

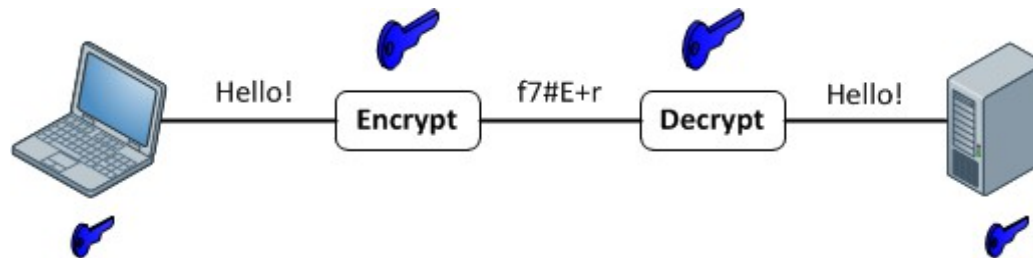
Virtual Private Networking - VPN



Alan Baker
Vermont AARP Fraud Watch Network
May 4, 2017

Virtual Private Networking

- Why have a VPN?
- Isn't https enough?
- How do I use a VPN?
- How do I get a VPN?
- Demo



Why would I want a VPN?

- **Fraud**

When you're online at a public wi-fi hotspot, you're *not* protected from:

- Eavesdropping
- Being redirected to a fake website



- **Privacy Loss**

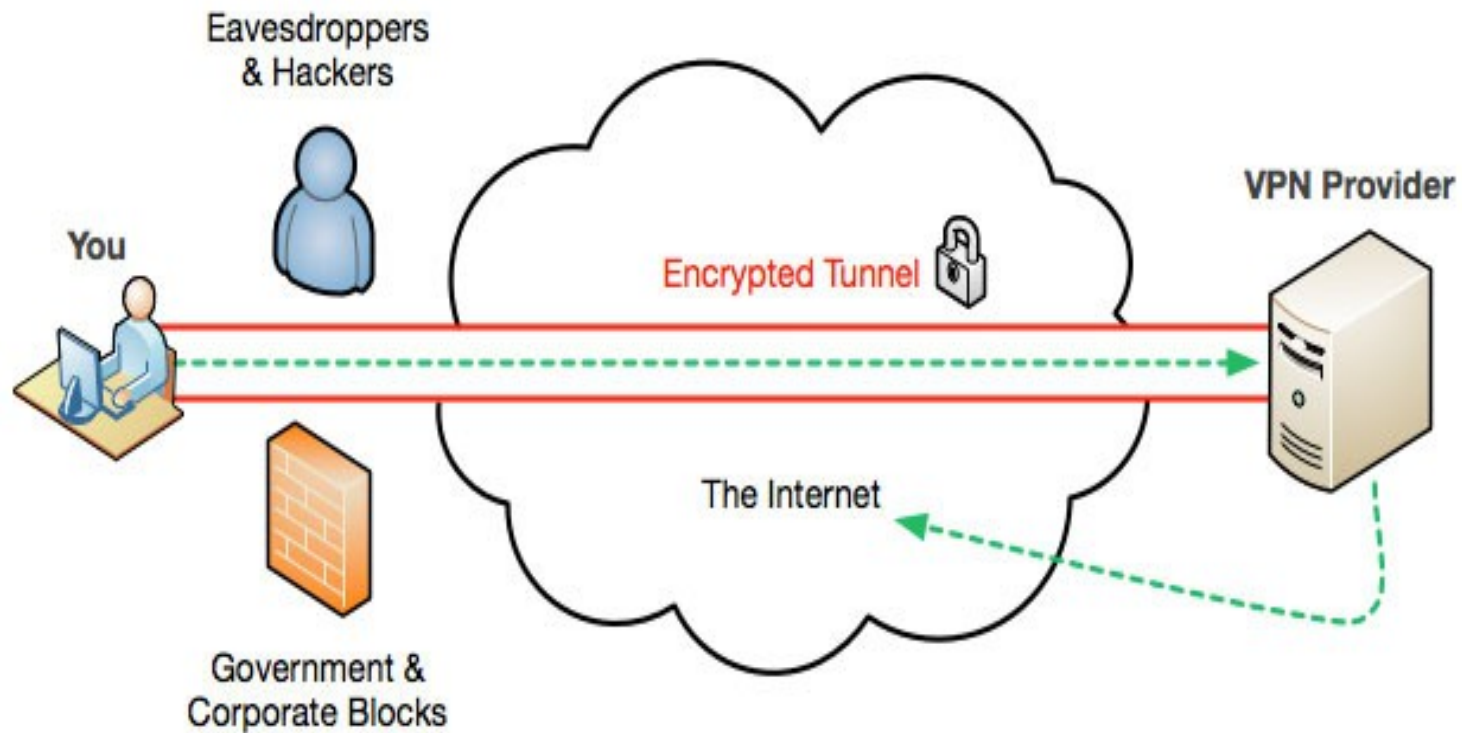
It's now *legal* for internet service providers to sell info about everything you do on the internet.

(Public Law 115-22, effective April 3, 2017)

Doesn't https encrypt? https://

- Yes, https encrypts your session *data*, but not your session *cookie* (containing username and password).
- If the cookie is unencrypted, anyone logged into the wi-fi hotspot can see your password.
- Even an encrypted cookie is vulnerable to a man-in-the-middle attack. This can replace the cookie and cause you to log into a fake website.

