20130410 SLAC SEECS and UNIMAS Meeting

Time & date

Wednesday April 10 2013 8:00pm Pacific Standard Time, Thursday April 11 2013 8:00am Pakistan time, Thursday April 11 2013 11:00am Malaysian time.

There was a doodle poll at http://doodle.com/fnwzs5yu7fmux868. It has been closed as of 4/8/2013. Note that the Doodle poll times are GMT (e.g. 3am 11 April GMT = 8pm 10 April PDT, = 11am 11 April Malaysia time, = 8am 11 April Pakistan time)

Attendees

Invitees: Anjum*, Kashif*, Johari*, Nara, Abdullah-, Badrul*, Hanan-, Fidah, Saqib*, Les*, Raja-, Umar- and Bebo*

* Confirmed attendance

- Unable to attend

Actual attendees: Anjum, Johari, Saqib, Badrul, Les

Workshop

It will be 25-26 June at the University of Malaya. There is a document. **Abdullah has verbal approval, we are awaiting official approval**

University of Malaya will issue the invitation letter after receiving an official approval. Hanan will have a meeting with Dr Abdullah and Johari at UM on the upcoming workshop after the middle of April.

It does not appear possible for UM to fund someone from NUST or Bebo. We have a contingency plan. However Les believes, and sent email to Abdullah stating, that it is critically important to have someone from NUST at the workshop. Abdullah asks if UNIMAS or UTM could fund the NUST person. **Johari has forwarded a request to Nara. We hope to hear in a few days.**

For attendees it is important to try and get 2 representatives from each of the 20 public Malaysian universities. It would also be good to get a non MYREN University and someone from Malaysia Telecom. Bebo has sent contacts for MIMOS and Manipal. One participant would be from the computer division (more to do with installing and maintaining), the other from Faculty (more for the research side). **Johari said there is space for 30. Anjum said we should invite more than 30 since there will be some who will not attend. We could go >30 people for the non technical sessions and restrict for the hands on.**

Johari suggested a signing ceremony at the workshop for an MoU between UM, UTM and UNIMAS.

It is not easy to find pingable sites in some Malaysian states. Obvious targets are universities, for example UUM in Kedah and UNIMAP in Perlis, but those sites are not ping-able. One way is to approach these universities and explain to them about PingER project and request for the ping packet to be enable. Another approach is to invite such sites to the workshop.

Les has sent HostFinder.pl to Johari to possibly assist in finding hosts. There appears to be a problem with the Google query. After the meeting Les sent Johari a fix to HostSearcher.pl. Les also sent the documentation on the raw data format to Johari.

Funding/Proposals

Johari reported that the FRGS proposal had been accepted. It is for 75K MRs (~$35K). It is for 5 people.

Badrul is putting together a proposal fro an outreach program. It is similar to Johari's FRGS proposal. It will be used to expand the monitoring hosts.

The Next step in funding is to go for bigger research funding, such as LRGS or eScience. We can use the upcoming workshop (1 specific session) to brainstorm and come up with such proposal. We need to do some groundwork before that as well. **Johari will take the lead in putting together 1/2 page descriptions of the potential research projects.**

1. Need to identify a few key areas of research related to PingER Malaysia Initiative and this can be shared/publicized through the website. These might include using the infrastructure and data for: anomaly detection; correlation of performance across multiple routes; and for GeoLocation. Future projects as Les listed in Confluence here https://confluence.slac.stanford.edu/display/IEPM/Future+Projects can also be a good start and also Bebo's suggestion.
2. Need to synchronize and share research proposals so as not to duplicate research works. how to share? Maybe not through the website, or maybe can create a member only section of the website to share sensitive data such as research proposal?

 Anjum mentioned a paper on Evaluation of IP Geolocation Algorithms on PingER and PlanetLab Infrastructures, by Fida Gilani et. al. submitted to IEEE INFOCOM 2011UNIMAS. This could be updated with new data and maybe submitted to a different venue. Anjum forwarded a copy of the paper to Johari, Abdullah and Hanan with copies to the team. The idea is to see whether there is interest at UTM, UM or UNIMAS.

At the last meeting, we agreed that the projects we have been gathering should be divided into Development and Research. Since the last meeting Les did this, see Potential PingER Projects .

UNIMAS

There is a problem with the UNIMAS traceroute. It appears both in pinger.unimas.my and in the Raspberry. It appears pinger.unimas.my is behind a NAT that is not passing the traceroute UDP probes. Other hosts at UNIMAS are not seeing the problem, so Johari believes it may have to do with the IPTABLES in pinger.unimas.my. Traceroute using the -I option (send the probes using ICMP rather than UDP) seems to work (but needs root access). Thus it would appear not to be in the return (ICMP "time exceeded") response. The probes (when not using the -I option are UDP packets using sequentially ports 33434 - 33465 for up to 30 hops). It is possible that ports > some number may be blocked. **Johari talked to Imran of the UNIMAS Computation Center to discuss the IP address configuration mismatch on private and public addresses**

Johari has set up a guest account for Anjum. Anjum logged on and reported some concerns about addresses and interfaces not matching. He does not believe it is due to the Load Balancer. The traceroute/ping server is important for the TULIP trilateration project and also understanding routing within and from Malaysia.

