

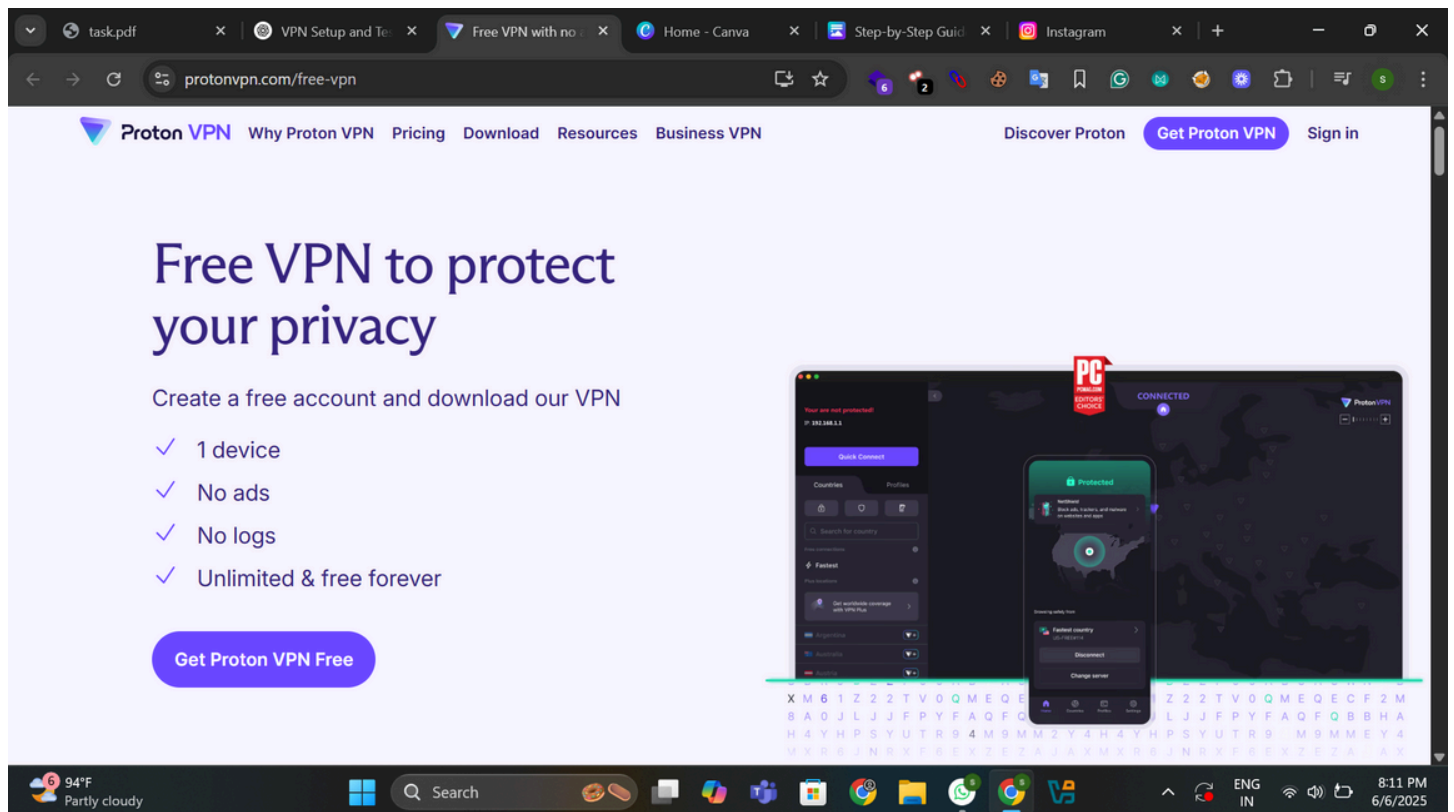
VPN Setup and Testing

1. Choose and Sign Up for a VPN

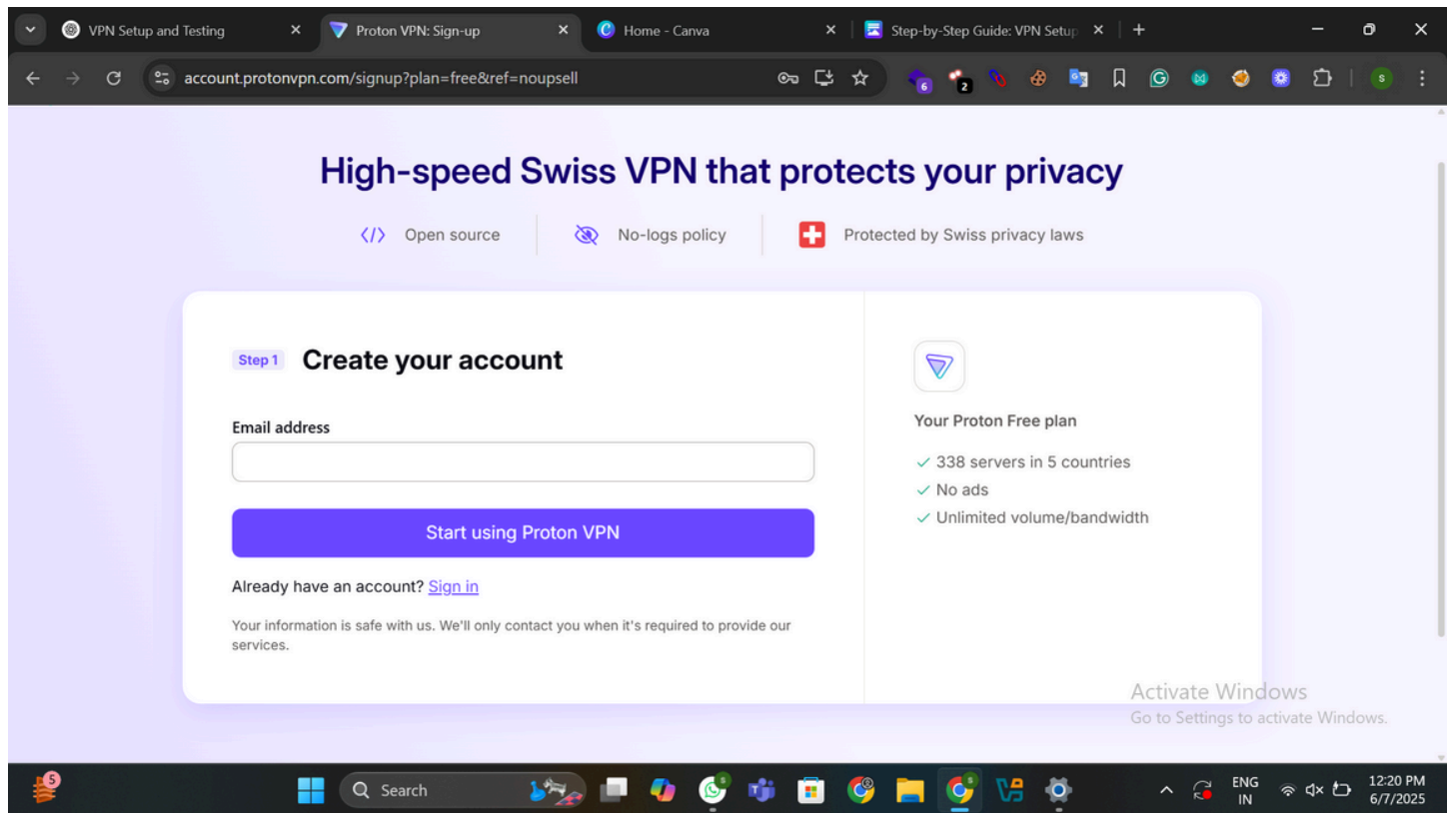
Choose either of the following:

- **ProtonVPN Free Tier:** <https://protonvpn.com/free-vpn>
- **Windscribe Free:** <https://windscribe.com>

