20101014 - SLAC SEECS Meeting

Agenda for SEECS/SLAC meeting October 7th 2010.

Pakistani case study - Fahad, Anjum

Zafar has offered to take the case study over.

- 1. [Done by Zafar] Anjum sent a list of Pakistani nodes and requested they get entered into the PingER NODEDETAILS database and the TULIP database. Did this happen Zafar
- 2. ncp, aup, nwfpuet, uettaxila, uob are down for several days: see http://www-iepm.slac.stanford.edu/monitoring/checkdata/). Who is responsible for keeping these nodes running?
- 3. UET, UOB, LSE, COMSATS do not have 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.
- 4. There appears to be an anomaly in the RTTs to vle.iiu.edu.pk from the Pakistani monitors it is over 200ms while from SLAC it is 67ms. I do not think this host is in Pakistan. Someone should check the traceroutes and fix up the database.
- 5. Kashif Sataar of SEECS is managing the hosts and contacts host contacts in case of problems.
- 6. [Pending by Dr. Anjum] Problem with UPESH node, it is not pinging, a ping with custom target also doesn't work. Traceroute works. Moreover the node is pingable from SLAC which dismisses the possibility of pings being blocked.

PerfSONAR

- 1. Can we install perfSONAR services on host in PERN network. Faisal is learning perfSONAR so at a later date this may be an interesting project.
- 2. Faisal is working with Yee. Progress Faisal
 - [Done by Faisal] Yee's implementation of Visualization for perfSONAR services is written in GooglemapsV2, which is deprecated. We
 are currently porting it to V3.

TULIP

- 1. [Solved by Les & Zafar] Bug found in laundering in reflector.pl. It had to do with wget not being passed the URL correctly. All it needed was enclosing the URL with inverted commas. This probably happened because the OS was updated. We believe it is working OK.
- 2. [Done by Zafar] Zafar will look at failing hosts in PingER and perfSONAR to see if they are being called correctly.
 - a. There were two nodes inside TULIP database: www-wanmon.slac.stanford.edu (the correct one) and pinger.slac.stanford.edu (wrong one). I have deleted the wrong one and the correct one is already shown as active on the map.
 - b. Host at Chicago (planetlab3.cs.uchicago.edu) had a wrong IP address.
 - c. San Diego (users.sdsc.edu) had a non-matching IP address and hostname (was multivac.sdsc.edu instead of users.sdsc.edu).
 - d. CERN (pinger.cern.ch) had a non-matching IP address.
 - e. Comsats (pinger.comsats.edu.pk) had a non-matching IP address.
 - f. UPesh node (upesh.edu.pk) has ping response problem (read above under Pakistani case study).
- 3. Big problem with integrated version of Apollonius and Tri-Lateration not working in TULIP Live Faisal
- 4. [Pending by Zafar] Zafar is still trying to get license for MatLab so we can make CBG be a service. Communicating with MathWorks. Tried the download but it failed. Sent MathWorks an email, they replied but I couldn't see it today. Will get back to this asap.

TULIP GUI - Faisal

- 1. Live GUI:
 - a. Needs refactorization.
 - b. [Pending Faisal] Adding other geolocation estimates to GeoIPTools (GeoTools, IPLocationTools, whois, shortest ping ...) to come. Some things are ready to be installed when the trilateration & apollonius work.
- 2. [Pending Faisal/Zafar] TULIP map when one clicks on a baloon:
 - a. Instead of labeling aPingER etc, label as active PingER, PlanetLab, PerfSONAR.
 - b. Ping me feature is missing from PerfSONAR and some other nodes.
 - c. Change URL to pingURL from database for nodes that have tracerouteURLs.
 - d. Make URL clickable.

Possible project

No progress

- 1. Add traceroute & ping to my host and to selected host Faisal
 - Build on TULIP map
- 2. The advantage compared to other traceroute maps is that the laundering keeps only good servers.
- 3. This awaits Anjum's return.
- 4. Imran Bajwa is an undergraduate student in his senior year. He may be interested.

Future - Les

Funded for \$100K for each of 2 years for Yee and me to work on making perfSONAR measurements more easily accessible, easily navigable etc, plus access to end site data. Faisal is now involved with this research. Umar has yet to talk at length with Anjum.

Les has talked to HR we seem good to go on Zafar's return depending on SEECS contribution.

Paper - Umar, Fida, Zafar

- 1. We still don't believe in TULIP trilateration results. We will give upon it.
- 2. [Pending Umar] SVN for paper, Umar has set it up and it is working, Umar will send out the accounts.
- 3. Where do we go from here, do we await INFOCOM comments?
 - Do we rewrite with a new story, rewrite the introduction explaining what we are trying to sell, focus on comparative analysis, global extension, dependence on landmarks, tool. Put together a bulleted points of what the story line is. Umar, Fida, Zafar, Les will put together story line bullets. For the next meeting in a week. We need to identify where it is being submitted to determine what to focus on. Two possible venues are PAM (paper Oct 9, abstract Oct 2nd) and IMC-- Umar is looking at. Struggling whether to focus on Apollonius or comparative analysis. He is comfortable with Zafar's storyline. Fida will put together a paragraph on financial side for the motivation.
- 4. [Pending Fida and Umar] Do we go with comparative analysis, if we do then do we include Apollonius, if we do how we include it. Need to identify where we are useful. Mobility scenarios: mobility, routers, database does not have up to date info, e.g. mobile nodes moving country to country, do well if target is close to a landmark.
- 5. Need to identity other papers to quote how the 5 parameters we use affect the result,
 - · How much time can Umar spend on it?
 - Fall semester starts Monday so Umar cannot drive.
 - Need a person to drive the paper, in particular the first few pages with the storyline.
 - Ideally the person to re-write is Fida, he wants to do it, but with 3 courses and assignments but cannot be the driving force. Can Zafar
 take the reins. Zafar is volunteering to re-write the story line. Made a few changes to the Introduction part last week. Added a few lines
 about infrastructure. Feedback and guidelines required. Fida and Zafar are prepared to respond to comments/questions in 24-48 hours.
 - 1st step put together a story line in Google wave.

Tentative roadmap:

- 1. We are focusing on extending Geolocation coverage with relevance to the financial aspect of Geolocation. We claim that this is going to be the best service of coming year. We need some facts and figures in order to justify this claim (Action by Fida).
- Possible question: Why are we using IP geolocation to extend geolocation coverage in new regions? Why not DB based approach? We know that DB based geolocation has some inherent problems. But we need some real world examples with references to nail down this issue. (Action by Zafar & Co).
- 3. We claim that four infrastructural attributes affect the performance of Geolocation techniques. We need to find some published research material that have emphasized these parameters together or individually. So that nobody can argue that why are you using these parameters and why not other parameters.

Future meeting time - Les

9pm Thursday 21st October will be the next formal meeting.