

Border Security: Lessons from All Over*

*Inspired by Bill Cheswick's classic talk and
The New Border Wars by Klaus Dodds.

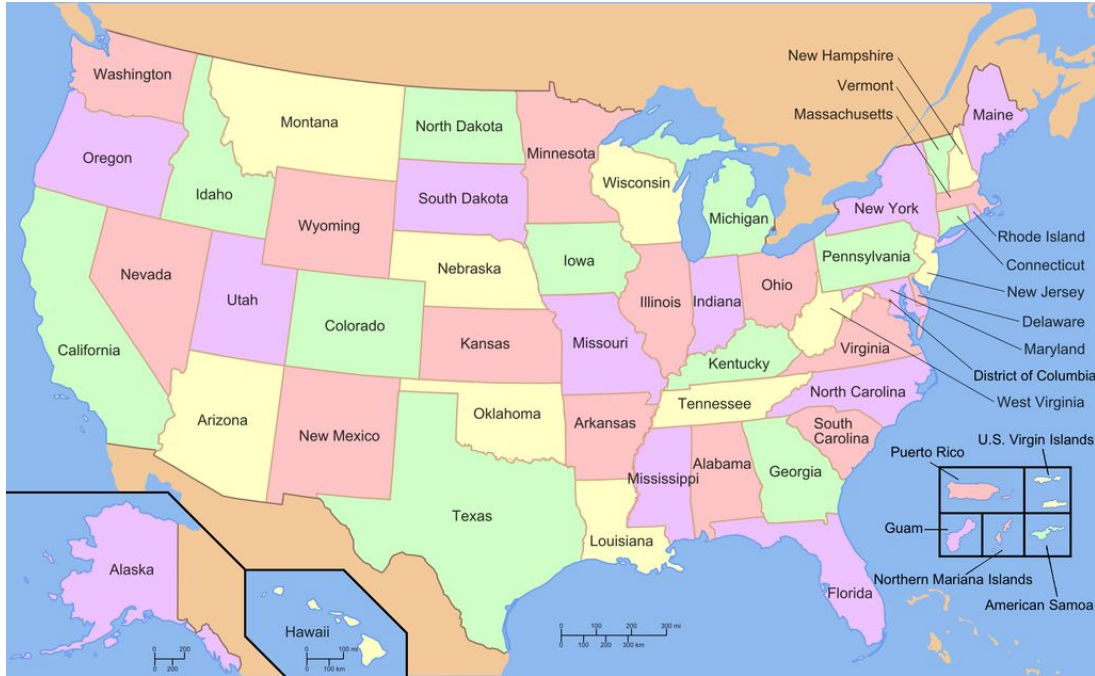
John Kristoff

Outline

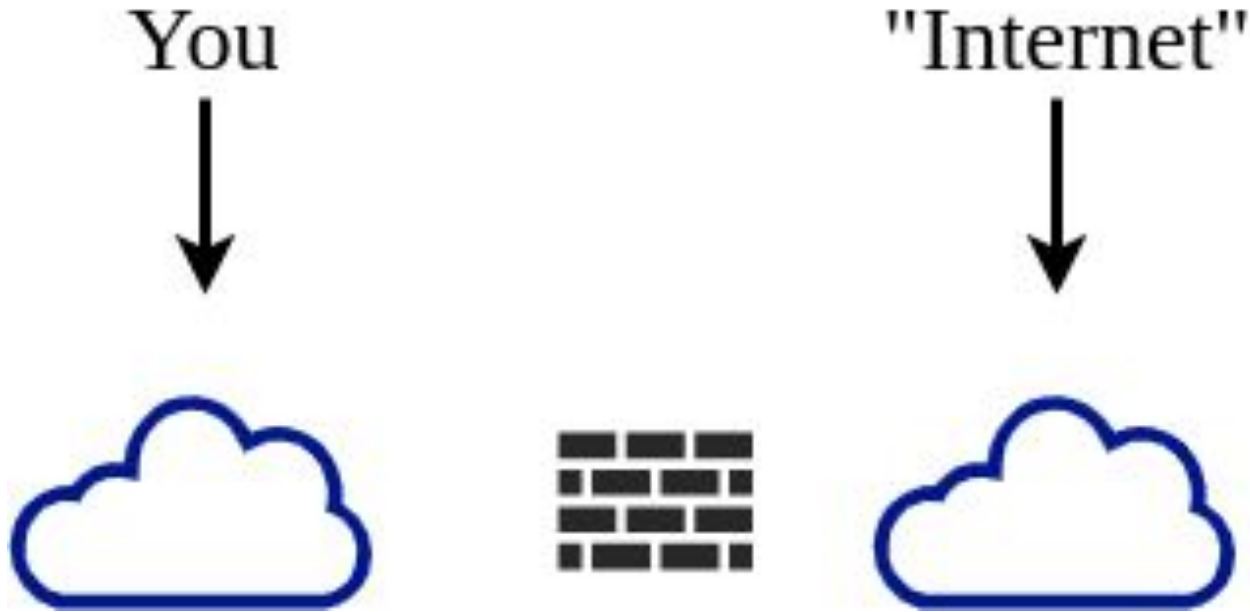
- Introduction
- Walls, Admission Control, and Blockades
- Censorship
- Shutdowns, Fragmentation, and Techno-nationalism
- Border Pliancy
- Routing Around “Damage”

