# 20110202 SLAC SEECS meeting

## Agenda for SEECS/SLAC meeting February 2nd, 2011.

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

#### **Future**

- Les has his Pakistan visa and airline tickets. There are problems getting authorization from DoE. How do things look following the Lahore American consulate incident?
- The draft letters of invitation for Sadia and Amber are with SLAC's international services. I have given expected dates of arrival, phone
  # and email addresses to SLAC international office. Current plan is for arrival April 1st.
- Sadia, Amber and Bilal have their SLAC computer and Wiki accounts. Amber had a problem with her Windows password. She is still having problems, Sadia is OK.
- Zafar received his DS-2019 on Dec 10 (Fri). Applied for visa on Dec 13 (Mon). Interview date was Jan 3, it has been delayed to 24 Jan. Visa
  accepted now await clearance. Expect ~3 weeks. Hope start march.

#### Pakistani case study - Zafar, Anjum

- Nodes wise details
- Pakistani case study is done for the moment.
  - A summary of the case study is in the ICFA report.
- UETTaxila Zafar
  - o Zafar has started taking and archiving traceroutes between Pakistani monitoring hosts on a daily bases.
  - Amber has analyzed te patterns are confusing since UETTaxila had a strike, then there were exams, then off for the winter break.
     They will be back after coming Monday. The early morning load Sadia has seen maybe to students studying for exams. Umar will get the dates of the events at UETTaxila, and Amber and Zafar will update the wiki report.
- Amber will need to get up to speed on Linux.
- Look at NUST trends over last year, which sites have improved
- · Sadia is working on prm.pl to add alpha and MOS. She has a local copy, when done will update on the server.

### **ICFA** Report

- . The ICFA report has been submitted Zafar
- Zafar is working with Les on a case study for Egypt. Services have now been restored so we have more information to add. Umar suggested posting the study when ready on SlashDot.

## **PingER**

- The traceroute server and ping\_data.pl have been installed and working in Sarawak.
  - The traceroute/ping server needs to be added as a landmark to TULIP.
  - We are working on getting pinger2.pl working. The pinger.xml page needs to be fixed
- PingER archive site: Ghulam and Farhan have created two ERDs. One is a simple design (relatively inefficient) and another is a complex design (relatively efficient though it might introduce some redundancy) with multiple normalized tables that can be joined. They have created MySQL databases following both ERDs and have done some stress testing. The simple design is faster to load, the more complex design is faster to load data from. They will probably go with the more complex design.

#### 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.
- Get the MatLab license at SEECS and put up a CGB server using it. 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. The client will then call the CBG/MatLab server with the relevant RTTs, lat/longs etc.
- CBG Bilal went to home time after exams, so far changed CBG to integrate into TULIP. ope to get to him by end of this week, when he
  returns meet on Monday.

#### **PerfSONAR**

Problems were fixed. NTP servers were causing considerable clock delay. Added close-by Stratum 1 NTP servers to solve the problem. Nodes were updated to PerfSONAR version 3.2 (Fedora distro). Nodes however are offline since they were disrupting normal traffic. We are waiting for 10 Mbps dedicated connection to switch the nodes back on. - **Update** 

- 1. Faisal is working with Yee.
  - a. Working with Yee to get Lat long of perfSONAR host corrected.
- 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 talk to the students about these projects.

- 1. Extend the NODEDETAILS data base to allow entry support for whether the host is currenty 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. 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?\*
- 4. Fix PingER archiving/analysis package to be IPv6 conformant. Will build a proposal for an IPv6 testbed. They will try various transition techniques. A proposal has been prepared and that has been submitted to PTA. Adnan is a co PI. It is being evaluated today. A small testbed has been established in SEECS and the plan to shift some of the network to IPv6. Bilal is part of 3 students involved with PingER and they will be involved with IPv6. They are porting the PingER archive site site to using a database. They have redeveloped the archive site using Umar's documentation. They have set up a small test archive site. They have gathering, archiving, analysis. They will design a new database. They will also try a port of PingER to IPv6.
- 5. Look at RRD event detection based on thresholds and how to extend, maybe adding plateau algorithm. Umar's algorithm did not work in a predictable manner.
- 6. Provide near realtime plots of current pinger data using getdata\_all.pl/wget. It will work as a CGI script with a form to select the host, the ping size, and the time frame to plot. It will use wget or getdata\_all.pl to get the relevant data and possibly RRD/smokeping to display the data.

## 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
- 6. Meeting between Adnan, Umar, Ali Khayam did not come to pass due to Adnan being sick. It is believed we need a re-write, the technical details are OK. Adnan will get to more rigorously.

#### **AOB**

## Future meeting time - Les

The next meeting in Wednesday February 11th 2011 for people in US and 27th January for people in Pakistan.