

CS 121

Our Digital World:

The Internet

April 5, 2011

# Announcements

- Midterm: Apr 14<sup>th</sup>!
  - We'll talk about sample questions/topics Thursday and Tuesday
- Social Media Identity Series slated for April 5-8
  - Wednesday Apr 6, 6pm McGill Auditorium
    - "Making Metapictures Political: Re-Scaling Images of the Fall of the Berlin Wall"
  - Friday Apr 8, Berglund 200, 1-2:30 pm
    - "What is your Digital Identity? Bridging the Gap between our Physical and Virtual Lives."
  - Check the Pacific web site for more info!

# How does...

- an email get from you to me?

chadd@pacificu.edu  
profchadd@gmail.com

- Facebook work?

www.facebook.com  
facebook.com

# The Internet (ch 12)

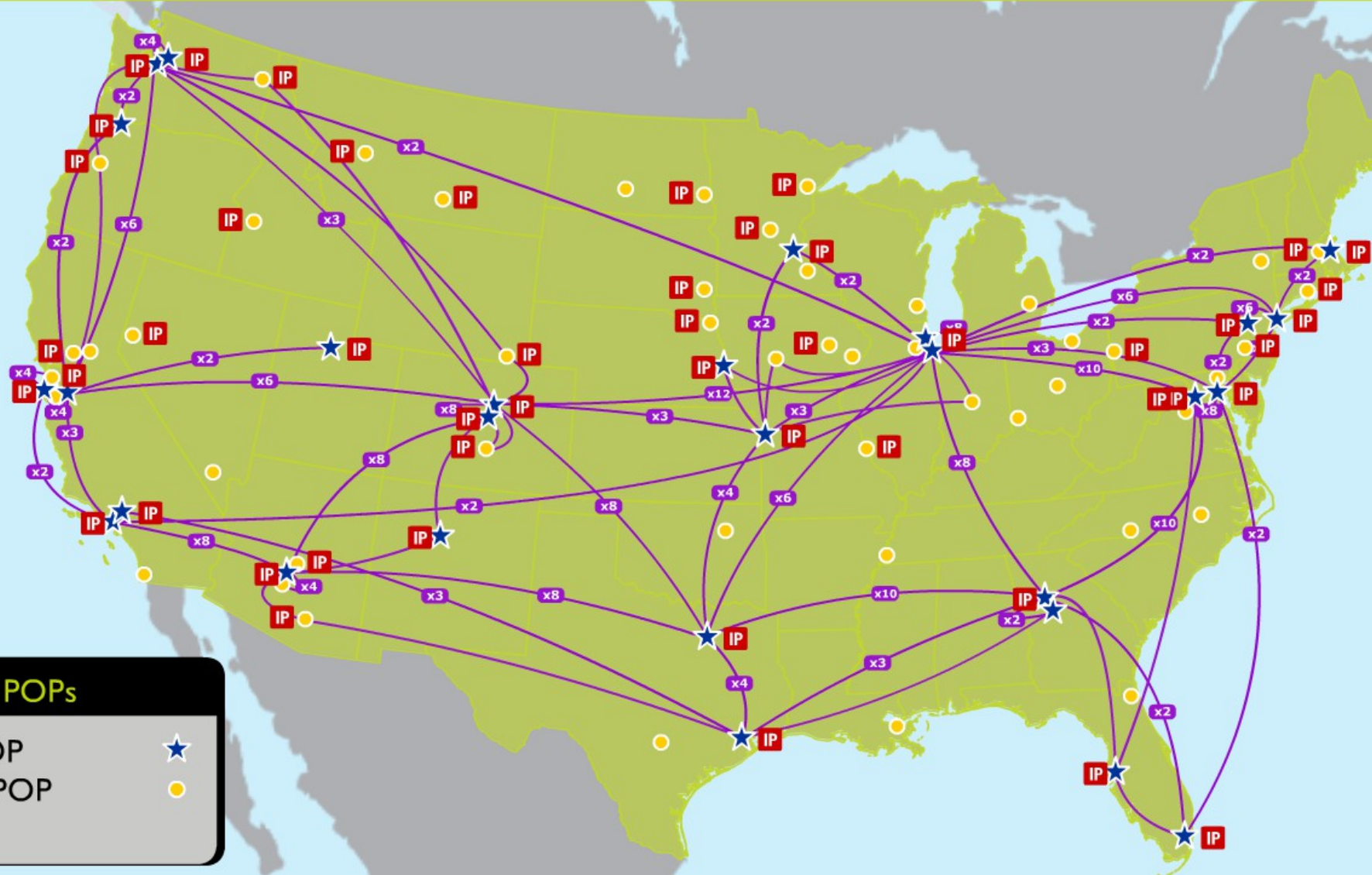
- Computer Network
  - Host
  - Address 74.125.127.104
    - Domain name system
      - TLD
      - ICANN
    - Internet Protocol (IP)
      - IPv4 (32 bits)                  IPv6 (128 bits)
- Client/Server
- <http://www.internettrafficreport.com/>

# Letters you might see

- http
  - html
  - URL
  - https
  
- ftp
  - sftp
  
- IMAP
- POP/POP3
- DHCP

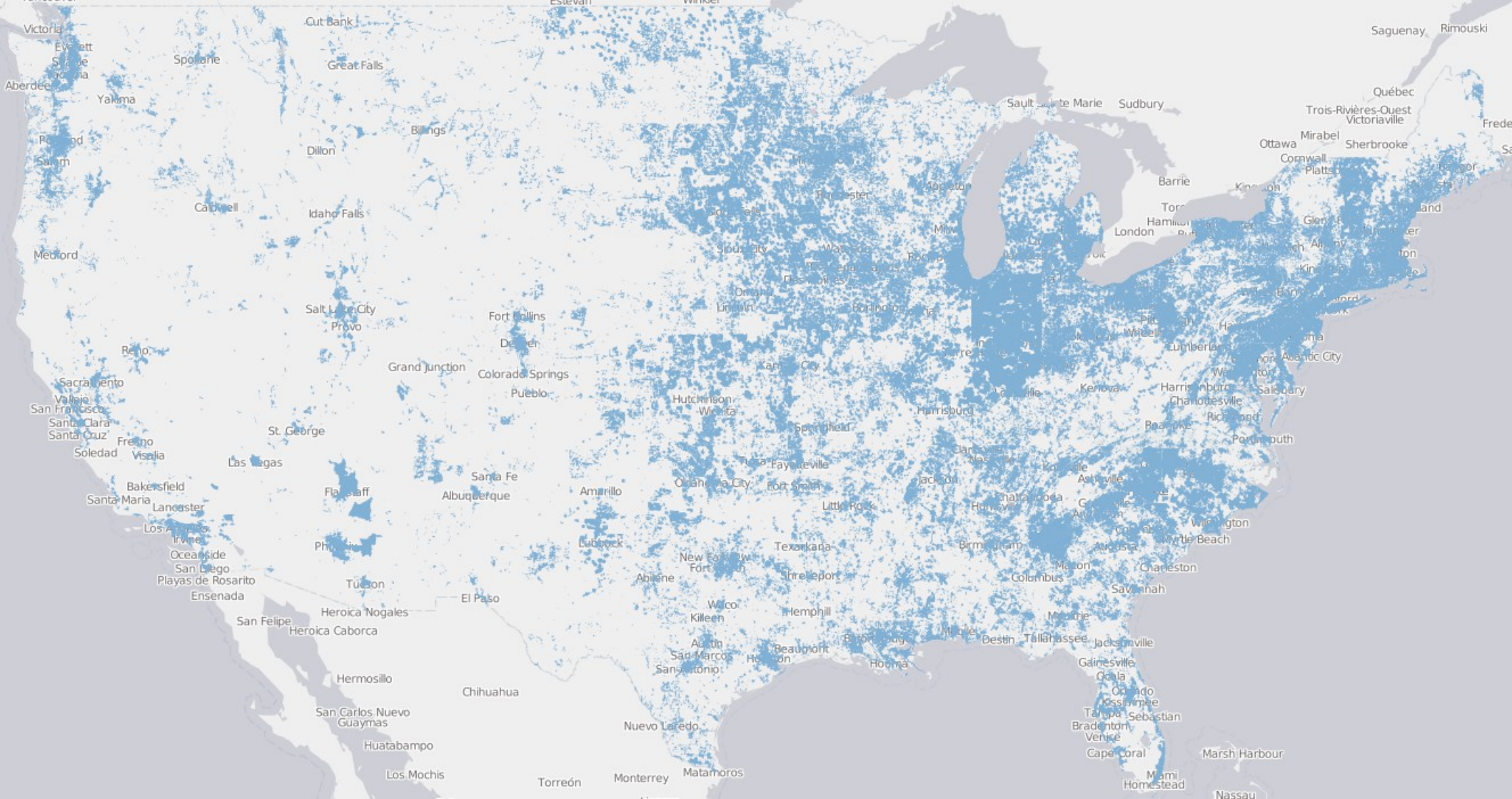
# Internet Access

- How does my computer at home connect to the Internet?
- Backbone
- Internet Service Provider (ISP)
  - broadband
- <http://broadbandmap.gov/technology>



<http://www.qwest-business.com/demos/network-maps.html>





<http://broadbandmap.gov/technology>



# Speed

- Bandwidth

- how many bits can you send in 1 second?

- Dialup      56 kilo bit/second
- DSL          1.5 Mega bit/second
- Cable\*      ~15 Mbps
- FiOS\*        up to 50 Mbps

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- OC3          155 Mbps
- OC12        622 Mbps
- OC48        2.5 Giga bit/second
- OC192      9.6 Gbps
- 10GigE      10 Gbit/second

\* based on commercially advertised speeds

# INTERNET TRAFFIC REPORT

The Internet Traffic Report monitors the flow of data around the world. It then displays a value between zero and 100. Higher values indicate faster and more reliable connections.

Last update (MST):  
4/5/2011 13:15

Global Index **73**  
Trend 

[Home](#)

[FAQ](#)

[Events](#)

[Contact](#)

[Links](#)

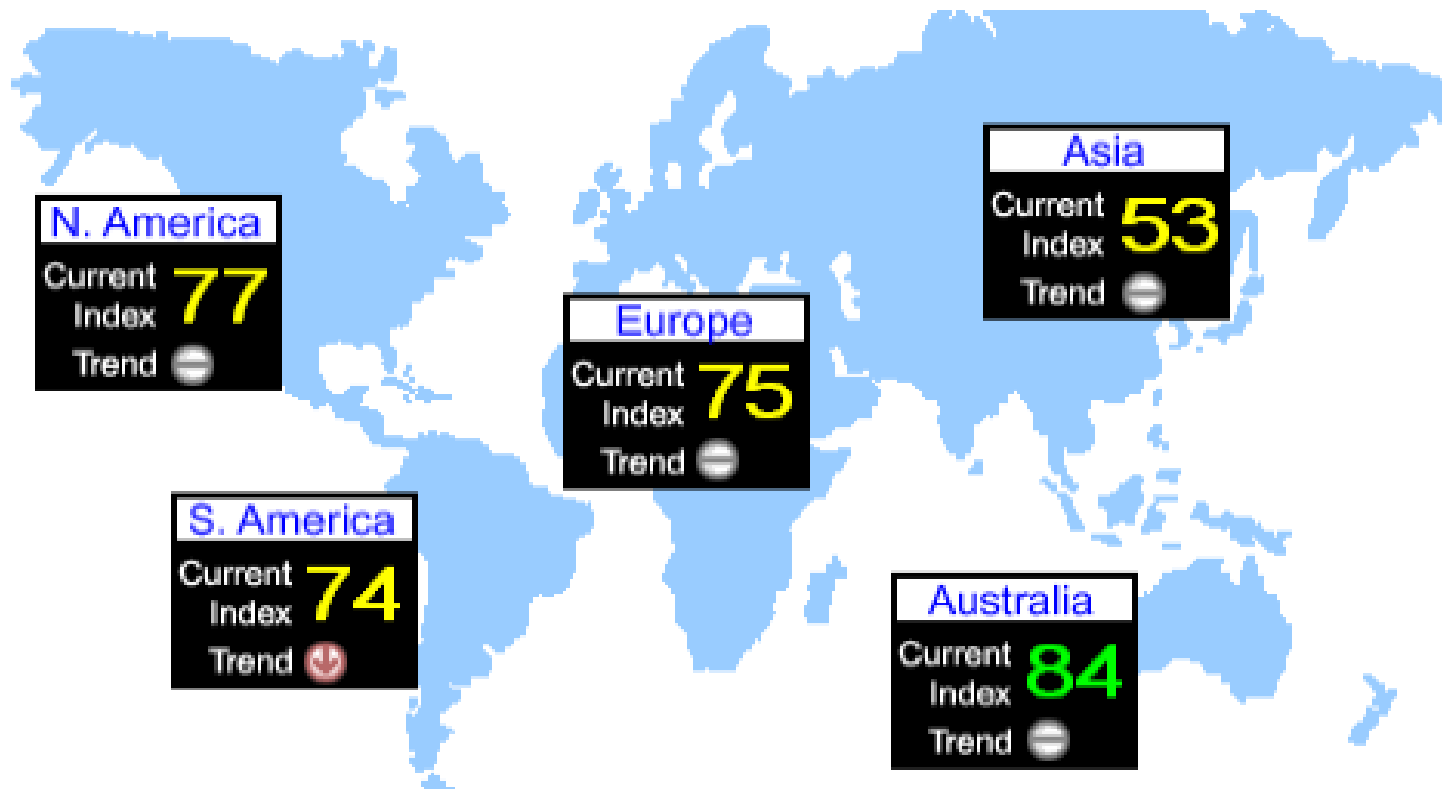
[Ads by Google](#)