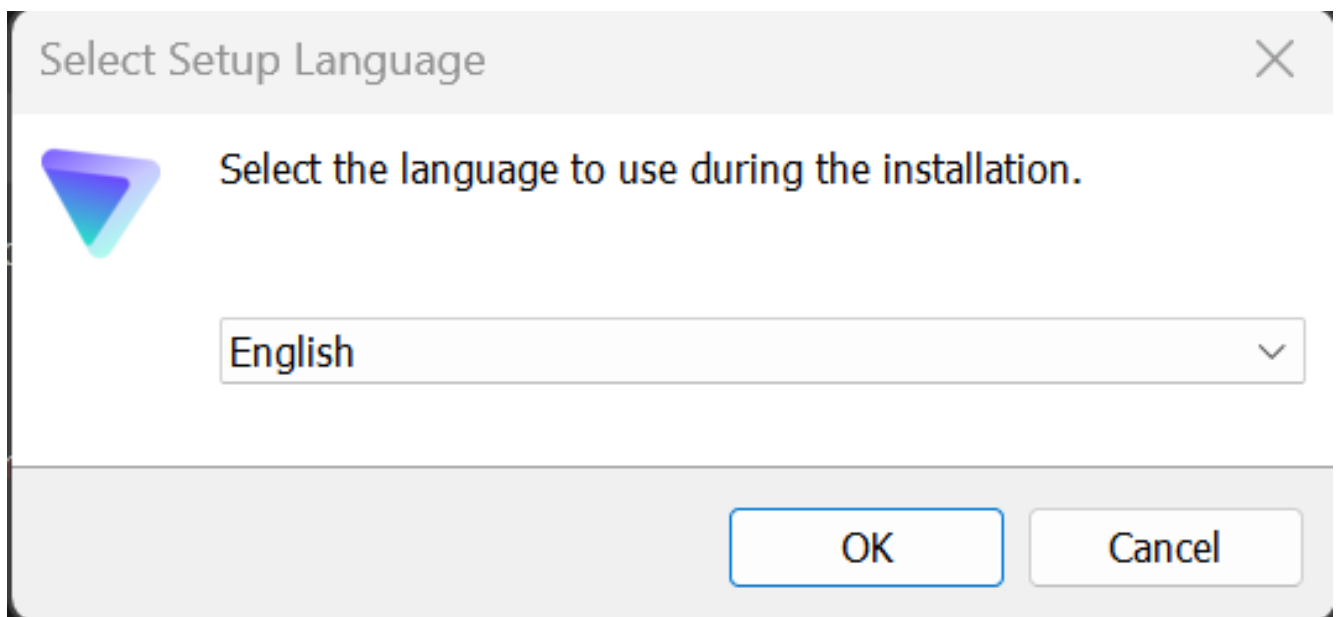
Recommendation: ProtonVPN has no data cap; Windscribe offers more locations with a 10GB/month limit.



- **2. Download and Install the VPN Client**