Introduction

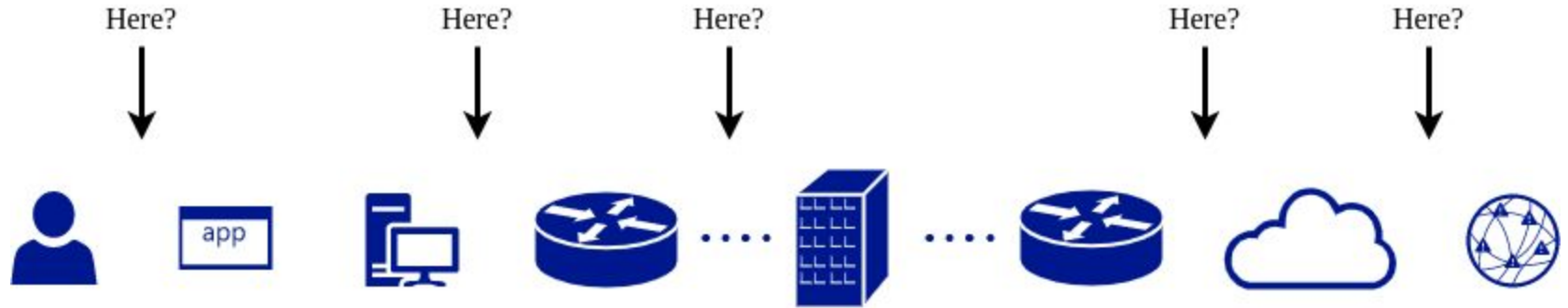
What Border?



Network Border “Classic”



Will the Real Border Please Stand Up



Origins, Destinations, and Transit

- Communications “intent” determined where?
- Who (or what) understands intent?
- Ends vs. Middle
- Path(s) and State
- A border = function placement

Experiment

Ask any old R&E net or sec op:
“What was your opinion of the Packeteer?”

Walls, Admission Control, and Blockades

Walls



Admission Control





Blockades

Host of Internet Spam Groups Is C

By Brian Krebs

washingtonpost.com Staff Writer

Wednesday, November 12, 2008; 7:16 PM

The volume of junk e-mail sent worldwide drastically today after a Web hosting firm i a major host of organizations allegedly eng to security firms that monitor spam distrib

Welcome to the Internet Sanctions Project

This is an [open](#), [Internet community governed](#), project which produces real-time [BGP](#) and [RPZ](#) data feeds of network resources ([names](#)) associated with [sanctioned](#) entities. These data feeds facilitate [Internet network operators](#) in complying with governm international and human rights law.

TOOLBOX

North American Network Operators Group

[Date Prev](#) | [Date Next](#) | [Date Index](#) | [Thread Index](#) | [Author Index](#) | [Historical](#)

YAY! Re: Atrivo/Intercage: NO Upstream depeer

by Mark Ego



xfinity

[Internet](#) [Mobile](#) [TV & Streaming](#) [Home Security](#) [Home Phone](#) [Build Your Plan](#) [Rewards](#) [Comcast Business](#)

[Support](#) [Internet](#)

[Ask Xfinity](#)

Blocked Internet Ports List

Find out which ports are blocked by Xfinity and Comcast services, and why.

Ports on the internet are like virtual passageways where data can travel. All information on the internet passes through ports to get to and from computers and servers. When a certain port is known to cause vulnerability to the security and privacy of your information, Xfinity blocks it to protect you.

RELATED ARTICLES

[Why is Port 25 for Email Submission Not Supported?](#)

[What is Comcast Doing About Spam?](#)

[How to Set Up Your Comcast Email Address with an Email Program](#)

Censorship

Measurement (censoring)

- <https://ooni.org>
- <https://censoredplanet.org/>

The GFW is more (less) than a FW

- HTTP fetches with “bad text ” in URLs
- Tor blocking
- “Western” content/service censorship
- 8.8.8.8 graffiti in TR
- Oh... and HTTP/TCP reflection/amplification! Oops

Shutdowns, Fragmentation, and Techno-Nationalism

Shutdowns

Egypt Leaves The Internet

Jim Cowie

NANOG51, Miami

1 February 2011

Fragmentation

- Hot topic, search for “Internet Fragmentation”
- <https://splintering.net/>
- <https://www.cfr.org/report/confronting-reality-in-cyberspace>

Techno-Nationalism

- Well-known concept
- We're beginning to see Internet versions all over
 - Various UN committee efforts
 - DNS4EU
- There seem to be rogue actors too
 - e.g., threats to standards community governance

Border Pliancy

Border Disputes



Border Changes



New Borders



Routing Around Damage

Thank You

John Kristoff

<https://dataplane.org/jtk>

infosec.exchange/@jtk