

# Task 8 Report: Working with VPNs

## Objective:

To understand the role of VPNs (Virtual Private Networks) in protecting privacy and securing online communication through hands-on setup, usage, and analysis.

## Tools Used:

- ProtonVPN (Free Tier)
- WhatIsMyIPAddress.com for IP verification

## Steps Performed:

1. Selected ProtonVPN Free and created an account.
2. Downloaded and installed the VPN client on Windows.
3. Logged in and attempted connection to fastest free server.
4. Verified IP address change using [whatismyipaddress.com](https://whatismyipaddress.com).
5. Browsed websites to confirm secure traffic routing.
6. Disconnected VPN and compared speed & IP changes.

## VPN Encryption & Privacy Features:

- AES-256 encryption secures all traffic.
- No-logs policy ensures privacy.
- DNS leak protection.
- Kill switch support.

## Summary:

### Benefits:

- Masks real IP and location.
- Protects against hackers on public Wi-Fi.

- Encrypts traffic for secure browsing.
- Bypasses geo-restrictions.

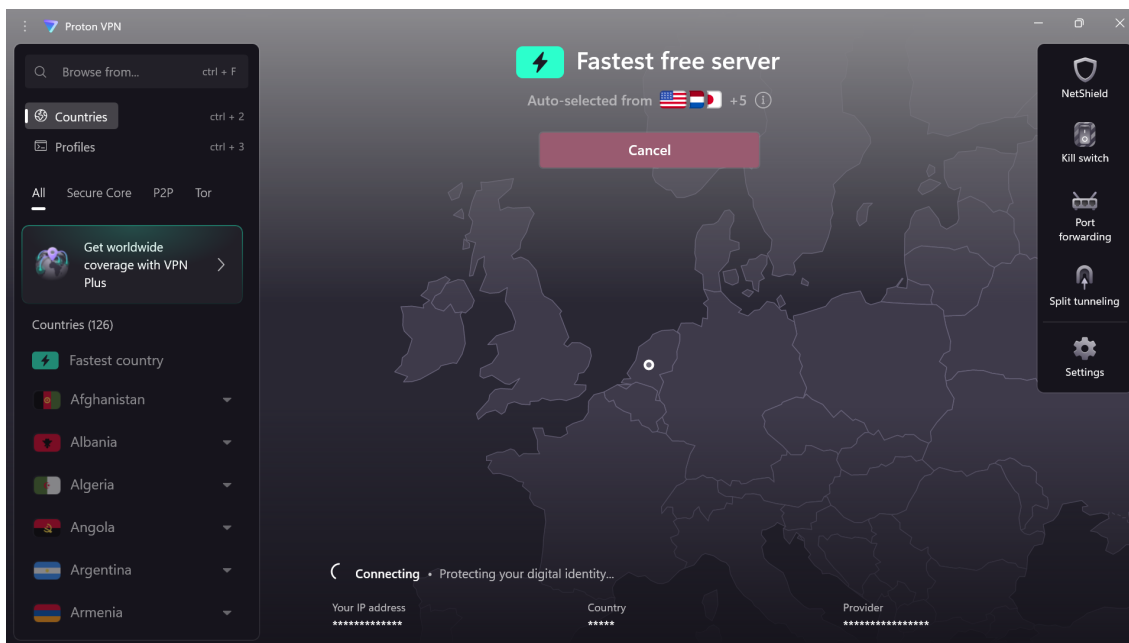
#### Limitations:

- Free VPNs may have bandwidth limits and fewer servers.
- Internet speed may reduce slightly.
- Some services block VPN usage.

#### Deliverables:

- Screenshots showing VPN status before, during, and after connection.

#### Screenshot 1: VPN Connecting



#### Screenshot 2: VPN Connected

