

20160413 SLAC Amity Meeting

Time & date

Wed Apr 13th 2016 ~8:00pm Pacific Standard Time, Thursday Apr 14th 2016 08:30am India time.

This was a Skype meeting.

Coordinates of team members:

- The email list for the Amity team is: stanfordamityproject2015@gmail.com
- The chat group is <https://slac-amity.slack.com>
- [Coordinates for SLAC Amity collaboration](#)
- Skype id for Amity is shiv.rajappa

Attendees

Invitees:

Prof Abhay Basal, A. Sai Sabitha, ... - Amity; Les, Bebo SLAC

Actual attendees:

Prof Abhay Basal, A. Sai Sabitha, Shiv Rajappa, Rohan - Amity; Les, Bebo SLAC

General

The students will be preparing for and taking finals between now and May 15th. Probably the next meeting will be in the 3rd week of May.

Pinger MA - Les

[Installation Overview](#). This is proceeding. They have a working pinger2.pl. They have a public DNS pingeramity.it. They have installed ping_data.pl, it is working:

They fixed one problem by registering pingeramit.on and changing:

```
<SrcName>pingeramity.amitynoida.local</SrcName>
to
<SrcName>pingeramity.in</SrcName>
in /usr/local/share/pinger/pinger.xml
```

There is information on progress at [Setting up PingER servers at Amity](#).

They fixed up a strangeness in the DNS lookup for pingeramity.in as seen from SLAC that was causing problems with gathering data:

```
[cottrell@pinger ~]$ nslookup pingeramity.in
Server: 134.79.111.111
Address: 134.79.111.111#53
```

```
Non-authoritative answer:
Name: pingeramity.in
Address: 202.12.103.71
Name: pingeramity.in
Address: 173.193.105.245
```

The host has been un-pingable for the last two days. They have been experiencing Ethernet problems that they hope to solve in the coming day. Then we will retest.

Traceroute/ping servers - Les

<http://202.12.103.71/cgi-bin/traceroute.pl> gives "the web page below:



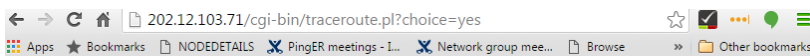
Please note that traceroutes can appear similar to port scans. If you see a suspected port scan alert, for example from your firewall, with a series of ports in the range 33434 - 33465, coming from 202.12.103.71 it is probably a reverse traceroute from our web based reverse traceroute server. Please do NOT report this to us, it will almost certainly be a waste of both of our times. For more on this see [Traceroute security issues](#).

You are about to request a traceroute that may be interpreted as an 'attack' from 202.12.103.71, by a firewall protecting your browser: 10.0.253.1 (10.0.253.1). Have you read the description above and is it OK to proceed?

YES

Your host is: 10.0.253.1 (10.0.253.1).

However clicking on Yes gives:



	traceroute from 127.0.1.1 (202.12.103.71) to 10.0.253.1 (10.0.253.1) for 10.0.253.1	Related web sites Traceroute servers Monitoring tutorial Internet monitoring What is my IP address?
	<p>CGI script maintainer: Les Cottrell, SLAC. Script version 6.52, 6/24/2015, Les Cottrell.</p> <p>Download perl source code.</p> <p>To perform a traceroute/ping/tracepath function from 202.12.103.71 to the target, enter the desired target host domain (e.g. www.yahoo.com) or Internet address (e.g. 137.138.28.228) in the box below.</p> <p>Note the function is performed for the target's resolved Internet address.</p> <p>Enter target name or address: <input type="text"/> then push 'Enter' key.</p> <p>Lookup: domain name Locating a Host visual traceroute Find AS's between hosts Find AS of a host contacting someone</p>	

Please note that traceroutes can appear similar to port scans. If you see a suspected port scan alert, for example from your firewall, with a series of ports in the range 33434 - 33465, coming from 202.12.103.71 it is probably a reverse traceroute from our web based reverse traceroute server. Please do NOT report this to us, it will almost certainly be a waste of both of our times. For more on this see [Traceroute security issues](#).

