

WURM, 11-12-2023 13:00 WURM Marjolein's office

Present Bob, Aard, Wybren, Paul, Marjolein

Bob: problems w/ recorded e-VLBI last week, mem usage of jive5ab ~8 GB / instance, 1 minute at current data rate, still (lots) of packet loss? So far unable to reproduce except mem usage but not crash ("std::bad\_alloc") or packet loss level; tried limiting zfs arc cache to 4 GB seems to prevent crashing. Will be at TOG / Toruń this week. Put on todo-list: Northstar for ORP-PILOT multi-facility CFP.

Aard: updated de-channeliser-code-generator to by Py2/Py3 compatible; script assumes that pkg "python=python3" is installed; still not (very) fast ~ 2 Gbps / station [Marjo: previously reported was ~3.5 Gbps / station?] Lots of traffic over one interface of the bond from fb18 to sfxc-[mno]? [Paul: can check other bond-hashing mechanisms]. FranzK, JackR at it again: correlating mixed-bw and no Py2 = veeeerrry sloooow: sent Py2/Py3 compat tooling and also some updates. Integer delay correction on GPU now working for multiple integrations (bookkeeping); next step is to write out data in sfxc format to be able to inspect output in detail. Debug button seems to have been broken: push = crash, yikes.

Wybren: helping debugging recorded e-VLBI issues. Replaced several disks; investigate fb0 UEFI boot? On todo-list: proposal tool for ORP-PILOT, what's needed? [Bob: (VM + certificate + nginx)]. Want to look into zfs write cache configuration.

Paul: Aard's bonding problem: now is layer 2 (MAC address) + XOR + modulo = maybe too static; will look into layer 3 options. Whilst in US of A: e-transfer from NRAO to JIVE - found out that next hop is already Internet2, i.e. research network, i.e. SURF would not charge, i.e. could be option; NRAO experimenting w/ clustered file system and after that can try e-shipping [Q Bob: what is the expected data rate?] 10 Gbps link. Had telecon w/ Infleqtion about "Tiqker" product (atomic clock 3U high, less temp sensitive), uses passive H-maser whilst VLBI uses active H-maser; previous ADEV report measured against passive maser, now compared two Tiqkers against each other: show very little improv; ~ order of mag worse than active H-maser but price still 2/3 of active H-maser.