

## **Task 8: Identify and Remove Suspicious Browser Extensions**

### **(VPN Setup and Privacy Protection Report)**

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#### **Objective**

To understand the role of VPNs in protecting privacy and enabling secure communication by setting up and testing a free VPN service.

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#### **Tools Used**

- **VPN Service:** ProtonVPN (Free Tier)
  - **Verification Website:** [whatismyipaddress.com](https://whatismyipaddress.com)
  - **Browser:** Google Chrome
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#### **Procedure**

##### **Step 1: Choose a Reputable VPN Service**

I selected **ProtonVPN Free Tier** due to its good reputation, no data limits, and strong encryption.

##### **Step 2: Download and Install the VPN Client**

- Created a free ProtonVPN account on the official website.
- Downloaded the ProtonVPN client for Windows.
- Installed and launched the application.

##### **Step 3: Connect to a VPN Server**

- Logged into ProtonVPN with my account credentials.
- Selected the **Fastest Server** option for best speed.
- Connected successfully (Green "Connected" status shown).

##### **Step 4: Verify IP Address Change**

- Visited **[whatismyipaddress.com](https://whatismyipaddress.com)** before connecting — saw my real location and IP.
- After connecting to the VPN, refreshed the page — IP and location changed to match the VPN server location.

##### **Step 5: Confirm Traffic Encryption**

- Browsed websites — confirmed padlock icon in browser for secure HTTPS connection.
- Verified encryption via Cloudflare's encryption check page.

## Step 6: Disconnect and Compare

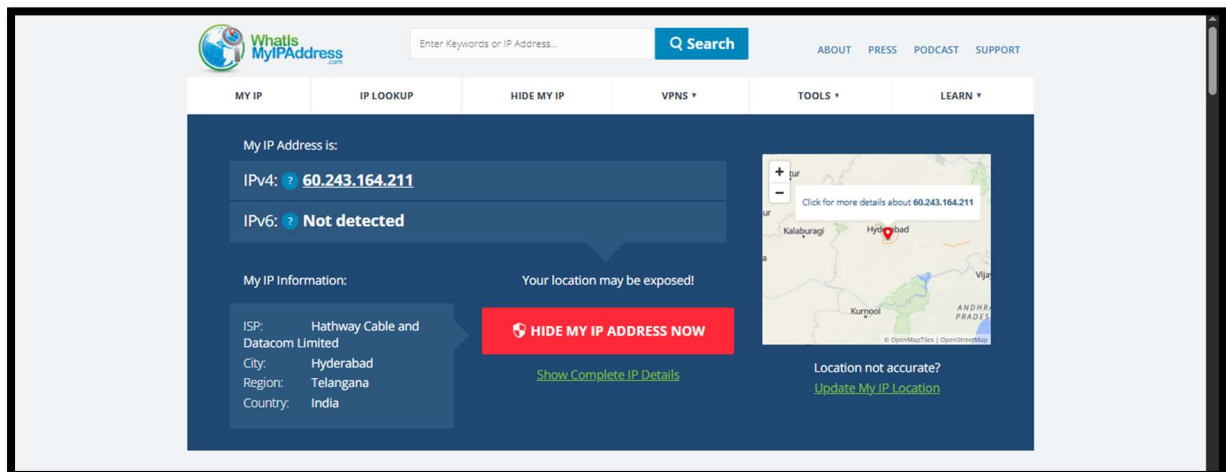
- Disconnected from ProtonVPN.
- Checked IP again — returned to original IP and location.
- Browsing speed improved slightly after disconnecting.

## Step 7: Research VPN Encryption and Privacy

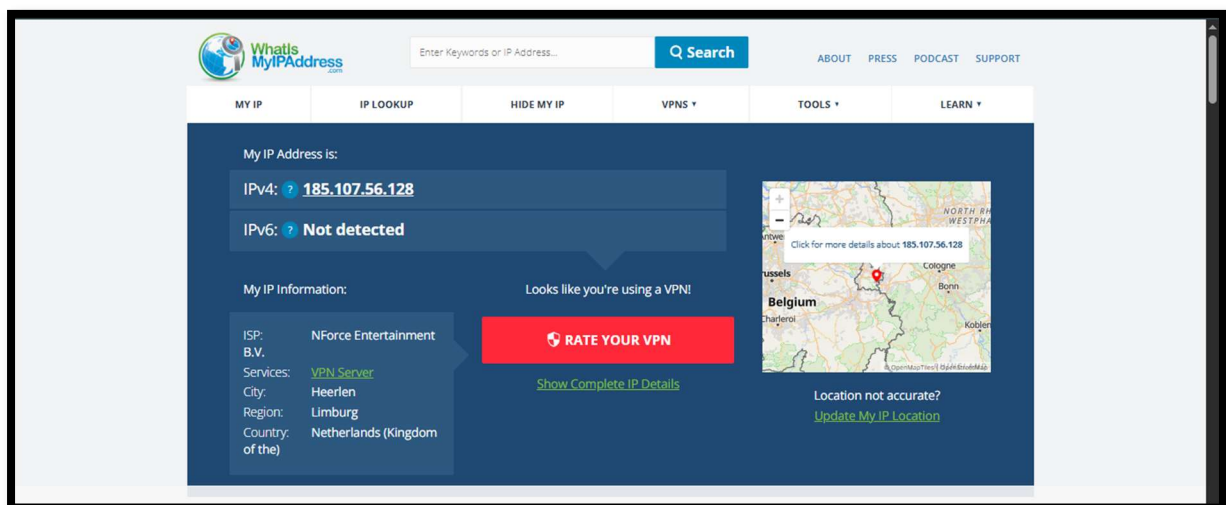
- ProtonVPN uses **AES-256** encryption and **OpenVPN / WireGuard** protocols.
- Has a **strict no-logs policy** to protect user privacy.

### Connection Status Screenshot:

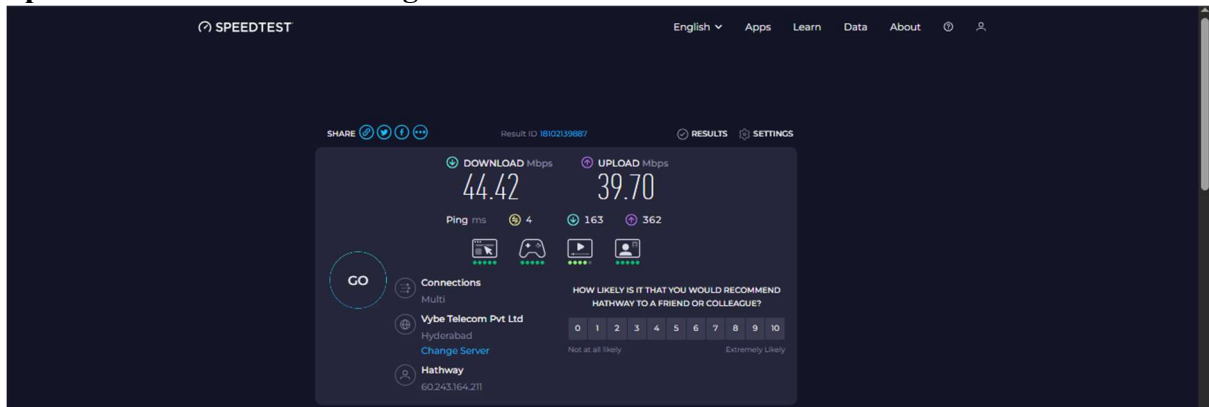
#### Before Connection:



#### After Connecting to a VPN:



## Speed Test Before Connecting to VPN:



## Speed Test After Connecting to VPN:

