

CSCD 433/533 Lab 5
Internet Measurement and Information Gathering
Winter 2017

Background

In this lab, we will practice with some of the on-line measurement and discovery tools available for our use. We will look at tools that allow us to see large blocks of performance by country. Also some tools to discover information about a domain or IP address

Stanford Tools

Go to <http://www.slac.stanford.edu/xorg/nmtf/nmtf-tools.html>

Task 1.

At the top of the page there is a link to the **Pinger Internet Monitoring**. Click on that link.

Click on the map icon Performance Intensity maps.

Set the From to EDU.SLAC.Stanford.Pinger To Region: **North America**.

Leave the setting on Average RTT (ms).

1. Look at measurements for the years, 1998, 2010 and 2015.

Report the Low and High Values for each year.

Have the measurements gotten faster, slower or stayed the same.

Computer how much faster they have gotten for the lowest and highest values.

2. Now look at Normalized Throughput and report that for 1998, 2010 and 2015.

And Unreachability for each of these years too.

Task 2.

Go back to the SLAC website and under the links in the left box, second column are

Maps of the Internet, click on **Internet Traffic link**

Click on the View the Most Recent Raw Data at the bottom of the screen.

1. What is value of the Global Index Trend? How do they measure it?

2. Which continent seems to have the best connectivity?

3. Ignore the Zero values.

Look at North America, Write the lowest value and the location where it was found.

Write the highest value and the location where it was found.

4. Discover information about the site

a. How often is it updated?

b. How do they get the traffic measurements?

c. Why are all the continents not listed?

d.

Go back to the Internet Traffic Report home page and look at the trend values for each area.

5. Report the trend value for North America. Is this the fastest value? Who is the next fastest?

Task 3.

Here we will look up some information on domain names.

Go to: http://toolbar.netcraft.com/site_report

Enter: ewu.edu in url bar

Write a short report filling in:

Language, Date first seen, Ip Address, Country, Netblock Owner

AS #, Nameserver(s), Administrative contact, technical contact, network address block.

Some of the above, you might need to try more tools at websites below.

<http://whois.icann.org>

<http://centralops.net/co/>

Repeat the exercise for 171.67.215.200. Create a report including which institution this is for.

First, find out what maps to that ip address.

Turn in Lab with subject line, CSCD 433-Lab5 via email.