

WURM, 24-02-2020 14:00

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

Aard: At ALMA2030 conference WalterB claims 10 x 8 Gbps correlation speed on their 480-node cluster, questionable according to Aard. SFXC on 1100-node cluster claims 12 x 4 Gbps "doable". Checked Ar fringe test data from RDBE+Mark6: no fringes at all. 32 MHz equivalent bandwidth sampled but looks like 16 MHz? (Under investigation by Ar, Ef staff, NRAO, Harro). The VEX2 data streams mod revealed that SFXC uses a JSON implementation which secretly sorts keys. Tried Kubernetes to run Jupyterhub on eee-dev, lots of errors, kernel modules missing.

Paul: Busy with EFTF presentation and LOC business, WhiteRabbit demo @Jodrell. There was a broken MLAG (transceiver). Looks like the cluster m-nodes problem is soft(firm)ware issue. After Cumulus upgrade all broken. Ticket at vendor opened; cannot go back to firmware where everything works. Have to continue with reduced throughput. ccs-disp's O/S upgraded (request by Berth to upgrade window flicker). e-VLBI traffic into LOFAR did not repeat during production e-VLBI run. WSRT maser fixed+locked again, fringes @L-band. However, the WhiteRabbit link is down. Paul was interviewed by SURF for their newsletter about "our" new 100 Gbps link. A gitea instance was set up and opened for testing. y2020 means it's y % 5 == 0 => certificate renewal. Note: firefox allows only 13 month max life time?. Three options: run own CA, buy certificate, use letsencrypt (=3 month free). Paul now has access to ASTRON/SURF dashboard, no LAG stats but not vital. Since Klaas now has 00-00-0000 as sickleave end date may take a while before more progress on the network migration.

Mark: Analysed archive DB and found it contains not a lot of relevant metadata - almost all can be re-extracted from the FITS files. Propose to not reuse the archive DB, other than to retain linking experiment => FITS files. Working on FITS -> ObsCore extractor (currently cvs format), mandatory columns already done, and DACHS resource descriptor ("q.rd"), converting csv -> postgresql. Running VM with name "dachs.jive.nl" overwrites ASTRON DNS entry for dachs.astron.nl (...). None of the "q.rd" examples seem to match our use case so expect some work there. There was a CASA/VLBI telecon: worrying news: CASAng new infrastructure (table system replacement) being pushed, implying less access to Socorro CASA people. Other CASA changes also afoot, impacting our VLBI tools - may mean that our current effort has to be (partly) redone (ouch). Release date of the CASA with fringe-fitters in > april. The fix for missing pol swap if baseline swap needs testcode demonstrating the fix actually works. Leah Morabito used export UVFITS which gives some ASTRON flavoured UVFITS, trying to handle this "something goes wrong". The CASA set of requirements for VLBI document should be published or distributed. Spent time in meetings with the NAOJ visitors.

eBob: ANTAB editor fix for "opacity corrected" values (for Italian

station(s)?). During e-VLBI every 15 min data send stops, restart fixes this. Is this a FiLa10G problem? 4 Gbps + VEX2 runjob seems to work (db2vex + vex2db consistent), routing to correlator seems OK, no stresstest done yet. The ssh problem only occurs at one specific point, after adding verbosity occurred only once. e-Transfer of 0z data with non-standard names required smart renaming. pySCHED, when encountering user input error does not always produce clear error messages (will be fixed).

Ilse: Jupyter notebook produced useful data! protms crashed kernel. Token handling between notebook and kernel needs improvement; will be weeks before Aard's platform will be operational. Scan intent handling, propagating into MS, would be extremely useful for data reduction pipeline. Next: use real, recent NME data. Worked on JUMPING JIVE reporting. The BHC conference is now moved to 25/26 mMay. The Chinese summerstudent will not come (negative travel advice on account of COVID#19) – runners up?

Harro: performed last of the Mark6 disk speed writing tests, showing the disk subsystem is really not the limit. j2ms2 and tConvert experimental Docker and Singularity containers.