- Create your account and get install



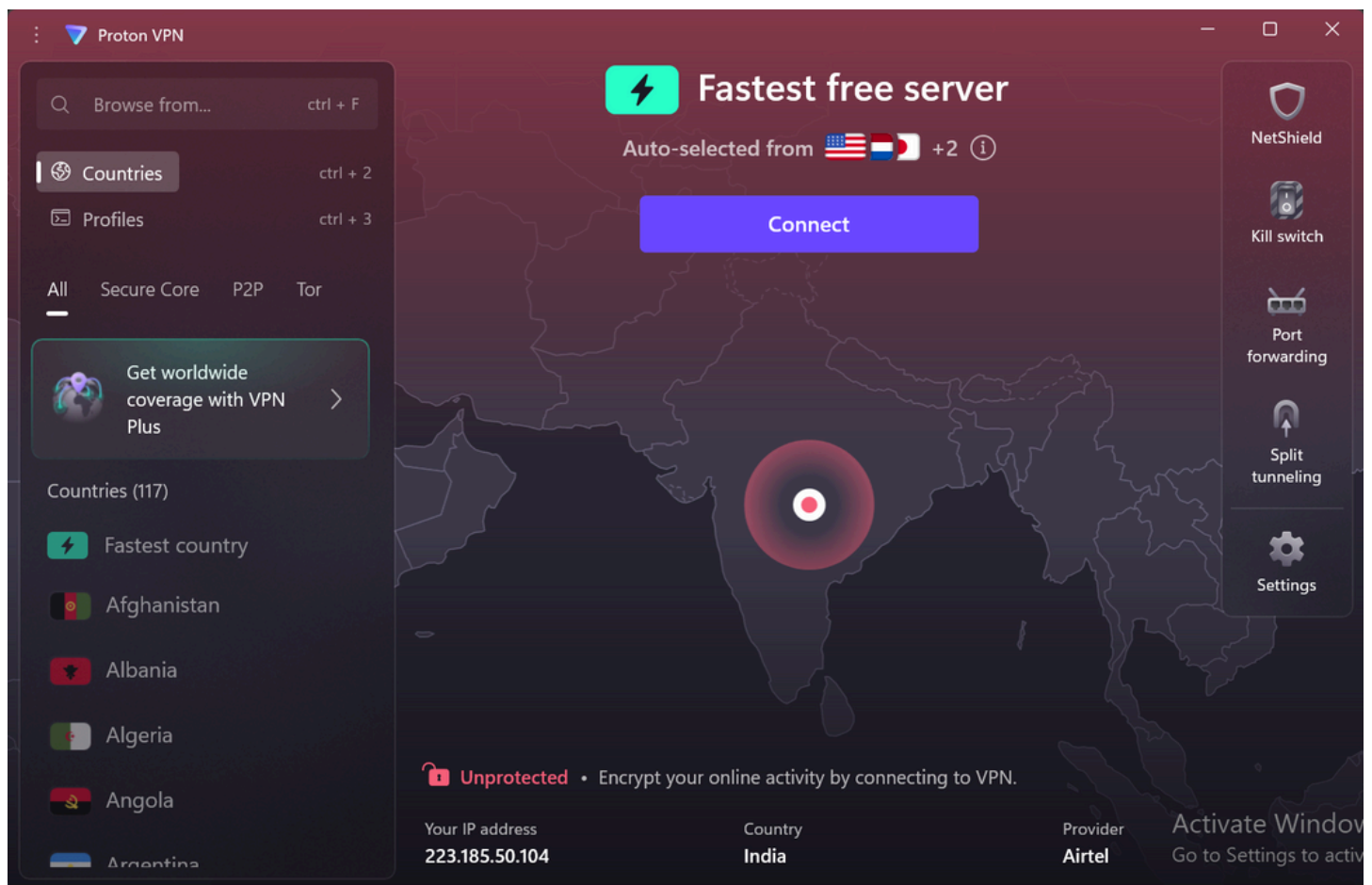
- Download the official VPN client for your OS (Windows/macOS/Linux/Android).
- Follow the setup wizard to install.