[IP Monitor](#)

[Port Monitor](#)

[Usage Monitor](#)

[LAN Monitor](#)



[View Graphs](#) or **Click a region to view more detailed information.**

<http://www.internettrafficreport.com/>

(slow) 0 to 100 (fast)

# International Speeds?

- Average Internet speed
  - US
  - Korea
  - Japan
  - Canada
  - Germany

# network visualizations

- <http://www.yougetsignal.com/tools/visual-tracert/>
- <http://www.verizonbusiness.com/ca/about/network/>
- <http://www.qwest-business.com/demos/network-maps.html>
- <http://navigators.com/isp.html>
- <http://www.tatacommunications.com/map/gfp.html>
- <http://www.level3.com/en/Resource-Library/Maps/Level-3-Network-Map.aspx>
- <http://www.cw.com/assets/Uploads/CW-Worldwide-Network-Map.pdf>

# How do I run a website?

- What technical considerations are there?
  
- I want to run `www.cs121s11.edu`
  - What do I need?

# Practical Problems

- How to buy a domain name
- How to host a website
  - Yourself
    - purchase a static IP address
    - dynamic DNS
  - Purchased services (cost?)
    - Amazon Simple Storage Service (s3)
    - Fatcow.com
    - [smallbusiness.yahoo.com/webhosting](http://smallbusiness.yahoo.com/webhosting)
  - Free Hosting
    - Google Sites



# Question of the Day

- Build a page 4/5/2011 under Question of the Day
  - List the following question and answers
- In the recent protests in Egypt, the Egyptian government “cut off the Internet”
  - Why/how did the government do this?
  - Find at least one article that discusses one of the above questions.
    - Link to the article and answer the question
    - What are the most important points worth discussing?
  - Include one question that you would like answered

20 minutes then discussion!

# Homework 4/5/2011

- By April 7, 9 am
  - Post on your website one article on Net Neutrality
    - Define Net Neutrality in your own words
    - Include a short summary of what you have learned
    - Include one question that you would like answered

- ▼ **Home**
- About Me
- ▼ **Homework**
- 3/31/2011
- 4/5/2011
- Other Interests**
- ▼ **Question of the Day**
- 3/31/2011
- Research**
- Sitemap**