

20110216 SLAC SEECS meeting

Agenda for SEECS/SLAC meeting February 16th, 2011.

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

Future

- The draft letters of invitation for Sadia and Amber have been sent, however they had the old dates, we are working on a new pair. They have the other docs (DS2019 etc.) 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. The new confluence went into operation. **It is now working for Amber.**
- Zafar received his DS-2019 on Dec 10 (Fri). Applied for visa on Dec 13 (Mon). Interview date was Jan 3, delayed to Jan 24. Visa accepted now await clearance. **He has not received his visa yet.** Hope to start mid march.

Pakistani case study - Zafar, Anjum

- Pakistani case study is done for the moment. Since I will not be visiting Pakistan in the near future, I have sent an email to Sohail Naqvi of HEC telling him of our case study of Pakistan. Now we need to work with Arshad to decide how to present the results to PERN/HEC. **Anjum will talk to Arshad today and after today's meeting then will present the case study to the PERN folks to try and understand the problems. PERN are interested in losses, reachability, and RTT. They are also interested in perfSONAR throughput measurements. For NUST this was waiting on the 10Mbps link. This had to go thru NUST who rejected the idea. It is too expensive. There is another link for the research purposes which will be split into 2, part for perfSONAR. PERN will deploy perfSONAR at HEC/Quetta. Someone is working on this. The university is close by HEC/Quetta. Hope in 4 weeks to have PingER monitoring node in 4 universities. More of a research project than a deployment project.**
- **HEC wants the ability to view just the Pakistan results. Want a view of whatever we are recording. They can use the map to see the topology. Faisal will look at a new user interface with a Pakistan bias.**
- Zafar has started taking and archiving traceroutes between Pakistani monitoring hosts on a daily bases. We need a user interface to select and view these traceroutes.
- The UETTAXILA to NUST report has been updated. However Zafar stopped the pings. He will re-start so we can get measurements made when the university is in a stable state. During daytime until 3:30pm when the classes are on, internet access is blocked to the hostels. After 3:30pm it is enabled thus RTT increases. **Amber will update her description of how this affects the RTTs.**
- Sadia is working on prm.pl to add alpha and MOS. I have fixed the creatpage.pl problem. An example of the output from the new prm.pl n_prm.pl is at:

<http://www-iepm.slac.stanford.edu/pinger/prmout/MOS-EDU.SLAC.STANFORD.N3-continent-allyearly.csv> **Sadia will start on alpha ASAP. Les will rename n_prm.pl to prm.pl and try it out various config files**

ICFA Report

- The case study for Egypt is finished. Services have now been restored so I have added more information. Umar suggested posting the study when ready on SlashDot. The report is at [<http://slashdot.org/submission/1468286/Egypt-pulls-the-plug-on-their-internet>].

PingER

- We are working on getting pinger2.pl working at Sarawak. The pinger.xml page needs to be fixed
- PingER archive site: Ghulam and Farhan have created two ERDs. One is a simple design (three tables, normalized to level 1) and another is a complex design (five tables, normalized to level 3, introduces some redundancy). They have created MySQL databases following both ERDs and have done some stress testing. The simple design is faster to insert data into and load data from.
 - **Simple design takes 15.4 seconds to write data from 15 files and 12 seconds to read. Complex design takes 18 minutes and 57 seconds to write data from 15 files and 13 seconds to read.**
 - **Simple design is also space efficient. It takes 27 MB of space as compared to 30 MB taken by complex design for writing data from 15 files.**
 - **As suggested by Umar, we should run more analysis before finalizing this.**
- **Faisal is working on a home page for PingER.**
- PingER Map
 - **Please add nodename and fullname. (done)**
 - **Test Maximum Minimum values (done)**
 - **Add The ability to choose the line thickness (done)**
 - **Remove the loading bar (done)**
- **Assuming it is easy do not remove a box if one clicks on something else, leave that to be done manually by clicking on the x in the top RH corner**
- **Add auto ranging**
- **The ability to save a color range setting**

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 CGB/MatLab server with the relevant RTTs, lat/longs etc. **Update**
- CBG Bilal went to home time after exams, so far changed CBG to integrate into TULIP. Hoped to get to him by end of last week, when he returns meet on Monday. **Update**

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.## Datagrid module to display tests from all the result set hosts for a selected ## Ability for datagrid module to share data and calls with map.
2. Documentation available here <https://confluence.slac.stanford.edu/display/IEPM/Google+Maps+for+PerfSONAR|.../display/IEPM/Google+Maps+for+PerfSONAR|>
3. **Zafar deployed PerfSONAR at SEECS. It was working and gathering data. However the Network Operations Center at SEECS had to shut it down since it was flooding the network and disrupting normal traffic (education/research). Sent an application to HQ NUST to approve 10 Mbps bandwidth link. The proposal was rejected. Now waiting to utilize 2 Mbps from a 10 Mbps research network link.**

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 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. 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|IEPM:Make PingER IPV6 compliant]**. 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/smokeying to display the data. **Anybody interested?**

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 23rd 2011** for people in US and **Thursday February 24th** for people in Pakistan.