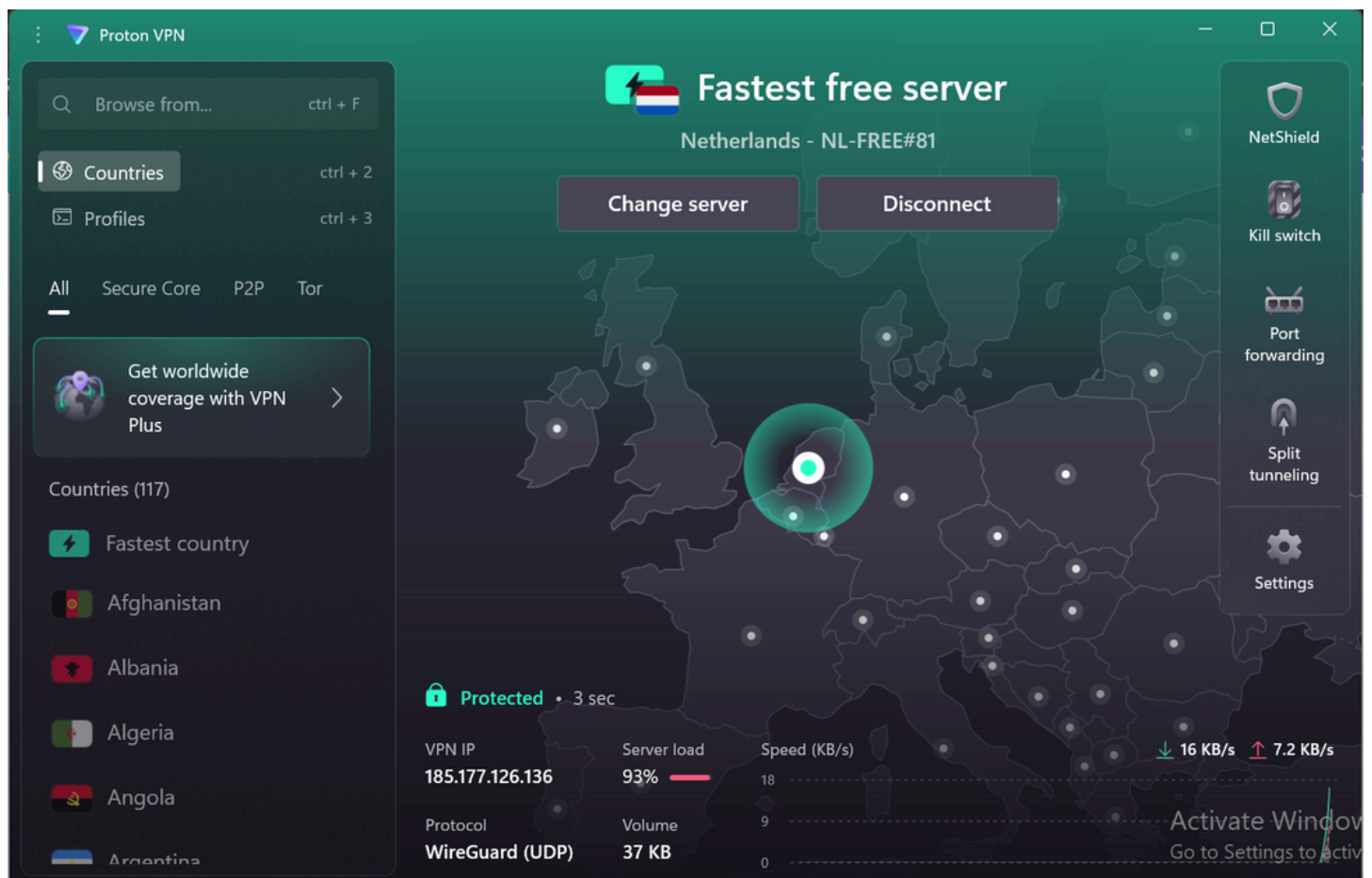
- Log in with your account credentials.

