## **Finding PingER Hosts**

## **HostSearcher**

Use /afs/slac.stanford.edu/package/pinger/HostSearcher.pl to locate www hosts in the required TLD, e.g.for Malaysia (TLD=my):

```
HostSearcher.pl --tld my --webonly --filter tld | tee my
```

This will get up to 1000 hosts in the selected TLD (my) from Google, and for those whose name starts with www, it will try and ping them, if successful it will go to GeolPTools to try and locate them. The results in the above example are saved in the file my.

If GeoIPTools is working then select hosts that it says are in the correct TLD, e.g.

```
grep MY my
```

Verify that they have roughly the right RTT.

- RTTs of < 80ms from SLAC probably indicate the host is in North America.
- One can also use a ping server at a PingER, PerfSONAR or PlanetLab site (see <a href="http://www.slac.stanford.edu/comp/net/wan-mon/viper/tulipmap.html">http://www.slac.stanford.edu/comp/net/wan-mon/viper/tulipmap.html</a>) that is supposedly near the target host and ensure that the RTT is suitably small.

Then you probably want to select hosts that are educational (e.g. have .edu or .ac. on the hostname) and representative of the country, e.g. in main cities, and do not overlap their location.

## Finding Lat/Long

Go to the web site and look for information on the location (e.g. try Contact us). Also try Lat Long Finder entering information found about the location of the site. Try looking for the site on Google maps. The link https://support.google.com/maps/answer/18539?co=GENIE.Platform%3DDesktop&hl=en provide s information on how to findd the lat long of a site in Google maps.

## Criteria

The criteria are:

- 1. The target needs to respond to pings.
- 2. The target needs to respond 24x7x365
- 3. The target needs to continue responding with the same address for multiple years.
- 4. We need to be able to find the actual location (lat/long) of the target.
  - a. The target must not be a proxy, i.e. the RTT must be such as one would expect given the apparent location of the host.
- 5. Host needs to be representative of the country.

Given the above we get a list of hosts in the country (i.e. with the TLD of the country) from Google. Then we test to see whether the host is pingable. We prefer to use www hosts as targets (since we can use the web to find out more about the site, such as city, street address etc.), and (less important) hosts that are associated with a university (e.g. have .edu or .ac in the hostname). This is since Universities tend to stick around for many many years as opposed to commercial sites. Also it is good to have a location diversity of the sites (e.g. not all in one city).