Setting up a Tor Relay with GNU/Linux for Great Justice

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WTF is Tor?

- Tor is an "onion router" network designed to anonymize your IP address and a few other things
- Connection is also encrypted
- HAXORS use it and so does the New Yorker

WTF is a Relay?

- A Tor relay is one of the computers in the chain of connections that are made between the user and the destination server

- It's fairly decentralized

- The more connections there are, the more diffused the traffic is

- Side affect: Connections from relays in Iceland initiated in $meanGovernmentCountry get a connection to the uncensored internet and all it's cat and Ai Weiwei photos

FREEEEEE INTERNEEET FOREEEEEVEERRRRRRR

Sauce: Oregon Humane Society

Get in loser, we're going shopping

- Easy checkbook activism:
  - Noisetor: http://noisetor.net/
  - Torservers.net:
    https://www.torservers.net/donate.html
- DIY4life:
  - The Cloud (unless exit node)
  - Something beefier than a RaspPi at home with a dedicated IP (unless exit node)
  - VPS or hardware server (outside US if exit node)

Get in loser, we're going shopping

- Huge list of Tor-friendly and Tor-unfriendly cloud services/VPS/colo:
https://trac.torproject.org/projects/tor/wiki/doc/Good

GNU/Linux Debian (Wheezy) Quickstart

- apt-get update

- apt-get install tor

- Edit /etc/tor/torrc

  - Uncomment ORPort directive:

    - `ORPort 9001`

  - Set speed limits to prevent VTEC kicking in:

    - `RelayBandwidthRate 80 KB`

    - `RelayBandwidthBurst 200 KB`

GNU/Linux Debian (Wheezy) Quickstart

- Edit /etc/tor/torrc

  - Set a cool nickname

    - `Nickname kawaiirelay`

  - Add notification info:

    - `ContactInfo YourNameOrNick <whatevs at whatevs.com>`

  - Set limits for a set time frame (monthly billing cycle at 100GB/month starting on 3rd of each month at noon):

    - `AccountingMax 100 GB`

    - `AccountingStart month 3 12:00`

OSHI-

Sauce: Phillip Pessar va Flickr

GNU/Linux Debian (Wheezy) Quickstart

- Edit /etc/tor/torrc
  - Set exit policy for relay-only
    - `ExitPolicy reject *:*`
  - OR set limited exit policy to only allow specific ports
    - `See:` https://gist.github.com/huertanix/5604863
- service tor reload
- Check /var/log/tor/log for issues
- Subscribe to tor-announce, tor-relays, tor-weather mailing lists and check Atlas

One more thing...

Hidden Services!

Hidden Service Overview

- Best advantage: Technically only accessible via tor

- Disadvantage: Slow and still the public internet; robots.txt can't save you from humans

- Security/privacy issues discussed in next IEEE Security and Privacy mag

- Deploy on a tor client but DO NOT PUT ON A RELAY; Remember Atlas?

Hidden Service Quickstart

- Install a webserver
  - thttpd no longer in wheezy repos :<
  - nginx available, configure to minimize exposing system info
- Edit /etc/tor/torrc again
  - Point hidden service dir to webroot
    - `HiddenServiceDir /var/www/hidden_service/`
    - `HiddenServicePort 80 127.0.0.1:80`
- service tor reload
- Check hostname file for you shiny new .onion address
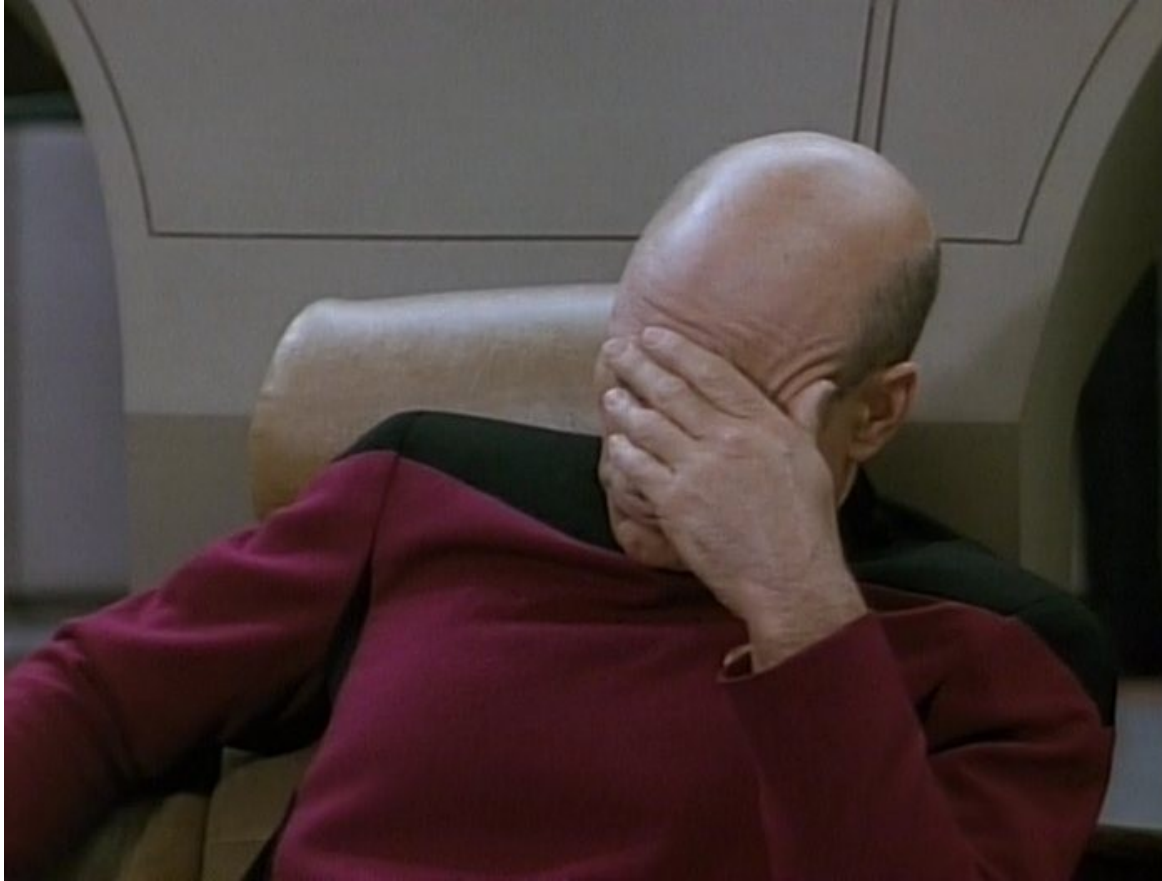
[temporary] hidden service on a relay demo!

THANKS MIAMI HAXORS!

Sauce: Phoenix New Times