3. Connect to a VPN Server

- Open the VPN client.
- Choose a server (closest for better speed or test others).

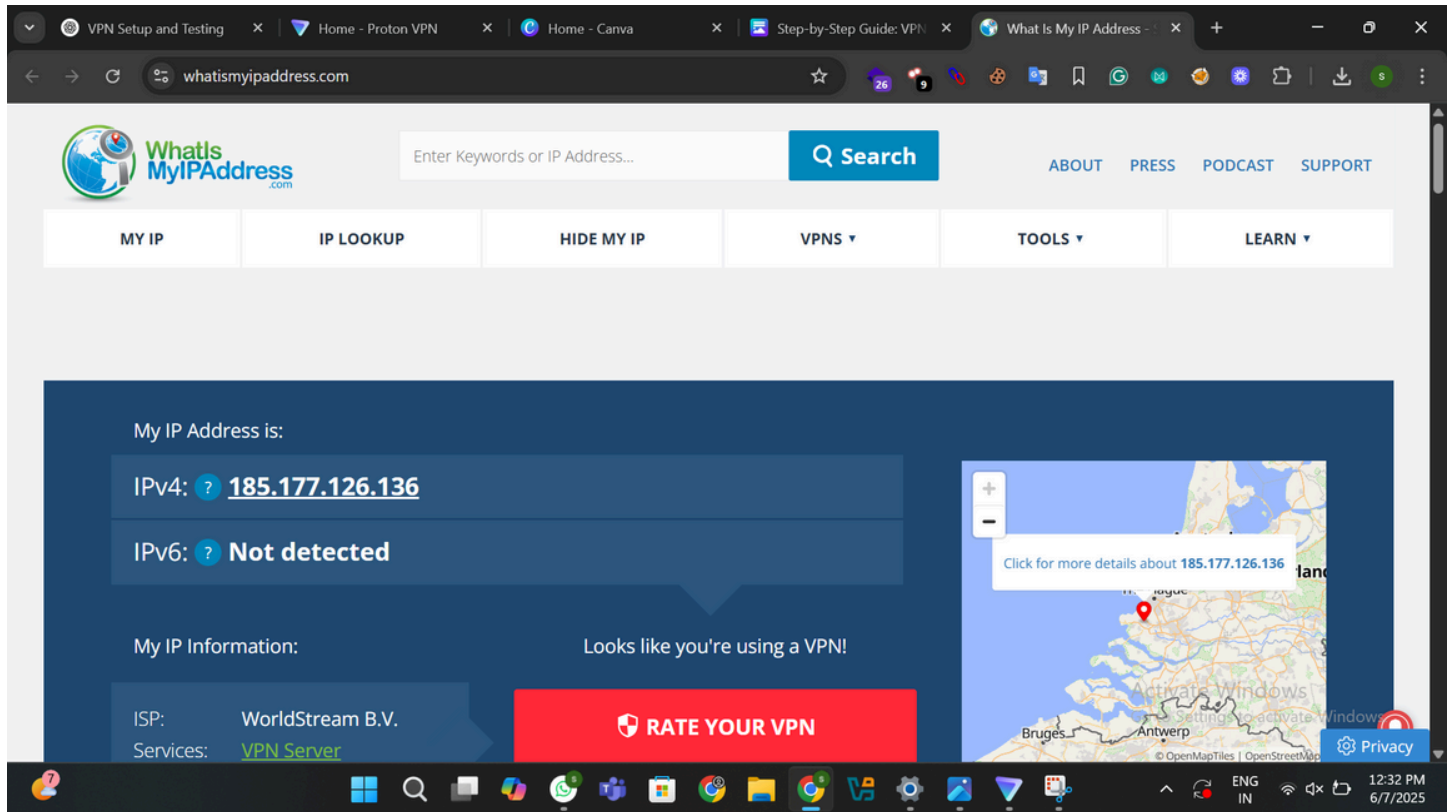


- Click **Connect**.
- Wait for the connection confirmation (usually a green icon or notification)



4. Verify IP Address Change

- While connected to the VPN, visit: <https://whatismyipaddress.com>
- Take a screenshot showing your new IP location.



- Note the difference from your original IP.

5. Confirm Encrypted Traffic

- Open a website (e.g., <https://www.duckduckgo.com>).
- It should load normally – this confirms your encrypted tunnel is active.
- Most VPN clients show “Secure connection” or encryption status.

6. Disconnect and Compare

- Disconnect the VPN from the client.
- Visit the IP checking site again – confirm it shows your real IP.

The screenshot shows the homepage of WhatIsMyIPAddress.com. The navigation bar includes links for MY IP, IP LOOKUP, HIDE MY IP, VPNS, TOOLS, and LEARN. The main content area displays the user's IP address as 223.185.50.104 (IPv4) and 'Not detected' (IPv6). It also shows IP information: ISP is Bharti Airtel Ltd. and City is Madanapalle. A prominent red button says 'HIDE MY IP ADDRESS NOW'. To the right, a map shows the location near Proddatur, Nellore, Tirupati, and Vellore. A warning message states 'Your location may be exposed!'.

My IP Address is:

IPv4: **223.185.50.104**

IPv6: **Not detected**

My IP Information:

ISP: Bharti Airtel Ltd.

City: Madanapalle

HIDE MY IP ADDRESS NOW

Your location may be exposed!

Proddatur, Nellore, Tirupati, Vellore, Kolar, Tumakuru, Bengaluru, Mandya, Tiruvannamalai, Chennai

Click for more details about 223.185.50.104

Go to Settings to activate Windows

Location not accurate?

Update My IP Location

Show Complete IP Details

- You can run a simple speed test using <https://fast.com> or <https://speedtest.net> before and after VPN usage to compare performance.
- Before connecting the VPN.

The screenshot shows the Speedtest.net website. The main display shows a download speed of 8.23 Mbps and an upload speed of 5.74 Mbps. The ping is 45 ms. The test was conducted on 06/07/2025 at 12:45 PM. The user is identified as Airtel. The test server is Pioneer Elabs Ltd, Vijayawada. A large 'GO' button is visible. The website also promotes Speedtest Mobile Apps for iOS and Android.

