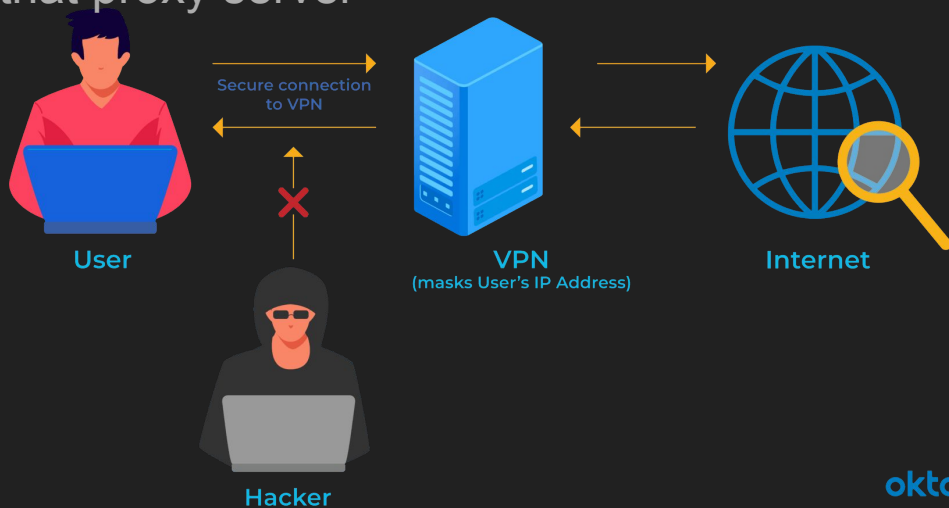


Nord VPN Breach

Christian Hinkle

VPN Services

- VPN: Virtual Private Network
- A VPN server is a proxy server that you connect to which makes HTTP requests on your behalf
- When connected to a VPN server, any HTTP requests that you make are encrypted - from your machine to that proxy server



What's the point of this?

- There are two main benefits to using VPN servers
 - Servers between you and the VPN server cannot see what requests you are making
 - Websites that you visit can't see your machine's IP address - only the VPN server's IP because that's the machine making the requests for you



Potential Breaches

- VPNs encrypt your activity and hide your IP
- But these servers that you connect to can see everything that you are doing
 - It's left down to trust in the VPN services whether they collect your data or not
- If a hacker got ahold of one of these servers they can see
 - The IP of the users connected
 - What websites they are visiting
 - Basically a really good interceptor between your internet activity



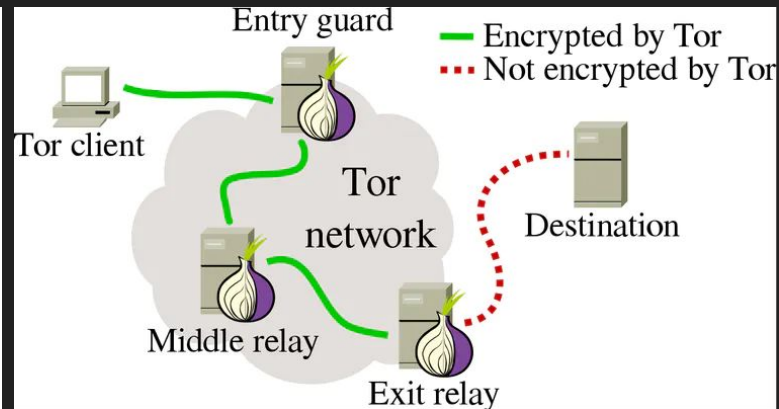
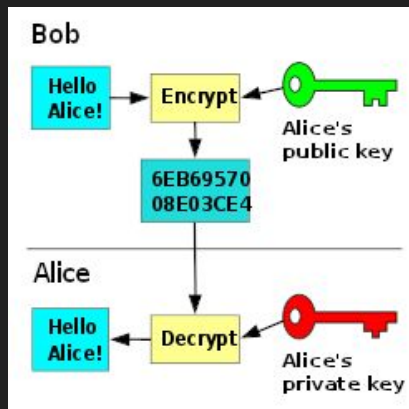
The NordVPN Breach

- In March 2018
 - But we found out about it 6 months later
- How it happened
 - Nord says that there was a stolen private key
 - They say it was exposed by a flawed server
 - They stopped using the company that maintained the server



How can we prevent this

- As a VPN service
 - Keep your private keys safe!
 - Choose secure server services and look into the security features that they provide
- As a user
 - Do your research to find the most trusted and secure VPN service
 - Run your own proxy server (not viable)
 - Use Tor



Works Cited

- Kastrenakes, Jacob. “NordVPN Reveals Server Breach That Could Have Let Attacker Monitor Traffic.” The Verge, The Verge, 21 Oct. 2019, www.theverge.com/2019/10/21/20925065/nordvpn-server-breach-vpn-traffic-exposed-encryption.
- Williams, Mike. “What's the Truth about the NordVPN Breach? Here's What We Now Know.” TechRadar, TechRadar Pro, 18 Nov. 2019, www.techradar.com/news/whats-the-truth-about-the-nordvpn-breach-heres-what-we-now-know.