

TULIP Landmark finding

TULIP landmarks are servers at well known locations (lat/longs), that can ping a requested target (typically at an unknown location) to use geolocation to find the location of the target. There are several sources of potential TULIP landmarks. These include [PingER](#), [perfSONAR](#) and [PlanetLabs](#). The current list of TULIP landmarks can be found by looking at the [list](#).

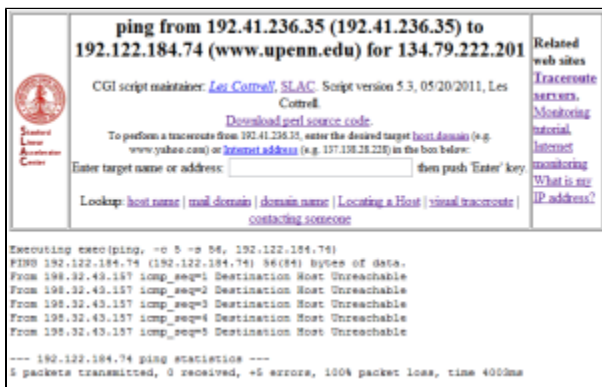
If you need to verify the location (latitude/longitude) of a landmark then see [TULIP Landmark finding the latitude longitude manually](#).

perfSONAR

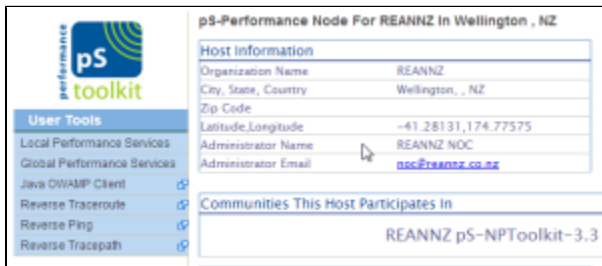
Use the perfSONAR list of traceroute/ping servers. It is at: <http://132.160.6.186/toolkit/gui/perfAdmin/directory.cgi#PING>. This provide a list of IP names /address that host traceroute/ping servers. Then add to the perfSONAR toolkit host name (e.g. 192.41.236.35 or 2001:e10:3c00:3:5054:ff:fe12:ee41) the following

```
<perfsonar-toolkit-host>/toolkit/gui/reverse_traceroute.cgi?target=<target>&function=ping
```

to create a URL: http://192.41.236.35/toolkit/gui/reverse_traceroute.cgi?target=www.upenn.edu&function=ping. The output should appear as below:



One can also simply go to the web site (e.g. <http://209.129.246.135/>, it will direct to <http://209.129.246.135/toolkit/>) and view the information for the node. Unfortunately some nodes do not respond, for others although Latitude, Longitude is in the table the value is not entered. Some work, see below for an example:



One could search for the string (for example `<td>Latitude,Longitude</td><td>-41.28131,174.77575</td>`) and extract the lat/long. A script could be written to automate this using wget to get the web pages etc.

PingER

Most [PingER monitoring sites](#) have a traceroute/ping server. This is the same server CGI script (with a different URL) as the perfSONAR server CGI script so the output is the same. The URL for the PingER ping server is

```
<pinger-host>/cgi-bin/traceroute.pl?target=<target>.edu&function=ping
```

This creates a URL of the form <http://pinger.arn.dz/cgi-bin/traceroute.pl?target=www.slac.stanford.edu&function=ping>

PlanetLab

We use the Planetlab [scriptroute](#) service via the [TULIP reflector](#).

Here is a list of PlanetLab Sites with Lat Lons: <https://www.planet-lab.org/db/pub/sites.php>