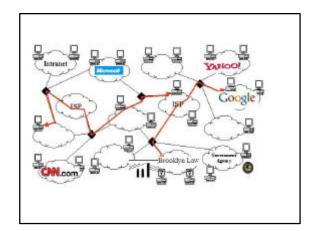
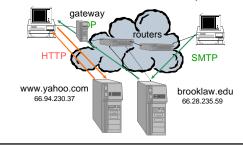
## Online Speech And How to Stop It

August 31, 2006



# Protocols, Numbers, Names: Layers of communication (and means of attack)



#### **Protocols**

- Protocols: technical standards for communication and interoperation
  - TCP/IP: Transmission Control Protocol, Internet Protocol
  - HTTP (web): Hypertext transfer protocol
  - SMTP and POP (email): Simple Mail Transfer Protocol, Post Office Protocol)

- Numbers
   Numbers: "IP addresses"
  - IP addresses or "dotted quads" identify computers uniquely to enable packets to find their destinations
  - Gateways (from local network to Internet) and Routers direct the flow
  - IPs are assigned in blocks to providers, who assign smaller blocks or individual addresses

#### Names

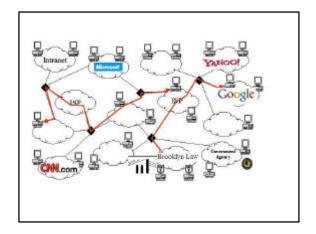
- Names: attached by the Domain Name System (DNS) to IP addresses
  - Architecture abstraction (www.yahoo.com is multiple machines, if the numbers change, you can still find www.yahoo.com)
  - Mnemonics

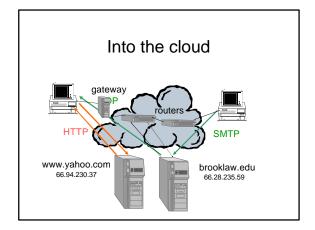
### **DNS**

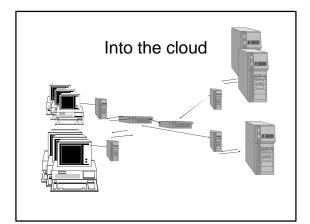
- Technical hierarchy:
  - root server (.)
  - Top-level domain (.com, .net, .edu, .uk, .ca)
  - Second-level domain (.yahoo.com, .brooklaw.edu, .ac.uk)
  - Higher-level domains (www.yahoo.com, ox.ac.uk)
- Server asking for an address starts from the right and works backward

#### **DNS**

- · Administrative hierarchy
  - Registrar: collects the data and money (register.com, gandi.net, networksolutions.com, etc. hundreds of accredited registrars)
  - Registry: keeps the database and more money
     A(I) A(I) A(I) A(I)
    - (Verisign, Afilias, Neulevel, PIR)
  - Root Servers: canonical list of TLD nameservers (A – M.root-servers.net





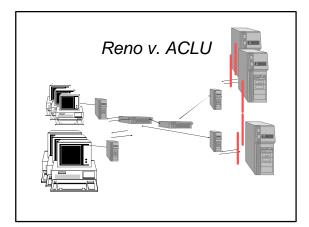


## John Gilmore

• "The Internet interprets censorship as damage and routes around it."

#### Reno v. ACLU

- Communications Decency Act of 1996 (CDA), 47 U.S.C. § 223 prohibited
- · sending of "obscene or indecent" communications to minors or
- · display of "patently offensive messages" to minors



#### Reno v. ACLU

- · Is the Internet a
  - Magazine shop? (Ginsberg)
  - Radio broadcast? (Pacifica)
  - Neighborhood? (Renton)
  - Dial-a-porn? (Sable)

#### Reno v. ACLU

"Through the use of chat rooms, any person with a phone line can become a town crier with a voice that resonates farther than it could from any soapbox. Through the use of Web pages, mail exploders, and newsgroups, the same individual can become a pamphleteer."

#### Reno v. ACLU

- · Majority:
  - Silencing speakers if they can't assure no kids are listening is not the least restrictive means of protecting children
- O'Connor Concurrence/Dissent:
  - Yes, but...
  - We could require speakers to tag their "harmful" speech so kids (parents) could filter it out.

#### **CIPA**

- IN GENERAL.--No funds made available under this Act for a library ... may be used to purchase computers used to access the Internet, or to pay for direct costs associated with accessing the Internet, for such library unless-
- (A) such library-
  - (i) has in place a policy of Internet safety for minors that includes the operation of a technology protection measure with respect to any of its computers with Internet access that protects against access through such computers to visual depictions that are—
  - depictions triat are—
     (i) obscene;
     (ii) child pornography; or
     (iii) harmful to minors; and
    (iii) is enforcing the operation of such technology protection measure during any use of such computers by minors; and
- (B) such library--
  - (i) has in place a policy of Internet safety that includes the operation of a technology protection measure with respect to any of its computers with Internet access that protects against access through such computers to visual depictions that are—
    - (I) obscene; or
       (II) child pornography; and
  - (ii) is enforcing the operation of such technology protection measure during any useof such computers.

#### CIPA

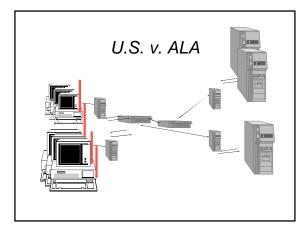
#### **TECHNOLOGY PROTECTION MEASURE.--**

The term `technology protection measure" means a specific technology that blocks or filters Internet access to visual depictions that are--

- (A) obscene, as that term is defined in section 1460 of title 18, United States Code;
- (B) child pornography, as that term is defined in section 2256 of title 18, United States Code; or
- . (C) harmful to minors.

HARMFUL TO MINORS.--The term ``harmful to minors" means any picture, image, graphic image file, or other visual depiction that--

- (A) taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excretion:
- (B) depicts, describes, or represents, in a patently
  offensive way with respect to what is suit able for
  minors, an actual or simulated sexual act or sexual
  contact, actual or simulated normal or perverted
  sexual acts, or a lewd exhibition of the genitals; and
- (C) taken as a whole, lacks serious literary, artistic, political, or scientific value as to minors.



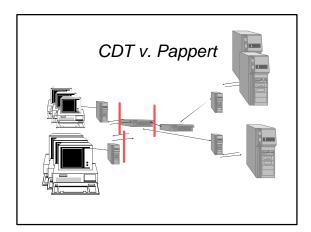
#### U.S. v. ALA

- Is the Internet (in libraries) a public forum?
- Does everyone have the right to speak on the Internet?
- Does everyone have the right to speak in a library?



## Pennsylvania Internet Child Pornography Act

 ISP must remove or disable access to child pornography "residing on or accessible through its service" after notification by Penn. Attorney General.



# Compare the regulations

- Who is regulated?
- Effectiveness: does the regulation stop "harmful" speech?
- Narrow tailoring: does it stop too much?
- Administrability, Enforceability: can it be enforced efficiently?
- Transparency: do those regulated know to whom to protest?