There is a bug in http://www-wanmon.slac.stanford.edu/cgi-wrap/connectivity.pl?monitor=pinger.fsktm.um.edu.my&rawdata=www.aiu.edu.my&format=tsv&. It gives: Content-type: text/html -rw-rw-r-- 1 pinger iepm 245175 Apr 13 01:08 /nfs/slac/g/net/pinger/pingerdata/hep/data/pinger.fsktm.um.edu.my/ping-2013-04-12.txt.gz Les needs to look at connectivity.pl

Les has sent documentation on the PingER raw data format to Johari

UTM

The UTM Pinger site is http://pinger.fsksm.utm.my/cgi-bin/ping_data.pl to get the data. .

Saqib is starting to look at Pingtable.pl anomalies as a start in a case study for Malaysia and S.E Asia.

There was a long discussion on traceroute from UTM at the last PingER collaboration meeting. Badrul has contacts at MYREN and will use them to investiate the routing and where some of the routers are actually located. It is peculiar that a tracerouter from UTM to www.unimas.my when used with a time out after 45 seconds just gets the following hosts

1 161.139.68.25

2 10.110.1.67

3. 161.139.248.254

4. 161.139.244.65

whereas with a timeout of 90 seconds it gets the same 1st 4 hops and then

5 161.139.245.254 in < 3ms

6 161.139.251.103 in < 3ms

I.e. the 5th and 6th hop respond in way < 45secs.

One gets the same result from the command line.

All of these hosts are in the UTM autonomous domain

A possibility is that the measurements were made at different times and so the routing changed.

It would be interesting to skip the first 5 or 6 hops using the traceroute -f 6 option from the command line. Also make traceroutes with the 2 time outs at the same time

UM

Since the traceroute is working, "we" can start to make a routing study similar to https://confluence.slac.stanford.edu/display/IEPM/Routing+from+UNIMAS. Badrul has a student who will be working on the case study and will coordinate with Saqib at UTM and Johari at UNIMAS to combine results and to put together a paper for the Malaysian ISI Journal probably around the end of June. There was no progress reported on this.

NUST

Raja has mailed to the SLAC International Studies Office his documents towards the DS-2019 process. (3/29/2013). They were submitted to the Stanford campus Bechtel international center 4/4/2013. We await campus to create the DS-2019 documents(s). Raja has heard that they are being sent to him. Typical turnaround is a few days (< 2 weeks).

Abdullah will be visiting Islamabad, he has been invited by Anjum to visit NUST.

Anjum reported he sent Les a proposal he is planning to send to HEC. Les has not seen it. Anjum will resend.

PingER at SLAC

 Les has been invited to give a general colloquiam at SLAC on the Internet where it came from, challenges and how it is performing. the latter section will report some PingER case studies and measurements.

A graduate student from Brazil will be joining PingER at SLAC for 12 weeks in late May, 2013. He will probably work on web front ends.

TULIP

Raja is experimenting with using different alpha values as well as different target landmarks in Europe, America and Pakistan. So far the results of using a constant alpha value and variable alpha values based on RTT are quite similar. He is trying to find the conditions and situations under which using variable alpha values is better. (3/20/2013).

Raja has completed converting CGG the MATLAB script to Mathematica and used it to generate some input files for Pakistan and Europe. However using the alpha values (function of both region and RTT value) found through the alpha analysis the distances were underestimates in some cases. He is working on finding the cause and possible solution. Did you get an answer?

Potential projects

See list of Projects

Future meeting - Les

Next meeting Wednesday 24 April 2013 8:00pm Pacific Daylight Time, Thursday 25 April 2013 8:00am Pakistan time, Thursday 25 April 2013 11:00 am Malaysian time.

Action Items

- We await official approval of the workshop so we can proceed with invites.
- Johari is waiting to hear from Nara on funding someone from NUS for the workshop. This is very important.
- If there is to be an MoU signing ceremony between UM, UTM and UNIMAS, then an MoU will need to be drawn up.
- Hanan, Johari and Abdullah need to meet
- Johari found a bug in HostSearcher.pl, it needs fixing. Les has fixed it since the meeting.
- Badrul is putting together a funding proposal.
- The traceroute at UNIMAS needs further investigation
- There are some suggestions of for Saqib to try on the trace route at UTM
- We look forward to Badrul's student's work on the malaysian Internet case study
- Anjum can you resend the proposal.
- Raja press forward with visa etc.

Coordinates:

See: http://pinger.unimas.my/pinger/contact.php