*10.0.253.1 is a private address
See [The Naming System](#) for information on host domain and [Addresses](#) for information on Internet addresses.*

I.e. the target address is a private Internet address (RFC 1918). One gets a similar result for <http://202.12.103.71/cgi-bin/traceroute.pl?function=ping>

This was at least partially due to the host's environment variable REMOTE_ADDR=10.0.253.1 whereas it should be the public address of the remote host but. 10.0.253.1 is a private address so here is no way to traceroute to it. This has probably been fixed with the pingeramity.in DNS registration. However the host is unpingable.

They will look at setting the REMOTE_ADDR environment variable.

Android implementation of Pinger Measurement Agent - Bebo

See [here](#). Also see the notes from the [meeting on PingER/Android](#) with Sara and Saqib in Pakistan who are working on this.

They have put together an app written in java that can take a list of hosts and make a set of pings to each in turn. The output appears as:

192.168.1.1
www.andi.dz
waib.gouv.bj
www.gov.bw
www.univ-ouaga.bf
www.univ-koudougou.bf
www.assemblee.bi
PING

PING 192.168.1.1 (192.168.1.1) 56(84) bytes of data: 64 bytes from 192.168.1.1: icmp_seq=1 ttl=254 time=1.80 ms 64 bytes from 192.168.1.1: icmp_seq=2 ttl=254 time=2.87 ms 64 bytes from 192.168.1.1: icmp_seq=3 ttl=254 time=14.7 ms 64 bytes from 192.168.1.1: icmp_seq=4 ttl=254 time=1.10 ms 64 bytes from 192.168.1.1: icmp_seq=5 ttl=254 time=1.46 ms --- 192.168.1.1 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4005ms rtt min/avg/max/mdev = 1.108/4.398/14.734/5.201 ms

Pinger2.pl uses the standard Linux ping to make up to 30 pings stopping when it has received 10 responses, so the ping command will need modifying (hopefully there is a java ping option to support this). In addition the output will need to be parsed to produce the pinger2.pl output format. It may be easier to take the pinger2.pl code and run a it under a perl interpreter. This is the approach Sara is taking in Pakistan. They will examine this. If they find serious problems they will communicate that so it can be shared with Sara. Also they will need to check the pinger2.pl documentation to ensure that a java version does the exactly same thing and has the same features.

They do not believe there is a problem with running the equivalent of a cron job to schedule the measurements each half hour.

Apart from this they will look at putting together a proxy that the Android can send the recent data to. Then the SLAC archive site can gather the data from the proxy. The proxy could be replicated at a second site for high availability. Depending on reliability the android should preserve a cache of the most recent data so it can be re-sent later. The least recently used data can be flushed asynchronously.

Scope Overview of PingER Linked Open Data (LOD) and Web Observatory - Bebo

See [here](#).

Other Projects

- [GeoLocation of Internet hosts using TULIP](#) - Anjum Naveed, UM and Les Cottrell
- [IoT, Computer vision-](#) Mayank, Yee
- [Big Data](#) - Jacek and Vaicunth ThruKral

Action items:

Next Meeting

Old Information

Student availability

There are two students (Jahin and Ankit Singh) will be at at the University of Florida who have F1 US visas and will finish at Florida in the 1st week in May. They are then free to come directly to SLAC. They will then continue their studies in the US in August 2016, hence they will be available at SLAC for ~ 3 months. **Low cost housing could be an issue.** Most of the other students are BTech students at Amity who will graduate in May. Once we have their names and mutual interest we can start the paper work to get started on invitations. Aditya Pan and Anwesha Mal who graduate in May with a BTech are going to the National University of Singapore. (I am unsure if this means they are going to University of Singapore after they graduate in May, or before then. Are they candidates to come to SLAC?)

PingER students

The following have written papers on PingER:

- Aditya Pan has started work on the Android port of the PingER MA
- Anwesha has started work on looking at the PinGER data and using cluster analysis on it
- Jahin and Aditya have started work on looking at the PingER data and correlation analysis

Les has copies of these three and has reviewed the Android and cluster analysis papers. It would help if he could be provided with a copy in word so he could mark up corrections before they go to publication via IEEE. These students will be working remotely with Les and Bebo at SLAC between now and May.