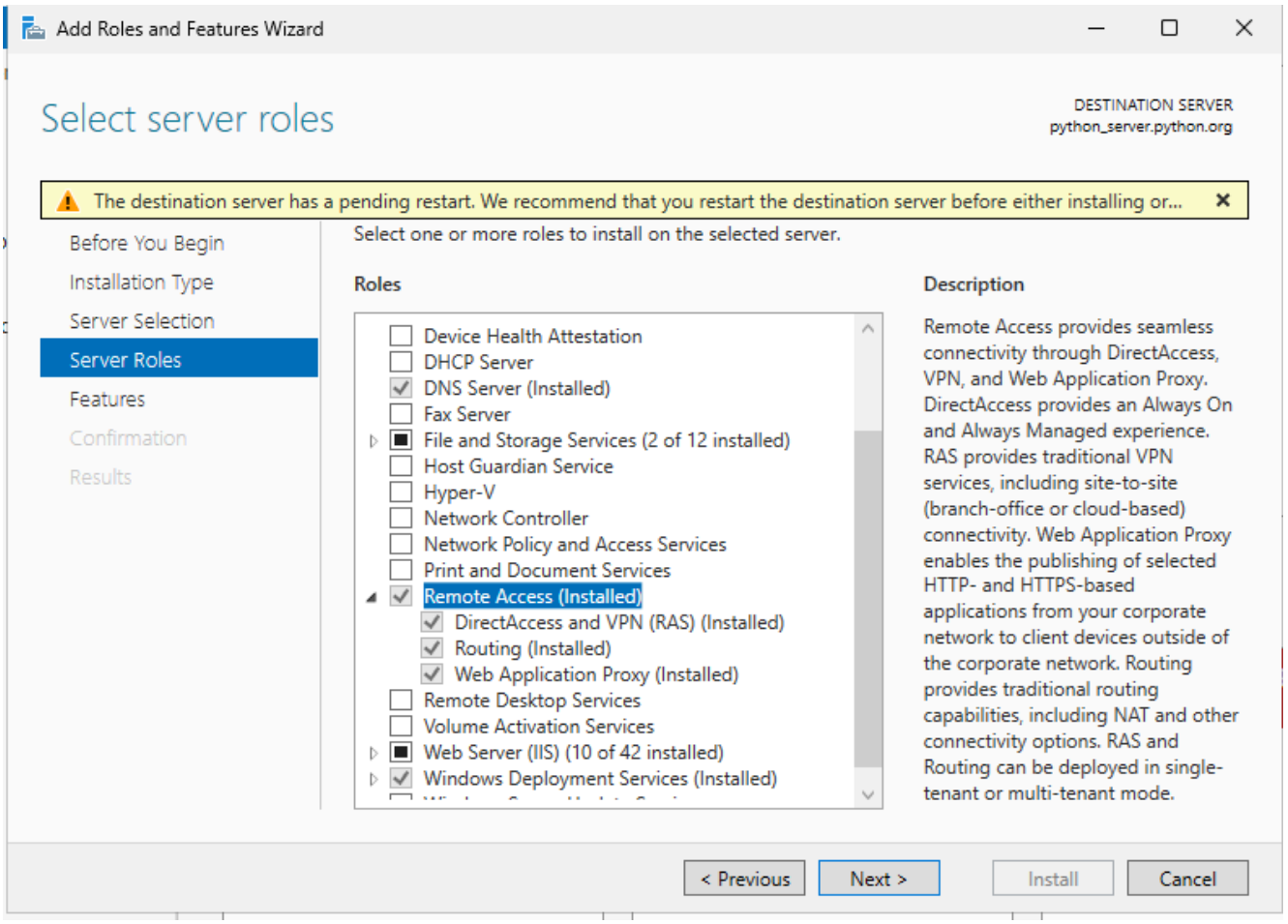
Windows VPN Connection

This guide explains **how to create a VPN (dial-up) connection** using **Windows Server 2025** and **Windows 11**.

