

20101222 SLAC SEECS meeting

Agenda for SEECS/SLAC meeting December 22nd 2010.

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

Italics action items

Pakistani case study – Zafar, Anjum

What is the status of the HEC report?

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. She also spotted differences in the stats reported by table.pl and pigntable.p that needed understanding. Well done Sadia in unearthing and reporting the problems.

Progress on ICFA Report 2011 - Zafar

Updated Pakistani PingER monitoring nodes status from Zeeshan.

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

I am still working on a monitor in Sarawak. It appears to be using Linux selinux to block pings & traceroutes.

The new faster host for www.wanmon.slac.stanford.edu is up and running. It is 3-4 times faster for table.pl which now completes instead of timing out

There is also a bug in the SEECS table.pl for dataservers with a @ sign for them, and the colors need to be looked at. **Zafar is looking at.**

<http://www.wanmon.slac.stanford.edu/cgi-wrap/reflector.cgi?PD=set&PE=set&function=landmarks&out=csv> needs modifying to use tsv instead of csv since there may be commas in the city field. **Zafar is working on.**

Added Features for pinger map - Faisal

1. Adding ping, traceroute etc. **Under-progress**
2. Add in Viper capabilities (i.e. paths with coloring) **Under-progress**

TULIP

With the move to the new host Faisal had to get a new cookie to allow scriptroute to run scripts on the PlanetLab infrastructure. Still needs testing.

Traceroute.pl versions earlier than 5.0 have XSS vulnerability. It has been fixed. I have written a script ([node-contacts.pl](#)) to read the list of landmarks created by [reflector.cgi](#) then use an updated version of [dbprac.pl](#) to get contacts and dataserver from the database. Then extract the email addresses and using the CPAN sendmail.pm module be able to send an email to the contacts telling them of the need to upgrade. **I will leave the Pakistani landmarks to SEECS.**

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*. Any progress on MatLab CBG - Zafar?*

Les spotted an error in reflector.cgi when using function=landmarks and requesting a csv file. Zafar has fixed.

PerfSONAR

Zafar has not had a chance to do much work on it. The VMs are giving problems, changed to VMWare 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 between 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 - 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 currently pingable.
2. Extend Checkdata to provide emails automatically, see <https://confluence.slac.stanford.edu/display/IEPM/Extend+checkdata+to+make+it+more+useful>. Many of the ideas in the script node-contacts.pl are a step in this direction.
3. Add MOS and alpha to pingtable.pl see <https://confluence.slac.stanford.edu/display/IEPM/Add+Mean+Opinion+Score+%28MOS%29+to+pingtable.pl+metrics> Sadia will start work on it when done with HEC report, writing thesis. **When should we expect progress?**
4. 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 occur. 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?**
5. [Fix PingER archiving/analysis package to be IPv6 conformant](#). Will build a proposal for an IPv6 testbed. They will try various transition techniques. **Any progress?**

Future

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

Les has submitted the invitation letters for Amber and Sadia to SLAC management. The account request have been received at SLAC, they will be submitted after Jan 3rd, 2011. Les also has forms for Bilal's account, they will be submitted early next year.

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).

Zafar has his D2019. He has applied to the 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. **Update**

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 Anjum.

Arshad coming in Jan, to start his daughter at Foothill. Faisal looking for a place 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.
2. 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 29th December 2010 for people in US and 30th December for people in Pakistan