Correlator Implementation and Control meeting, December 6 2012, 11.00 local time, Arpad's room

present Jonathan, Salvatore, Jintao, Harro, Arpad

Deliverable document for UB^2 was briefly discussed, how big it should be. Jonathan will use Astron template as Eric suggested. Arpad said it would help to write things down *not* supposing everybody knows what he is talking about. Jonathan will send 1st as soon as to Arpad for comments.

action items
Jonathan: test fix of Erlang performance problems reading UDP packets (on hold)
Jonathan + Salvatore: figure out how to make packet spacing adjustable (on hold)
Harro: create more N11L4 VDIF data
#done remove
Harro: talk to Ger about other plotting packages besides Glish
#done remove. Basically everybody writes their own programmes with Python. Arpad and Harro discussed with Roelof Anne the possibility to have RA re-write the standards plot package in Python (Glish is a layer on top of C++, could be replaced by Python)
Harro: update Erlang on unictl
#done remove
Des: investigate Suse and Erlang, how to keep Erlang synched across platforms
#unknown
Harro: ask Paul about 10G on AriBox
#done remove
Harro: ask Paul if Aribox is available for sending UB data
#done remove.
all: decide on topic and scope of documents to provide for design review
#done remove. Decision is to use documents on timing and delay, Jonathan to change bits and pieces in original design document. All of this should be done by half January, so that review can take place before end of January.

update:

Jonathan: packet loss disappeared now that Aribox is hooked up. Sometimes a lack of synchronisation between FN and BN is seen, about 5% of time. Problem with the aligning of bytes. Workaround is made, config phase is followed by alignment phase of 2 seconds, which gives the system ample time to synch. Same sort of solution was applied at Astron.

Problem is this cannot be simulated, very hard to find. Salvatore talked to de Booijs, who agreed that some time is needed, although he thinks the solution should be different, look at eyepattern, buy software tool. Daniel did look at eyepattern, did not find it particularly useful. So, this is a pragmatic fix. Problem took (too) many weeks to find, especially considering the behavious had been noted at Astron. Something along the lines of listing this kind of locally resolved bugs in the issue tracker? should really be in the document on coding standards. By tomorrow the bug fix should be in. Jonathan also found issue with non-zero delay values, strangely enough the problem always is with station 1. Investigating now. Something with addressing.

Des is working from home, is not allowed to drive. It was seen that he has been doing tests last week. Later answered via email that he is sending real data into correlator from unictl, nothing coming out however.

Harro: updated VDIF sender, more addresses, more senders. Step towards central control of data senders. Will of course document all of this.

Jintao will document his work on pulsar gating, make sure all info is there. Continuation of his work will take some time, only after basic correlator works.