Part 1: VPN Server Setup (Windows Server 2025)

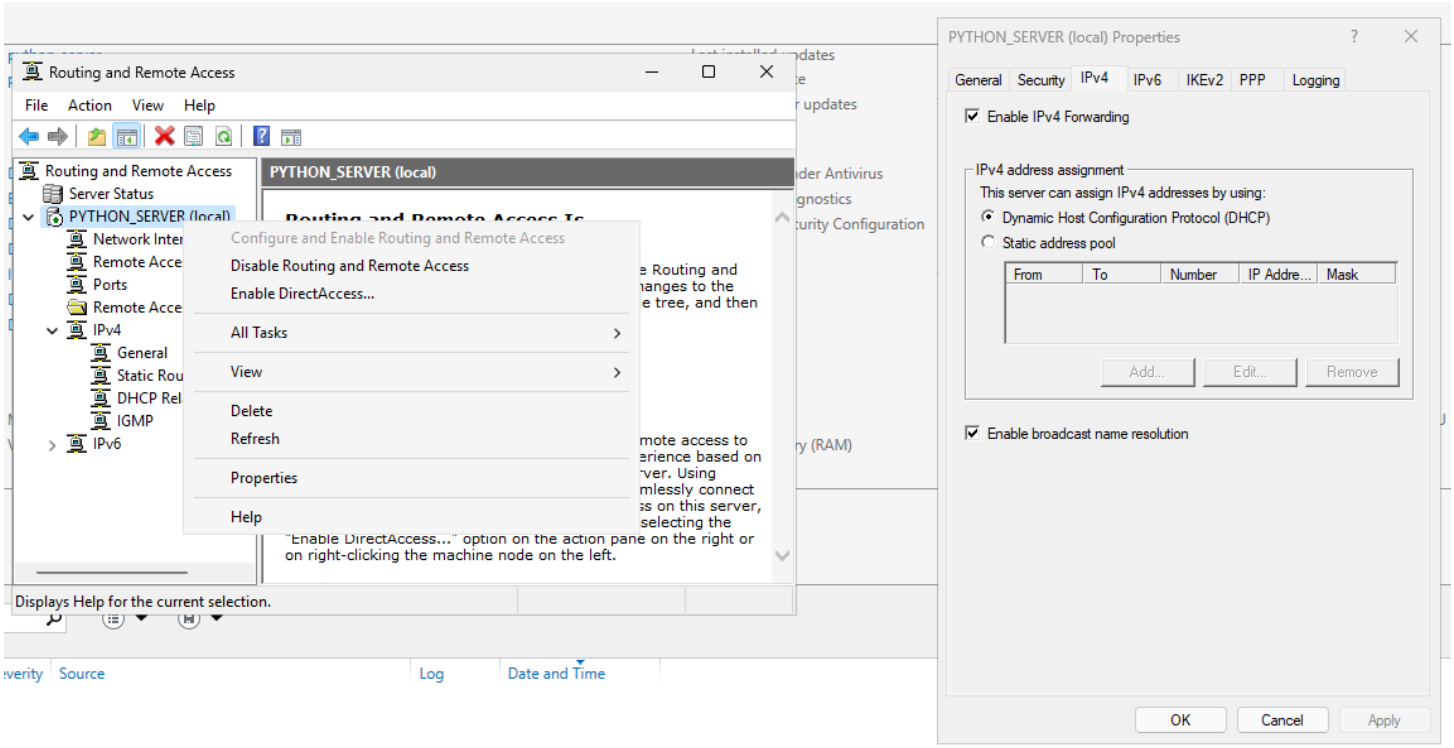
Step 1: Install Remote Access Role

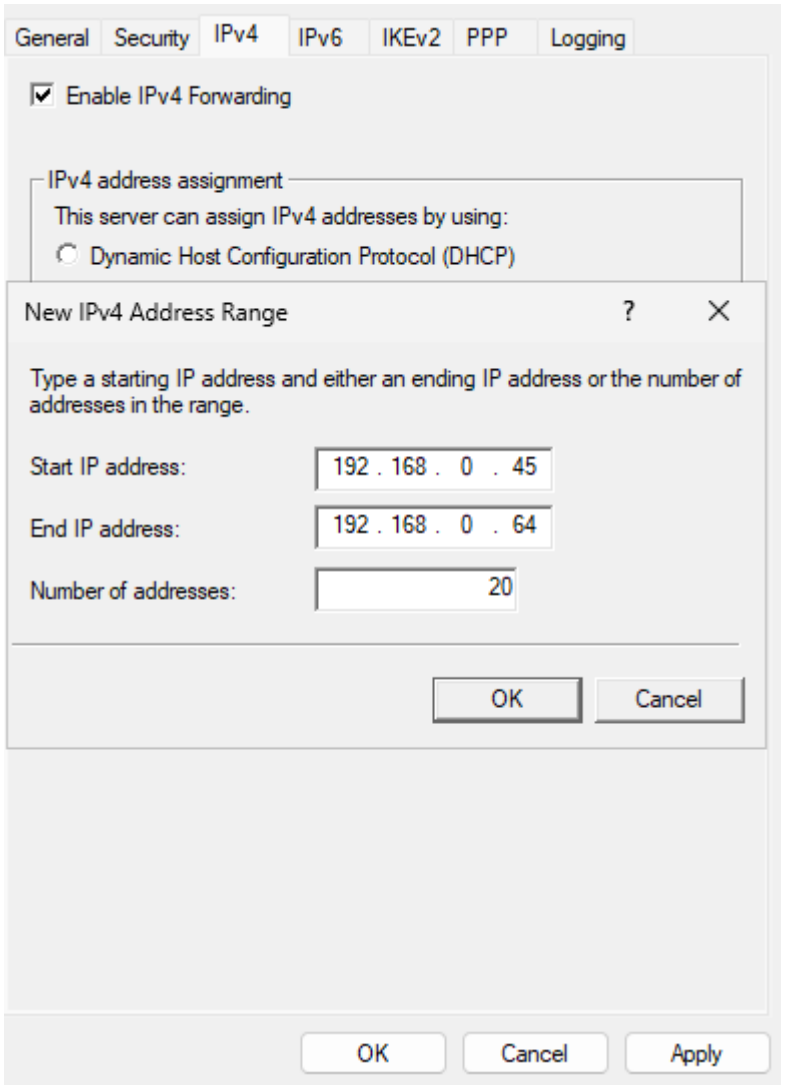
1. Open **Server Manager**
2. Click **Add Roles and Features**
3. Select **Role-based or feature-based installation**
4. Choose your server
5. Select **Remote Access**
6. Tick:
    - DirectAccess and VPN (RAS)
    - Routing
7. Click **Install**



Step 2: Configure RRAS (VPN Server)

