WURM, 25-04-2022 13:00 (First in-person WURM in 113 weeks, used empty supp.sci. office)

Present Bob, Des, Ilse, Aard, Mark, Paul, Marjolein

Plenary discussion: Marjolein raises the issues of both hybrid ZWURMs and the in-person WURM:

- ZWURM: if > 1 people in the same room use own equipment to dial into Zoom: that doesn't work; if roommate is NOT in a meeting it's also not optimal; all on-site participants in the same room using the MeetingOWL also doesn't work too well; participants w/ desktops cannot move to an empty office (if any). [MarkK: how about those WfH just not join?] [MarjoV: the past two years have proven that it is perfectly possible to arrange hybrid meetings, barriers to join from anywhere have been removed. They're here to stay so we should find a workable/acceptable solution, accepting the fact that it may not be optimal].
- Marjo's room way too small to put all of us in [MarjoV: actually, the problem may get worse, there is a much better than average probability that our group will expand by one]. Possible options: book Oort room? Can't do that on a regular basis and not knowing how many participants will be on-site and the Oort room booked for conf's and classes may limit usefulness. Maybe if conflicted participants gather in Marjolein's room (group should not be > 3), if everyone in a room is joining, could share single audio/video. This still doesn't fix the all-on-site capacity issues. Action Marjolein to bring up hybrid issues; may be also issue outside our group: no rooms/laptops to join any hybrid conf from on-site w/o bothering anyone and there's no policy on "empty offices are fair game to hijack for online meetings".

Ilse: NOVA ISC, git course and EHT welcome meeting took significant time; last week *many* meetings w/ too short breaks betweem them to get organized to work on e.g. the CASA/VLBI paper. Will try this week.

Des: PapersDB for Zsolt: working on this, but JorgeR seems to have asked staff personally this year to provide this info. [MarjoV: is recurring problem and automated solution still preferred, so please keep at it, now it's still in cache]; uses ORCIDs for JIVE staff that have'm. DOI wrap-up: multi-epoch individual DOIs + overarching DOI already implemented so CAN be supported, but doesn't have to; need to work on landing page to handle both flavours. Need to pressure MichaelJ for validation since code freeze for nxt CASA release coming up (early May). "controlDBBC" needs some work, will try to complete this week, before e-VLBI on May 10/11.

Paul: FiberStore optics: got answer that "one shipment checked and in repair", w/o being able to tell WHICH one (one shipment: 30 optics, the other 3). SURF reported CRC errors on one of the 100 Gbps links (not necessarily related to errors during e-VLBI); replace SmartOptics module (the more expensive brand!): errors gone. SA/Hartebeesthoek e-shipping problem: return traffic pkt loss/UDT timeout: installed patched jive5ab to fix UDT timeout bug (100min in

stead of ~one minute), checking NRENs, all OK until leaving TENET (SA NREN); JonQ found rat-gnawed fiber. Cooling machine replacement preparation welding work: equipment power down+up; ASTRON ICT room very noise airflow tmp sol'n 2x three industrial strength fans in ICT room doors; no probs found except Jupyterhub on/off button didn't respond, fixed by physically disconnecting+reconnecting power. In downtime replaced DHCP server, after power-up no issues. SMTP w/ OAuth2 now works, let MarcL know if you need it. More machines added to automatic patching, will see occasional reboot. Installed svn2cvs for Bionic on code.jive.eu (which has newer O/S) - the tool doesn't exist beyond Bionic, so please migrate repositories while you can. Got word that "fb90" will arrive next week.

Mark: e-VLBI w/ MPC requested for May 10/11, need to test in proper simulated e-VLBI w/ BobE. Phasecal support: awaiting VLBA feedback; in meantime updated code to handle joining MeasurementSets to join PCAL too; tested on joining two random data sets pulled from new VLBA archive (actually: NRAO archive) - now get mail + user interface change if data has been staged and is ready for download. [DesS: PCAL in MeasurementSet?] Yes. [Would be good to use existing script(s)]. CASA-VLBI mtng: per-scan interpolation still w/ GeorgeM; issue w/ reporting if sol'n covers data: existing code weak, hopefully makes it into CASA6.5. EOPs: no suitable solution yet, but vlcoffee discussion sparked possible different approach. ngEHT DM wg reactivated, review is June 9/10, would be good to have memos on DM ready by then [IlsevB: but science wg report(s) not yet avail?] yes that may be an issue. This week: IVOA interop online, three sessions/day for covering timezones, have short presentation in radio session about EVN VLBI ObsTAP service.

BobE: SA/Hartebeesthoek e-shipping issues: provided JonQ w/ patch for UDT timeout fix, much better xfer speed (although still not optimal). BertH: LTO[34] => LTO8: tape reading probs, not sure if drive or tape; asks if we actually verify result of writing? (No we don't). Software changed so that it does read back after write and verify. Huge impact on performance and tape + drive wear. [PaulB/MarjoV: maybe change to sample check instead?] Yes, can do. Robledo data avail for correlation, no log file: must regenerate from DirList; corr crash on Ro: "crap" VDIF? No, looks legit, sent to AardK for further diagnosis. Reviewing/testing "runjob" changes; tested udpsnor weights, most are "1", some report loss of 0.01%, looks ok (udpsnor may even look slightly better) [MarjoV: code is slightly more efficient so who knows]. To do on SCHED: setups in file, Sun warnings; as discussed.

Aard: ANOTHER critical Java CVE (trivial to bypass certificate checks!!!), checked our Keycloak (which is in Java), uses old enough JDK (OpenJDK11 or so), not vulnerable. Working on SFXC paper; BenitoM: FRB w/ high SNR, but no detection? Detected in cross pols (linearly polarized source) – b/c delay between both pols see phase wrapping a lot; may require bandpass plot for only subset of channels w/ detection: problem likely not in SFXC. Jupyterhub: do not encrypt user data yet but MariaDB can: in two ways, neither happy about: keyfile in local file system or in the cloud (=need to

pay!). File on disk requires encrypted key and cert, how to do that? [PaulB: how about encrypted volume which asks pass at boot?] That might work, discuss offline.