

20101007 - SLAC SEECS meeting

Agenda for SEECS/SLAC meeting October 7th 2010.

Pakistani case study – Fahad, Anjum

Is anything happening on this?

1. nwfpuet, uettaxila, uob are down for several days: see <http://www-iepm.slac.stanford.edu/monitoring/checkdata/>
2. 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.
3. We may be getting additional nodes. We need to get the information so we can enter into the TULIP and PingER databases. Zafar will update our databases. There will be 21 monitors in Pakistan.
4. There appears to be an anomaly in the [RTTs to vle.iu.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.

pingtable.pl - Les, Fahad

1. Fahad has integrated the Smokeping graphs into the MAGGIE version. they work well. Pingtable.pl can be found at: <http://pinger.seecs.nust.edu.pk/cgi-bin/pingtable.pl>

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.
 - Yee's implementation of Visualization for perfSONAR services is written in GooglemapsV2, which is deprecated. We are currently porting it to V3.
3. can PERN install netflow monitoring. Netflow would need a netflow connector to be installed at the PERN node. This would be good to look at utilization of the backbone. This is a fairly large effort.

table.pl - Zafar

1. table.pl modified to conform to perl warnings and tainting mode. New version has been installed at SLAC and works.
2. Deployed at SEECS. It is available at <http://pinger.seecs.nust.edu.pk/cgi-bin/table.pl>

TULIP

1. What is the state of laundering, there was a statement that there were no landmarks. It appears that PingER and perfSONAR are OK but PlanetLabs has no landmarks.
2. **[Pending - Zafar]** Should add ability (to reflector.cgi) to ignore landmarks which are within a specified "short" distance of one that has already been used. Mark such landmarks as "dups". Work on this is subject to access to reflector.
3. Big problem with integrated version of Apollonius and Tri-Lateration not working in TULIP Live - Faisal
 - a. Integrated Code doesn't work with Reflector at SLAC
 - b. Trilateration doesn't give correct estimates in integrated code. We are giving up on Trilateration and will focus on CBG via MatLab server.

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.

Possible project

No progress

1. Add traceroute & ping to my host and to selected host
 - 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.**

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 identify 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).
2. 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 - 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. We would like to free up some of SEECs resources (Faisal or Zafar) to get involved with this research. Umar has yet to talk at length with Anjum.

1. Les is working with SLAC HR on formal way of categorizing interns.

Future meeting time - Les

8pm Thursday 14th October will be the next formal meeting.