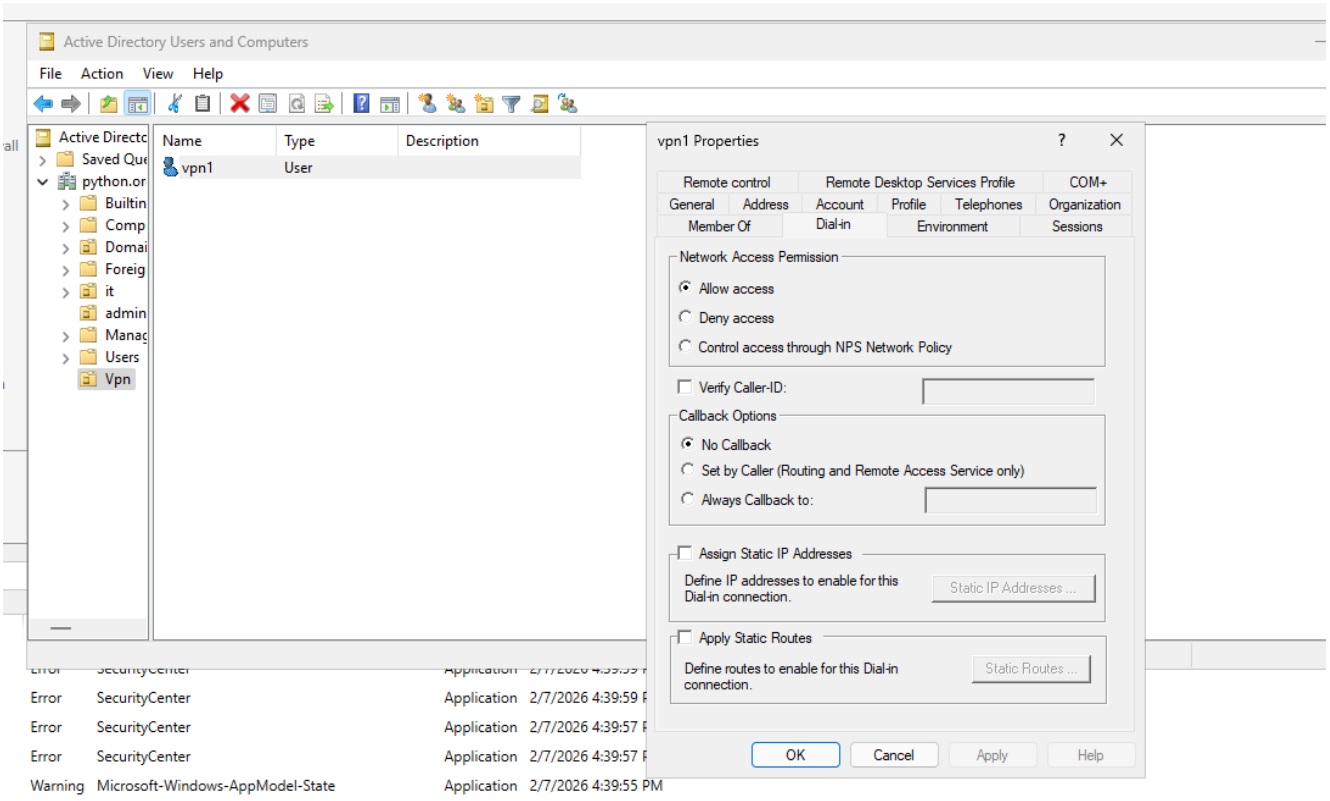
1. Open **Server Manager → Tools → Routing and Remote Access**
2. Right-click your server → **Select Properties**
3. Choose IPV4
4. Select **Static address pool → Enter ip Address Range → OK → Apply**
5. Finish and **Start the service**