SPEEDTEST

English Apps Learn Data About

Speedtest® Mobile Apps
Try Speedtest for iOS and Android

06/07/2025 12:45 PM

DOWNLOAD Mbps: 8.23

UPLOAD Mbps: 5.74

Ping ms: 45

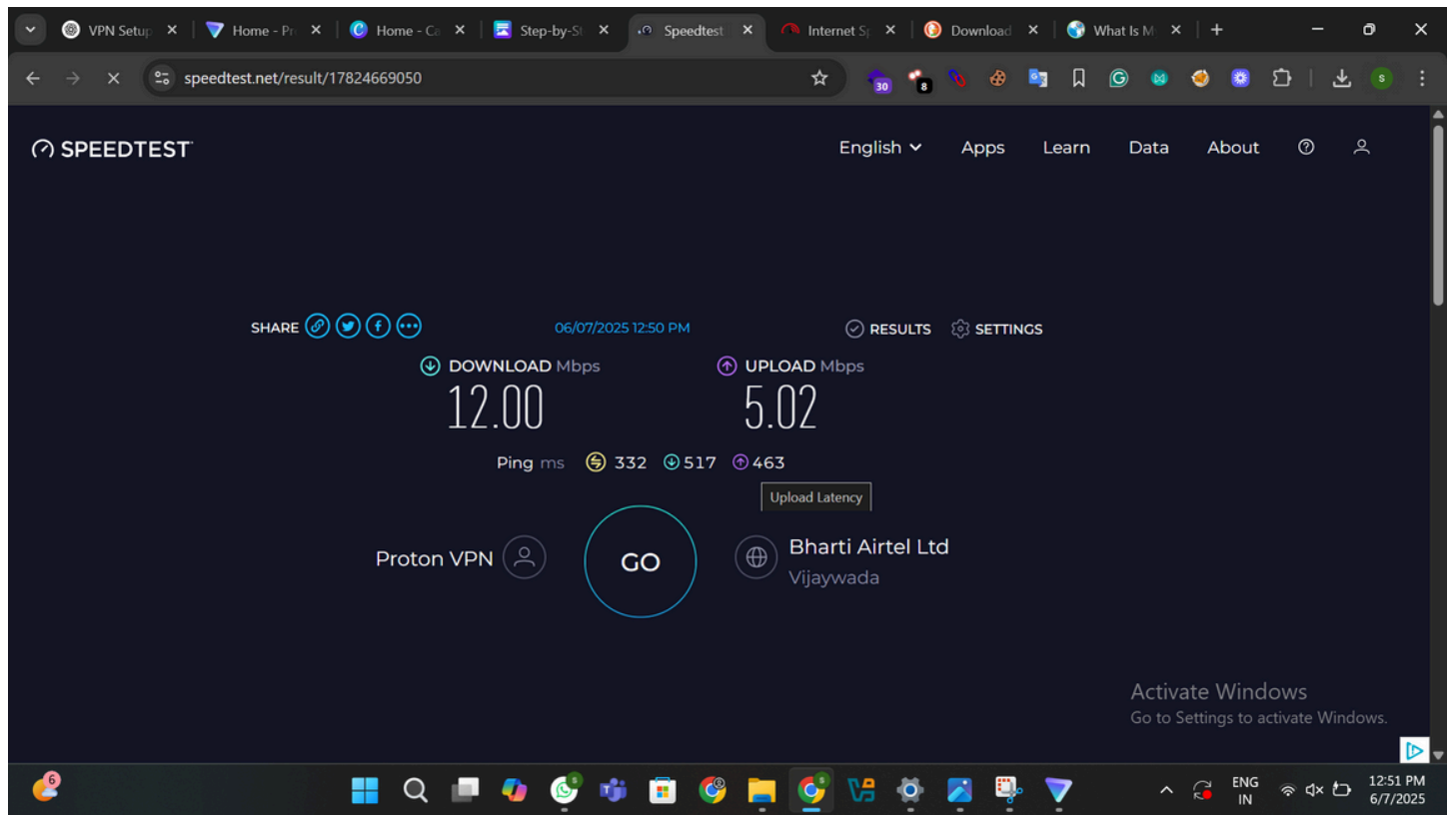
Airtel

GO

Pioneer Elabs Ltd
Vijayawada

Activate Windows
Go to Settings to activate Windows.

- After connecting the VPN.



Research and Summary

VPN Encryption & Privacy Features (Sample for ProtonVPN)

- Uses AES-256 encryption with OpenVPN/IKEv2 protocols.
- No-logs policy.
- DNS leak protection.
- Kill switch for sudden disconnects.

Conclusion

Using a VPN is an effective way to enhance online privacy and security. By encrypting internet traffic and masking the user's real IP address, VPNs help protect against tracking, surveillance, and potential data theft—especially on public or unsecured networks. In this task, the setup and testing of a reputable free VPN (such as ProtonVPN or Windscribe) demonstrated how user identity and location can be concealed with minimal effort.

However, free VPN services may have limitations such as restricted server access, slower speeds, and limited bandwidth. It's important to research the provider's privacy policy and ensure they follow a strict no-logs policy. Overall, VPNs are valuable tools for anyone seeking greater control over their digital footprint, but users should be aware of the trade-offs between free and paid services.