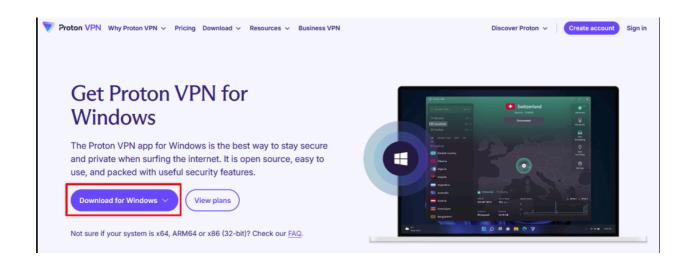
# **VPN Setup and Privacy Report**

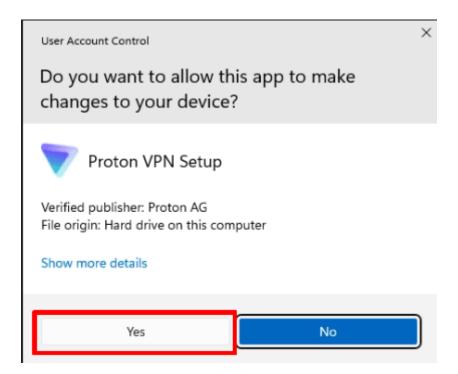
# 1. Choose a Reputable Free VPN Service

- **VPN Chosen:** ProtonVPN (Free Tier)
- Why? ProtonVPN offers unlimited bandwidth on the free tier and strong privacy policies with no logging.



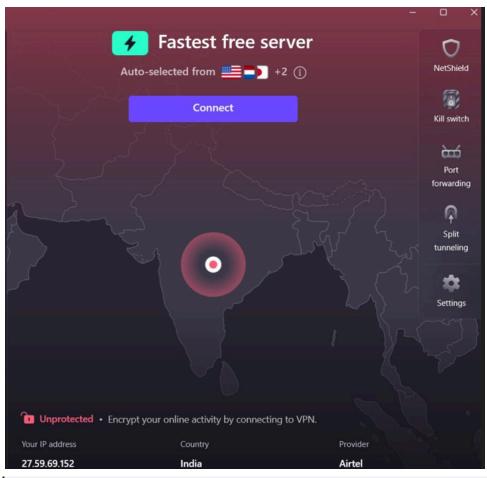
#### 2. Download and Install the VPN Client

- Go to <a href="https://protonvpn.com">https://protonvpn.com</a>
- Sign up for a free account.
- Download the ProtonVPN client for your operating system (Windows/macOS/Linux).
- Install and launch the client.

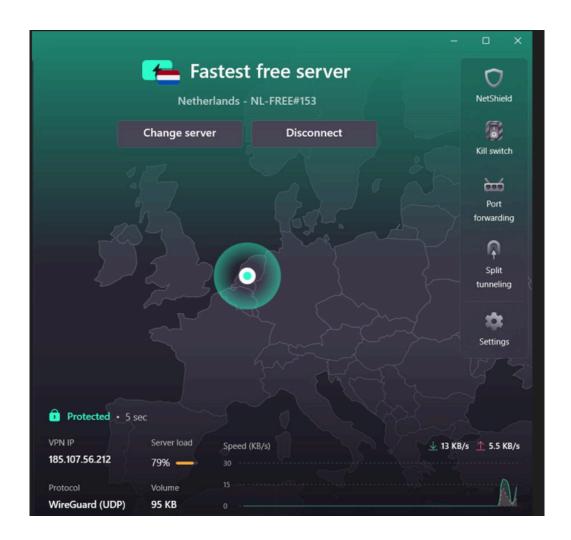


# 3. Connect to a VPN Server

- Log in to the ProtonVPN client.
- Choose a **Free server** (for example, Netherlands or United States based on proximity).
- Click "Connect".





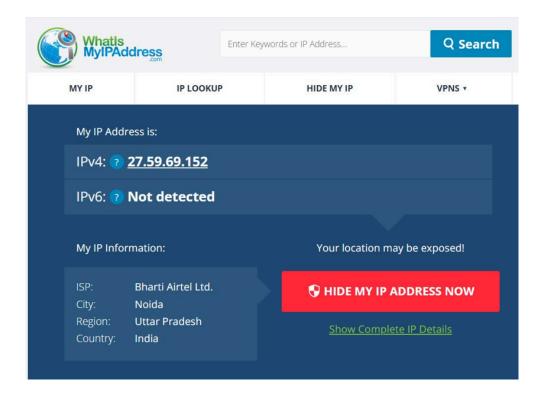


# 4. Verify Your IP Address Has Changed

- While connected to the VPN, go to <a href="https://whatismyipaddress.com">https://whatismyipaddress.com</a>
- Note the **new IP address and location** (it should match the VPN server).
- Take a screenshot of the changed IP address (this is one of your deliverables).

### 5. Browse a Website to Confirm Traffic is Encrypted

- Visit a secure website such as <a href="https://bbc.com">https://bbc.com</a> or any HTTPS site.
- Observe the padlock icon in the address bar it confirms encryption.
- You can use tools like <a href="https://www.dnsleaktest.com">https://www.dnsleaktest.com</a> to verify DNS requests are routed through the VPN as well.



# 6. Disconnect VPN and Compare Browsing Speed and IP

- Disconnect from the VPN.
- Revisit https://whatismyipaddress.com and compare the IP.
- Optionally, run a speed test before and after (use <a href="https://speedtest.net">https://speedtest.net</a>) to compare performance.

## **Before connecting to VPN**



### After connecting to VPN



## 7. Research: VPN Encryption and Privacy Features

### **Encryption:**

- ProtonVPN uses **AES-256 encryption**, the industry standard.
- Uses secure protocols like OpenVPN and WireGuard.

### **Privacy Features:**

- No-logs policy: Does not store logs of user activity.
- DNS leak protection: Prevents DNS requests from being exposed.
- Kill switch: Prevents internet access if VPN drops.
- **Secure Core (ProtonVPN only)**: Routes traffic through multiple servers for added privacy (available only on paid tiers).

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