20101208 SLAC SEECS meeting

Agenda for SEECS/SLAC meeting December 8th 2010.

Bold face, topics for coming meeting that we need to address

Italics action items

Pakistani case study – Zafar, Anju

See the current status of new Pakistani PingER monitoring hosts. Zeeshan working on deployment, the list is the same.

Sadia is working on statistics for the HEC report which will be incorporated into the Pakistani case study. It will have a summary and Appendix. They are focusing on an inter-regional study. This will include routing paths and anomalies, with summary graphs. They are picking one or two nodes per region and then study from it to all other regions. They did not make the Nov 20th date due to Eids. That has been a problem that Anjum has managed to work around. The subsequent reports will be monthly on 15th of the month. Expect to finish by Wednesday next week. Zafar is trying to keep the report below 50 pages. 11/1/2010 we are almost done with draft of the report and finishing the report. There are some interesting cases like intra cities nodes having weird RTT close to 0.7ms. The complete report will be available asap.

Following suggestions with coloring of table and need to update the introduction. Will have what has been done, what planning to do and expectation s

Sadia unearthed a problem in smokeping at SEECS. It has been fixed. She also unearthed a problem in table.pl which has also been Fixed. **Well done**Sadia in unearthing and reporting the problems.

Progress on ICFA Report 2011 - Zafar

Zafar has uploaded the report and email the link. Currently completed most of the stuff, still to do new nodes and Pakistani case study. the later will take a couple of weeks.

- 1. 2010 Updates on Africa (done)
- 2. Inland African fibre optics (done)
- 3. African NREN (done)
- 4. Mean Opinion Score
- 5. Regions of the World graphs
- 6. Throughput graphs (will be handled in December/January)
- 7. PingER metrics (done)
- 8. Loss (done)

I have extended the African case study to add BGP prefixes and pinger metrics for Africa.

PingER

We added another monitoring host this time in Egypt.

I am working on a monitor in Sarawak.

I have got a new faster host for www-wanmon.slac.stanford.edu and it works with table.pl for continent to continent. The old www-wanmon (to be replaced) used to time out.

Extend the PingER map (also use for Pakistani to Pakistani subset map for the case study) - Faisal has taken this on.

Added Features

- Zoom based on selected bounding area
- Google's search services and auto zooming i.e if Africa is searched, it will zoom to Africa. If 'Peshawar university' is queried it will
 focus on bounding radius of university.
- . New attributes added from DB and linked with pingtable in such a way that they provided relevant results.
- 1. Adding ping, traceroute etc. Under-progress
- 2. Add in Viper capabilities (i.e. paths with coloring) Under-progress

PerfSONAR

Zafar has not had a chance to do much work on it. The VMs are giving problems, changed to VMWaure but no better. the machines are down. the graph problem is solved. Contacted Jason and pointed out problem with NTP servers. Latency nodes having problems. Working with NUST data center to sort out problems with VMs. Trying to fix the problem or move to physical. Zafar will put together paragraph on what has been working, plans and a picture.

- 1. Faisal is working with Yee. Progress Faisal
 - a. Looking at how to display multiple nodes at a single lat/long or close lat/longs, a grouping problem. Looking at how to handle identical lat /longs. Looked at MonALISA, and other implementations. This has been solved.
 - b. Added Zoom in based on selection feature. User can select a specific region of a map by holding shift key and dragging through the bounds. Will add to the PingER maps.
 - c. For displaying links b etween hosts, Faisal is using poly-lines to represent great circle routes, rather than just straight lines to present the actual shortest path. Lot of mathematical formulas. Study on implementing Bézier curves which may help better to separate paths.

- d. Representation of data in XML for links and paths. Writing an API so can get data from perfSONAR and provide to the client.
- 2. Zafar found a problem in the TULIP map, Faisal has fixed it. Faisal has kept information on the landmarks used RTs etc, which be very valuable later to look at
- 3. Zafar deploy PerfSONAR nodes at SEECS. Second step is to find whether the same can be done at HEC on PERN's network. It is working, congratulations!

Possible projects

See https://confluence.slac.stanford.edu/display/IEPM/Future+Projects. Zafar will be working on this

- 1. Extend the NODEDETAILS data base to allow entry support for whether the host is currenty pingable.
- 2. Get the MatLab license at SEECS and put up a CGB server using it. The student(Bilal) had exams, will resume work on Monday. Do not have license for MatLab will do on own machines to test and will migrate when have license. Zafar will contact Arshad and Ali. Basically the client will call the reflector with the target. The reflector will return the landmarks and RTTs.
- Extend Checkdata to provide emails automatically, see https://confluence.slac.stanford.edu/display/IEPM /Extend+checkdata+to+make+it+more+useful
- 4. Add MOS to pingtable.pl see https://confluence.slac.stanford.edu/display/IEPM/Add+Mean+Opinion+Score+%28MOS%29+to+pingtable.pl+metrics Radia will start work on it when done with HEC report, also she is working on her masters classes done, writing thesis. When should we expect progress?
- 5. Improve the PingER2 installation procedures to make it more robust. This might be something for the person(s) in Pakistan who are responsible for installing PingER2 at the Pakistani monitoring sites. They probably have found where the failures occurs. Also look at the FAQ, and ping_data. pl which has been improved to assist in debugging, could it be further improved (e.g. provide access to the httpd.conf file so one can see if it properly configured)? There are 2 students working on the PingER archive. Is this something they could work on?
- 6. Fix PingER archiving/analysis package to be IPv6 conformant. Will build a proposal for an IPv6 testbed. They will try various transition techniques.

Future

Les is trying to clear space to visit SEECS in February.

Amber and Sadia will share their CVs, Anjum will get them and forward.

They have applied for SLAC IDs, Les has approved they are going through HR. They have filled out and are scanning and will send.

They need to learn Perl. Zafar will go over what the projects PingER (this is done) and perfSONAR (this has to be done). hope to do tomorrow after finish the HEC report). Will get D2019 in regular mail (it has been sent Dec 6th) then apply to consulate, then await an interview with a weeks notice, then about a month to get visa. Hope for interview Dec 21st. optimistic, realistic late/Feb.

Adnan Kiani has just been introduced to the PingER project. He completed his PhD degree this year in communications at Brunel University. He will be taking over the liaison at SEECS from Anium. Anium is over committed and unable to commit enough time to the PingER project.

Arshad coming in Jan, to start his daughter at Fotthill. Failsal looking for aplace for them

Paper - Umar, Fida, Zafar

- 1. SVN for paper, Umar has set it up and it is working. Umar will send out the accounts. Not critical at the moment.
- Umar will take as the main/first author of the paper. Ali Khayam has put together an introduction
 identifying the main points. Umar will send in the first draft and put together with feedback from Ali. Umar hopes to be done by Mid December.
 Umar is currently overwhelmed. Zero progress 11/10/2011. Umar has to submit a camera ready copy in the next couple of days.
- 3. Adnan is also interested in working on the paper and will talk to Umar.
- 4. Umar sent draft to Adnan. Umar will be in Pakistan later this month and will get together with Adnan. Fida will be available after December 16th.
- 5. Fida will send review comment to Adnan

AOB

Future meeting time - Les

The next meeting in Wednesday 22nd December for people in US and 9th December for people in Pakistan