Step 3: Enable User VPN Access

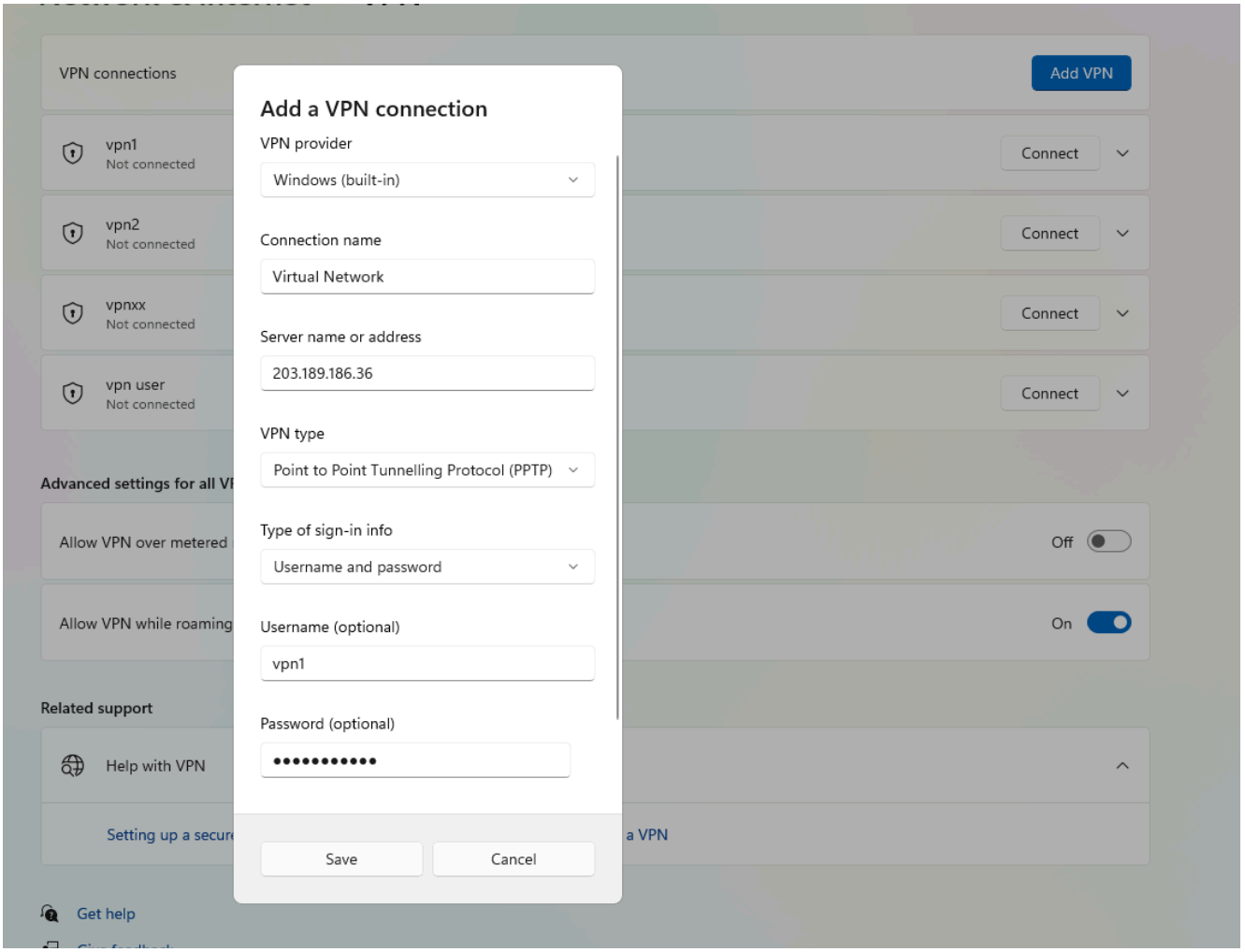
1. Open **Active Directory Users and Computers**
2. Right-click user → **Properties**
3. Go to **Dial-in** tab
4. Select **Allow access**
5. Click **OK**



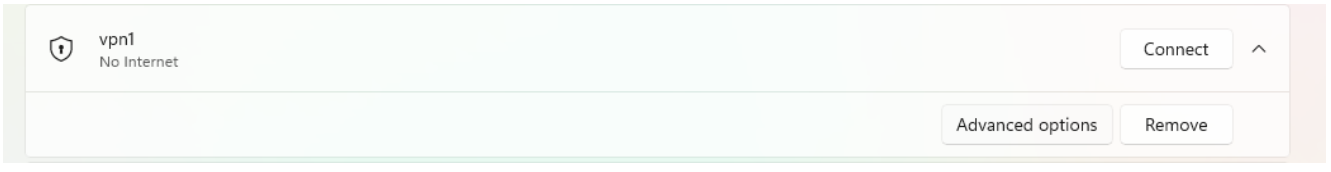
Part 2: VPN Client Setup (Windows 11)

Step 5: Create VPN Connection

1. Go to **Settings → Network & Internet → VPN**
2. Click **Add VPN**
3. Fill details:
    - VPN Provider: **Windows (built-in)**
    - Connection Name: *Office VPN*
    - Server name/IP: *(Public IP ex - 203.189.186.36)*
    - VPN type: **PPTP**
    - Username & Password
4. Click **Save**



