## **Working and Understanding VPN (Without Installation)**

Platform: Windows 10/11

Tool Used: Browsec VPN Chrome Extension

## **Objective:**

To understand how a VPN works and how it protects privacy and enables secure communication — without installing any separate software.

#### **Tools Used:**

• Browser: Google Chrome

• Extension: Browsec VPN – Chrome Extension

### **Steps Followed:**

- 1. Installed Browsec VPN Extension via Chrome Web Store (no software installed).
- 2. Clicked the **puzzle icon** to locate the extension and **pinned it to the toolbar**.
- 3. Opened the Browsec extension → Clicked "Accept" on Terms of Service.
- 4. Turned VPN ON and selected a free server (Netherlands).
- 5. Opened <a href="https://whatismyipaddress.com">https://whatismyipaddress.com</a> Verified IP address changed.
- 6. Browsed <a href="https://wikipedia.org">https://wikipedia.org</a> confirmed HTTPS encryption was active.
- 7. Disconnected VPN → Refreshed IP check site → Saw original IP restored.
- 8. Compared browsing speed and location details before & after VPN use.

# **Key Observations:**

Condition Result

VPN Activated IP address changed

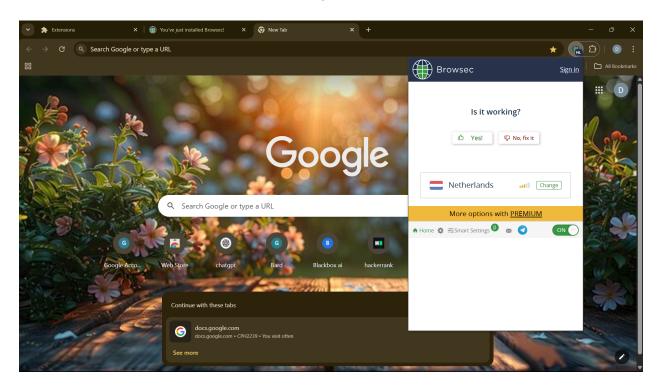
Secure Traffic HTTPS connection used

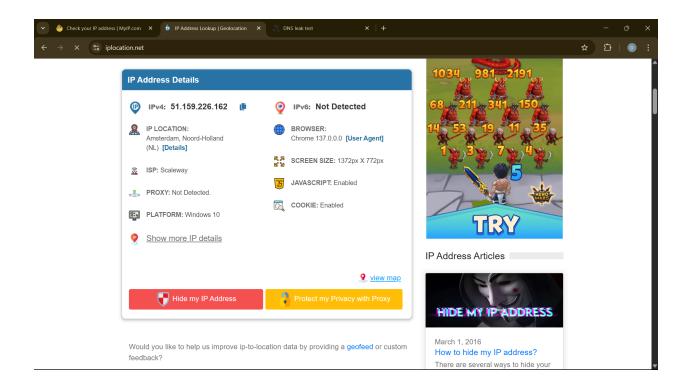
Software Installed None

VPN Disconnected IP returned to original

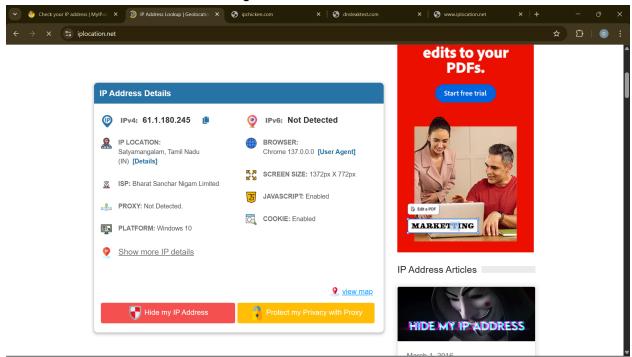
## **Screenshot Proofs:**

• Screenshot 1: Browsec VPN enabled, IP changed





Screenshot 2: Browsec disabled, original IP restored



## **Summary:**

- VPN (Virtual Private Network) creates a secure tunnel that encrypts browser traffic and hides user location.
- Benefits: Masks IP, encrypts traffic, protects against tracking.
- Limitations: Browser extensions only encrypt browser data (not full device).
- **Protocols Used:** HTTPS proxy (Browsec); full VPNs may use OpenVPN, WireGuard.