20101110 - SLAC SEECS meeting

Agenda for SEECS/SLAC meeting November 10th 2010.

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

Italics action items

Introductions

Sadia introduced herself. Good at modeling and math, taken a methods course, Doing analysis, interested in coding. Mainly on MatLab and C++, can easily get involved Java. No experience in perl not part of their syllabus. Interested in presenting data.

Amber Working with Dr Anjum on a theis. Major was telecommunications i.e. electrical engineering with communication. More interested in logics and reasoning and analysis. Can program but not her fashion.

They will share their CVs.

Get them started right away. Get accounts, learn Perl. Umar will go over what the projects PingER and perfSONAR are all about.

Dr Adnan was unable to attend due to a project review meeting.

Zafar had a high fever yesterday, may be unable to join

Sadia and Amber please go through the previous Pakistani case study. Then using the new data (see below) and see how the information could be updated.

Pakistani case study – Zafar, Anjum

We need to make some progress on the Pakistani case study soon.

1. aiou, lhr, nwfpuet, uettaxila, uob are down for many days: see http://www-iepm.slac.stanford.edu/monitoring/checkdata/).
   a. We will not give up on them. Only one person is installing nodes. *It will take a visit to them. The server needs replacing at sites. UOB will be fixed in 1 months, they will go there on the 27th. Anjum will check the status of the other two with Imran.*
2. There has never been any data from pinger-rcp.pern, hu (Hazara), kohat, nca, pwr.nu, ustb, since though the hosts are in the NODEDETAILS database there is no dataserver entry for each of then in the database. Should there be? They are identified as monitors. - Even if I guess at the URL for a dataserver, e.g. http://pinger.hu.edu.pk/cgi-bin/ping_data.pl there is no such web page. Maybe the permissions have not been ste. Zafar looked at fixed pinger-itc, and aiou. *But for Hazar, kohat, nca pwr, ustb, pinger-rcp cannot find web page, they need to be worked on.* 11/03 /2010: *Zafar will politely remind Imran about checkdata.* Email has been sent to all of them. If no reply will call them. Most of these people are cooperative. Holidays next week (Eids 2) so may be a delay.
3. UPesh problem: Seehttp://pinger.seecs.edu.pk/checkdata/and "try to get data" for UPesh. UPesh is gathering data but there is "0" at the end of each entry which means that it didn't receive anything back. It can only ping itself. It was installed very differently, they have a private subnet/IP address, this may be not be cost effective to make it work. Problem noted 11/3/2010. We will drop UPESH.
4. Dr. Anjum is verifying that table.pl at SEECS has all the known Pakistani monitors. Compare the RTTs September with November data things look a lot better for RTT. Improvements are still possible. Also look at the losses for September and November again there are improvements. This is probably better studied with pingtable.pl time series and the smokeping plots. If something has been recommended by our measurements and that has happened and made things better that is **very important for the case study.**
   a. UET, UOB, LSE, COMSATS do not have the full set of Pakistani beacons. See matrix. The Pakistani monitoring nodes are supposed to get the beacon list from SEECS. – Anjum said he has a student who can fix but need password so they can fix the nodes so they get the list from the SEECS server. They are fetching their beacons from SLAC. *Anjum is requesting admins to fix. Working on it, but response from admins is not good.*
5. RTTs to vle.iiu.edu.pk (AKA PK.IIU.EDU.N2) from the Pakistani monitors (apart from pinger.pern.edu.pk where it is < 1ms) was over ~40ms. The route between from monitoring hosts in Islamabad appeared to go via Nayatel to Karachi and back. Amber, Saada and Fahad are investigating. 10/11/2010 it looks a lot better, the host to ping was changed.
6. pinger-itc.pu.edu.pk has the wrong name internally to PingER2 config file - Zafar, no response to email. Zafar or Imam will call them up.

Progress on ICFA Report 2011 - Zafar

Integrate into the report. Need to save all the spreadsheets in http://www.slac.stanford.edu/xorg/icfa/icfa-net-paper-jan11/slaconly (AKA /afs/slac/www/xorg /icfa/icfa-net-paper-jan11/slaconly/) - *Zafar please make it so.*

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)

Zafar has explained to Sadia and Amber the nature of work. They are currently working on HEC reports. Deadline for Sep-Oct (bi-monthly) report is November 20th. That report will be helpful for writing down Pakistani case study. Meanwhile I will resume work on ICFA report.

How is progress on the HEC report?

Sadia and Amber are working on the Peshawar data. There is no data from AUP to Comsats in the table.pl, yet there is data in pingtable.pl*. *

Zafar was involved with BIT-7 convocation. So will not start on ICFA report until Monday. He will send an update on the ICFA report in a few days. It would be useful to see the HEC preliminary results.

PerfSONAR

Zafar met with Arshad, he is pleased *but wants to have more information presented to students so can encourage them to come to SLAC. Also any new ideas to bring this to nation-wide attention will also be appreciated.*

Zafar met with networking groups at SEECS to tell them what is needed (hardware, bandwidth & software) to install perfSONAR. Need to understand how not to choke the network. Can they use QoS, separate link, only run bwctl when everyone is in bed, or turn off bwctl. They have a separate link so this should be OK.

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.
2. Zafar - deploy PerfSONAR nodes at SEECS. Second step is to find whether the same can be done at HEC on PERN's network.

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. Extend the PingER map (also use for Pakistani to Pakistani subset map for the case study)
   a. This adds ping, traceroute, access to database etc.
   b. The advantage compared to other traceroute maps is that the laundering keeps only good servers.
   c. *Faisal will work on this*
3. Get the MatLab licsense at SEECS and put up a CGB server using it. Dr. Anjum talked to Dr. Arshad for license. Getting a license can be time consuming and might not work out the way we want it to. Our requirements are different and there are compatibility issues as well. Zafar has 3 graduate (MS) students, out of which 1 or 2 can work on re-implementing CBG in Java. The advantages of doing this are:
   a. All of our geolocation techniques are in Java and since there is no sort of a front-end back-end abstraction layer, best solution is to go with re-implementation.
   b. Since all of geolocation code is a single project, integrating CBG as a separate class will be better than trying to create a platform where CBG can talk to the rest of the infrastructure. This way in case of failure we will have just one point to deal with, instead of two. We won't be required to setup extra logging on the second machine running MatLab.
   c. Neither will there be communication overhead due to over-the-internet communication and nor will there be cross-platform issues.

Future

Zafar invite: getting signature of ALD. Budget and form filled out. Letter from has been issued and will be sent to Les. Les needs a CV from Zafar.

Two new students to visit SLAC: Amber, Sadia. They will be funded mainly from HEC. Arshad has met with them. We want them to overlap with Faisal and Zafar. They want to start early due to funding constraint, i.e start well before June. Aim for Jan Feb 2011.

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 Al*i. 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.

AOB

Future meeting time - Les

This time (8pm Wednesday 24th November, 9am Pak time) works for Les and Zafar and Anjum. *Anjum will bring in Dr Adnan.*