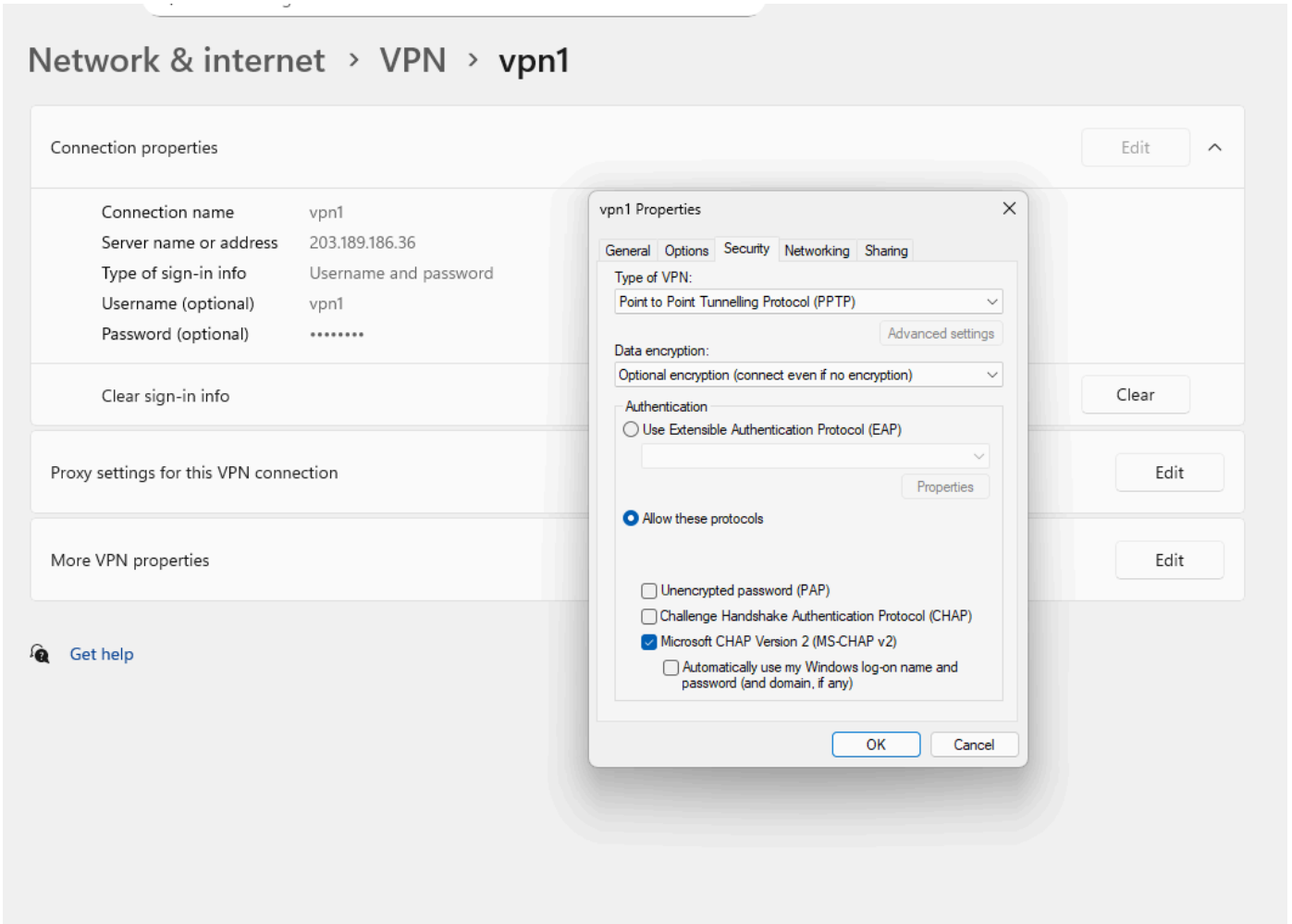
5. Click **Advanced options**



6. Click **Security Tab chose those Setting Like this Image view**

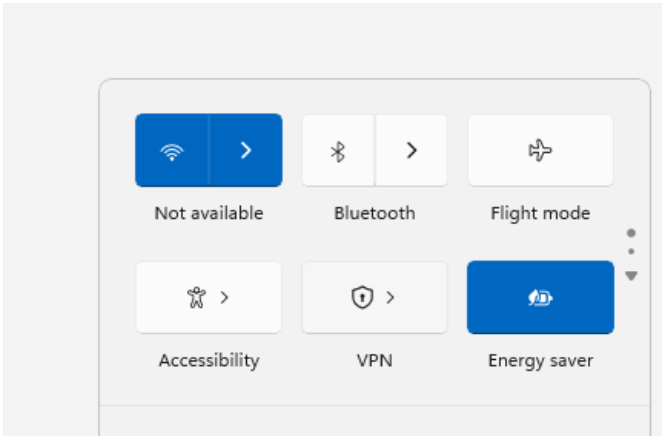
   Vpn type - **(pptp)**

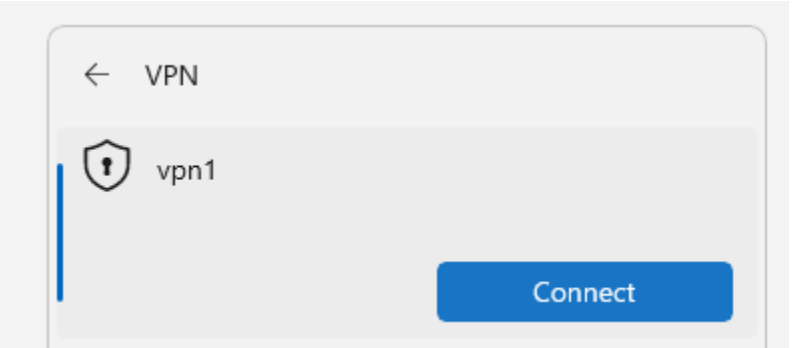
   Allow these Protocols and **Chose 3rd Optoin**