How does a VPN work?



How do I use a VPN?

One-time start-up:

1. Subscribe to a VPN service.
2. Install client software.
3. Install unique key.

Every time you use a hotspot:

Connect to your VPN first.



How do I access a VPN?

- **Subscribe to a VPN service**

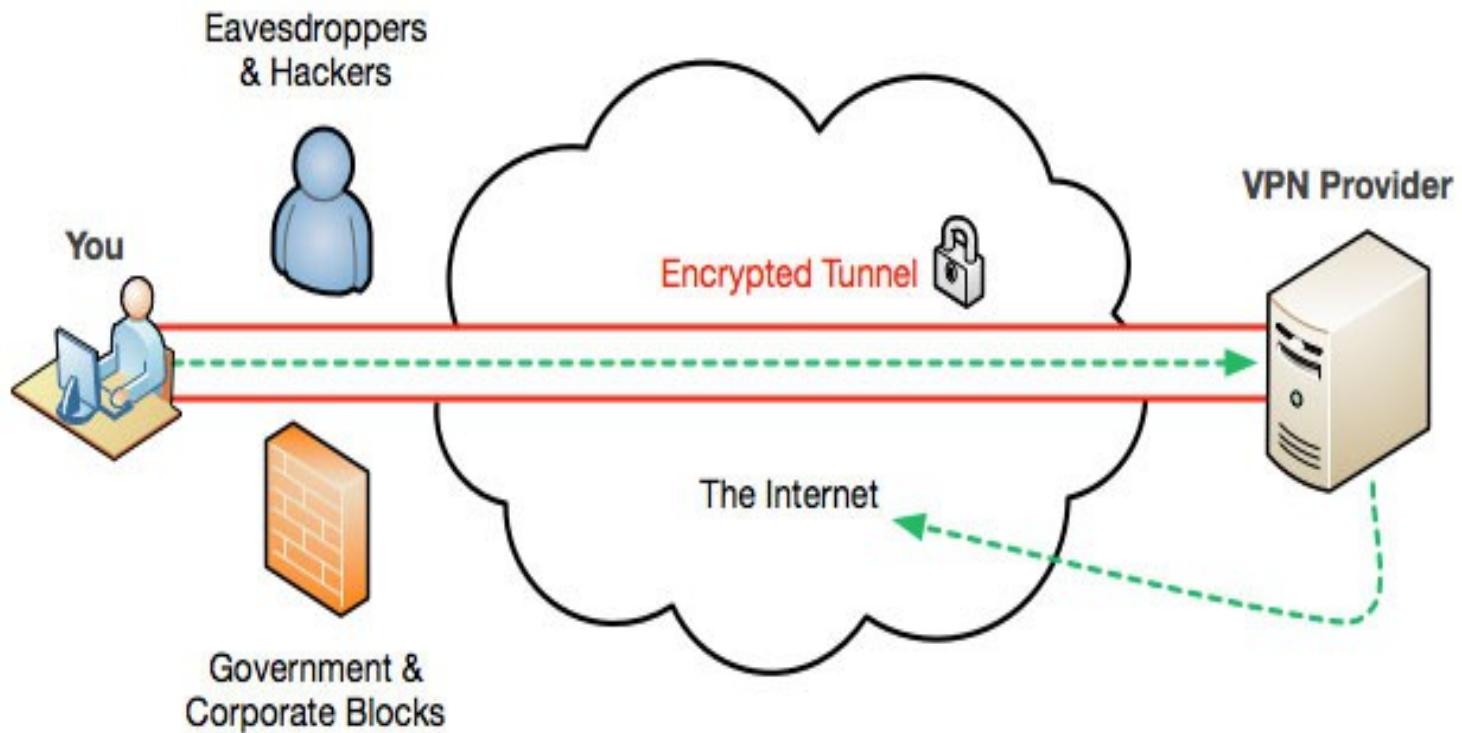
- Which VPN reviewer do you trust?
- <https://thatoneprivacysite.net/vpn-comparison-chart>
- <https://torrentfreak.com/vpn-services-anonymous-review-2017-170304>
- Which VPN do you trust?
- Test it for leaks at <https://whoer.net>

- **Or create your own VPN**



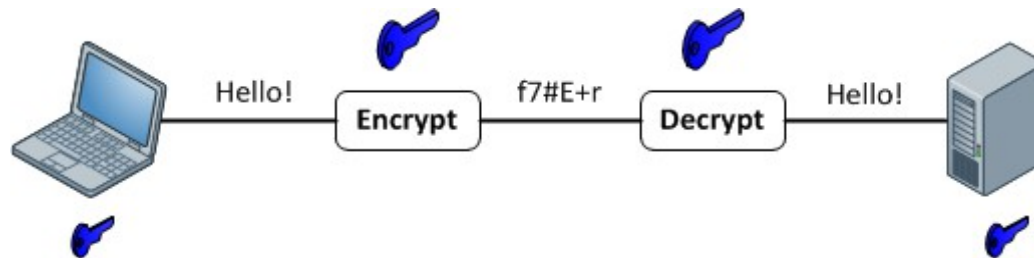
Demo

- Computer
- Phone



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