

WURM, 04-12-2023 13:00 WURM Marjolein's office

Present Bob, Des, Aard, Wybren, Mark, Marjolein

Plenary part: e-VLBI tomorrow!

Wybren: sFlow tried at last e-VLBI: not all streams showed up; those going through spine switch were missing; root cause unknown, maybe old Cumulus firmware? Suspect that fixing this will take lot of time, making choice of sFlow not obvious. All blade systems now on Deb12, upgrading fb's in order 0, 1, 10, 11 but fb[01] won't netboot? Which was lucky b/c sfxc input node on Deb12 has issue (Aard will elaborate). [BobE: status trantor/fb7?] all good, after HDD fw upgrade no issues yet but would like to pass the two-month-in-production-without problem mark before shipping to Wb. Arranged certificates for Northstar/nginx. Had lot of broken HDDs in the fb's; fb18 Zabbix complains (at some level) about running out of inodes but seems to not be a real issue. sfxc-g2 disk(s) broken; will upgrade to Deb12 after rebuilding the raid.

Mark: many EHTelecons; MichaelJ/Sebastien[A-Z] re-ask "fringe fit w/ differing channels per spectral window?". CASA VLBI mtng: now have Google chat channel (started at F2F meeting, now continued). TammoJ and DirkP ask casacore note on MS extensions. OSSR mtng. Was invited to give a talk on Virtual Observatory and e.g. radio in the VO at ORP-PILOT JA2.2 monthly meeting. RADIOBLOCKS WP4: was requested to help w/ deliverable documents; in D4.2 will write a section on data transport in the VLBI correlator case. Wrapping up EOPs need to be done, target is before Christmas.

Des: HOPS fringe-fit delay-rate search reply forthcoming. Working on MichaelJ's fringe-fit request; biggest prob there seems to be that the solve blocks do not have links to the original meta data (e.g. whence the spectral channels came), will try to find via cal table that is requested to write into; the problem seems to be mostly about bookkeeping. Finalising feedback tool docs for TOG. Request to make verlofoverview accessible w/o login if inside the building; looking into lighttpd options there.

Bob: ran DBBC3 tests w/ Medicina: got 4x 2 Gbps streams using Mc's fb as router: no loss in half an hour, almost no increment in CPU load; found DBBC3 interaction through dbbc\_proxy might be broken, complicating matters a bit at a low level. Working on TOG talk. ORP-PILOT monthly meeting: LCO has new version of TOM Toolkit containing the edit where an facility has access to the user info for e.g. token storage - looking good. Educating self on Keycloak. RossB reported pySCHED prob: turned out to be an error in string formatting of cable-wrap handling: fixed + will release a new version. [Discussion: what to do with multi-facility CfP and Northstar? Don't want to spend unnecessary amount of time; Marjo to check back with RobB about MVP requirements]

Aard: Berth reports 4 Gbps correlation is slooooooow?! Found root cause: on fb w/ Deb12 not Py2 and (fast) dechanneliser is Py2 script

generating the code, but b/c no Py2 present, the script #FAILs and code uses fallback built-in slow dechanneliser. Fortunately only two fb's affected (upgraded to Deb12); after tomorrow's e-VLBI change script to be Py3 compatible before upgrade to Deb12 (in fact: there are other scripts that still need change to Py3). GPU correlator: one integration, one second; updating code to do > 1 integration and other t\_int than 1s; found that 64-bit int is emulated on GPU (important for time keeping/sample counting): apparently large overhead on 64-bit int arith (20 calls iso 1) [Mark: discuss with JohnR; CI/CD in project => need data on DAS-6 cluster was no prob (~10 GB); put code on ASTRON gitlab but have not enough permissions to start project. [Mark: related, in WP4 meeting Koreans were present; likely have own GraceHopper system and said they have a project plan for a five-station SKA-VLBI correlator, work to do for the SKA VLBI WG?]