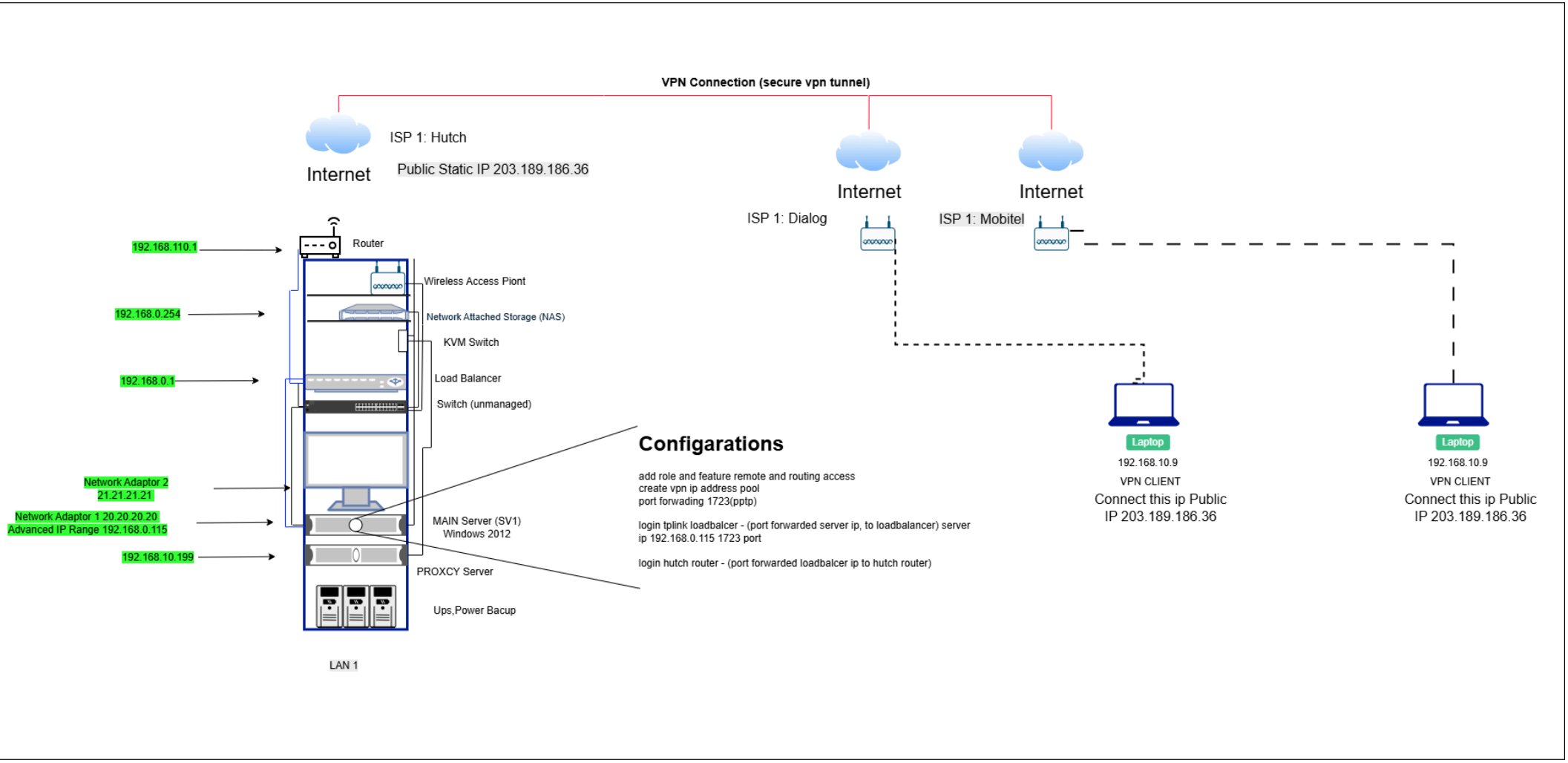


Step 6: Go to Windows 11 Client Connect to VPN

1. Click **Connect**
2. Status shows **Connected**






VPN Connection (secure vpn tunnel)
ISP 1: Hutch
Internet
Public Static IP 203.189.186.36
Internet
ISP 1: Dialog
Internet
ISP 1: Mobitel
192.168.110.1
Router
Wireless Access Piont
192.168.0.254
Network Attached Storage (NAS)
KVM Switch
192.168.0.1
Load Balancer
Switch (unmanaged)
Network Adaptor 2
21.21.21.21
Network Adaptor 1 20.20.20.20
Advanced IP Range 192.168.0.115
MAIN Server (SV1)
Windows 2012
192.168.10.199
PROXCY Server
Ups,Power Bacup
LAN 1
Configarations
add role and feature remote and routing access
create vpn ip address pool
port forwading 1723(pptp)
login tplink loadbalcer - (port forwarded server ip, to loadbalancer) server ip 192.168.0.115 1723 port
login hutch router - (port forwarded loadbalcer ip to hutch router)
Laptop
192.168.10.9
VPN CLIENT
Connect this ip Public IP 203.189.186.36
Laptop
192.168.10.9
VPN CLIENT
Connect this ip Public IP 203.189.186.36

Part 4: Network Diagram & Port Forwarding (Important)

The network diagram shows how the **VPN client connects to the VPN server** through the **internet router and load balancer**.

Additional Configuration Done

1. **Internet Router Configuration**
    - PPTP VPN uses **TCP Port 1723**
    - Port **1723** is forwarded from the **public IP** to the **Load Balancer IP**
2. **Load Balancer Configuration**
    - Load balancer receives PPTP traffic on **TCP 1723**
    - Traffic is forwarded to the **VPN Server internal IP**
    - Load balancer IP range is allowed for VPN traffic
3. **VPN Server Configuration**
    - PPTP port **1723** allowed in Windows Firewall
    - RRAS service listening on VPN server IP

Traffic Flow (Simple)

VPN Client → Internet → Router (Port 1723) → Load Balancer → VPN Server

This ensures secure VPN connectivity between **external clients** and the **internal network**.