

ZWURM, 09-03-2020 14:00 (WURM through Zoom because of #COVID19 house quarantine)

Present Paul, Ilse, Aard, eBob, Des, Mark, Harro

Paul: The m-node problem was traced to the spanning-tree protocol. We don't need it on our network but was enabled. Now disabled, get full dual-40 Gbps MLAG performance. Conducted all-to-all 2 Gbps local: no packet loss. Some more machines upgraded to 18.04 (FlexBuff, SFXC nodes), head+tail remain until last. Will be working from home Thu, SKA WhiteRabbit is now Zoomified (#COVID19). The EFTF paper was accepted but the conference cancelled (ESA strict #COVID19 regulations). The ssh issue seems to have resolved itself - for unknown reasons. gitea login problems (BenitoM, IlseB) solved; traced back to LDAP servers out of sync + gitea debugging. (later in-person phone call: ssh issue not linked to gitea/LDAP issues).

Ilse: Has a CWL and CASA6 VM installed on own machine now for experimenting with. The EHT summer meeting on Canaria was moved, EAS may be affected by #COVID19 (no communication yet but abstract access delayed against previous statement. Efforts still in place to have the Chinese summer student come. Working through the CWL tutorial to find out what it is good for. Preparing the November CASA VLBI workshop's first announcement, should go out between now and one week. Have a notebook with CASA6 to play with.

Aard: 2 x 2 Gbps tests did not work with the current simulator (erroneous VDIF headers by jive5ab). Despite a typo in a vex channel's data stream assignment, the correlation still worked. (Mark: for simple enough VDIF the correlator does not rigorously check thread/channel IDs, possibly should be looked at). Found a bug: two data streams but cross pols in different data streams does not work. Dr Bob reported a problem with a station showing weights 0.5, it recorded 1 Gbps i.s.o. 2 Gbps. SFXC should handle this easily and correct but was broken in the last version. The new HTML plot page generator was used for the FTP fringe tests. The SNR with missing data is wrong. BenitoM mentions that it is time to redesign the tool and/or the requirements [ACTION: put on TechOps/Ops/Support mtng agenda]. Allocated more CPU cores for scripted NME correlation - > speed up of ~3x. An issue with coherent dedispersion + RFI flagging is that RFI is at DM0 and signal at DMx. So after DM correction, RFI now negative DM -> many tools cannot handle this. Fixed by reapplying DM correction before writing out. ZsoltP announced that because of #COVID19 he now has time to (finally) check the primary beam correction calibration tables. After vetting can be announced for production, hopefully.

eBob: VEX2/4 Gbps now works good enough for current use cases. Working on ANTAB editor to support handling IDI-FITS files.

Des: helped eBob as much as possible. Wrote RadioNet RINGS deliverables. Working on Huib's "paper" database, basing it on sqlite and has hours of fun name matching. There's been NRAO overleg and Des asked if BenitoM can be allowed to do the verification of

the fringe fitting results.

Mark: Test code + data for testing the fix of polswap-in-case-of-baselineswap now in hands of NRAO, waiting for OK. Now has a DACHS "q.rd" which parses and generates a queryable table. Not quite the table(s) we want yet but closely. For VLBI FoV computation contacted Emil Lenc for copy of the wide-field code. Can now ask: given x% tolerable loss, what is FoV. Footprint of VLBI is circular in stead of rectangular (CCD-biased optical observers designing a standard), use DACHS polygon to approximate. Will implement VO SIAP and use DataLink to link to all IDI-FITS files. The EHT error/calibration working group asked for comments on the uv coordinate computation, problems now typically more MichaelJ's than CASA's. ESCAPE/WP3/FG1 telecon, suggested standardized meta-data about package (e.g. input/output format(s) supported) be present. Did some more streamlining on automatic tests; tests #FAILED because a cluster node failed - there were references to non-testcluster machines (now removed).