TECHNOLOGY BEHIND (GEO) BLOCKING

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A Survey of Worldwide Censorship Techniques

draft-hall-censorship-tech-04

Abstract

This document describes the technical mechanisms used by censorship regimes around the world to block or impair Internet traffic. It aims to make designers, implementers, and users of Internet protocols aware of the properties being exploited and mechanisms used to censor end-user access to information. This document makes no suggestions on individual protocol considerations, and is purely informational, intended to be a reference.
Normal web request...

- cdt.org?

- 104.20.11.17

- HTTP GET

- https://cdt.org/

- www

- 104.20.11.17
with DNS blocking...
...can simply use alternative DNS
Switching to an alternative DNS

- Laptop
  - cdt.org?
  - 104.20.11.17
  - HTTP GET
    - https://cdt.org/

- Censored DNS
  - DNS
  - 8.8.8.8/8.8.4.4

- DNS
  - 104.20.11.17
  - www

- Laptop
  - cdt.org?
  - 104.20.11.17
  - HTTP GET
    - https://cdt.org/
IP blocking/Route blocking...
VPNs can avoid most IP/Route blocks
Unless VPN IPs are blocked!
Then, you’ll need a discrete VPN...

https://github.com/jlund/streisand/
Thank you!

- We barely scratched the surface here!
  - more: https://datatracker.ietf.org/doc/draft-hall-censorship-tech/

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