

WURM 18 May 2026 WURMng+Quick Strategy Oort-room

According to the schedule this should be a strategy WURM, but given absence and power outage last week probably better to update and quick-review of strategy items.

Plenary:

Long power outage since Wed 13 May 2026 22:40 CEST until Sat 16 May 2026 ~afternoon (CEST) before full power restored to the building. Shutdowns were done Wed nite/ Thu (very) early morning and worked nicely.

Issues found:

- \* some machines still auto-started up when power was restored
  - will be fixed
- \* Flask didn't auto-start after reboot (fixed)
- \* some certs expired in Feb already (on the KVM cluster):
  - regenerated and will add to cert-check
- \* DHCP: now on Deb13 but old Deb12 still started up
  - thinking of migrating DHCP to switches
- \* Two (2) fb disks broken
- \* Long outage → static webpage fallback?
  - check w/ ASTRON ICT

Des: Calibration data in data structures: schema can only be checked if information is in. Last Thursday mtng w/ NRAO, SKA, LOFAR on MSv4, now member of (closed) MSv4 Slack channel. Got someone to fix Hamaker notes protection: now accessible on Confluence. Complaint: printers only allow single sided print under Linux?! Introduced in large shuffle ~few months ago, reported but not fixed yet.

Paul: More Linux CVEs → so far LPEs only, dreading remote exploit. [Mark: focus on perimeter security, open only ports that really need to be open]

Wybren: busy patching & rebooting; fixed framboos (RPI driving the BFMOTW), now on Ansible → easy re-install when needed. Starting upgrade to modern OS on important server. Flask + system updates.

Bob: PySCHED setups from BobC into catalogs; helped BobC with setting up conda. T6 requested max six changes/hr (Jb "average", T6 wants absolute): discussing w/ T6 how strict this really needs to be. POLARIS: Wybren

configured reverse proxy (now accessible via WiFi); gui for spectral windows removed; created roles + groups on Keycloak (Java  $\Rightarrow$  Web API /RESTful), but maybe not such a good idea: all info in token and tokens have max length, plus: if token not refreshed  $\rightarrow$  no new roles/groups [Discussion: archive and possible other access may need to follow proposal rights, maybe better to put in POLARIS db and add proxy where tools can find access right(s) for authenticated (Keycloak) users, e.g. RESTful API]

Aard: JupHub/Lab lots of security updates. BobC probs w/ sfxc2mk4 (mixed bw phase cal extraction not work); can add option to disable phase cal extraction. Space Array  $\rightarrow$  simulated S/C orbit + real-time constructed orbit (currently:  $\sim$  14m diff), plan: use simulate VDIF w/ simulated orbit, use "measured" to correlate. Model: Dima Py2 vsn (buggy, uses old/ not existing services). Plan to use ZhengMZ VDIFgen to make data. GPU correlator: mixed bw "working version".

Mark: batch jobs work (waiting for Wybren home dirs on out also). BobC mixed bw sfxc2mk4 pcal: if desired, can be done, but needs work, use manual pcal for now - only VLBA's have it. GPU corr: disk read is bottleneck, but fb21 seems "special" (unpredictable): added benchmarks "how long before data arrives", fb21 takes  $\sim$ 10s even re-running same scan [Wybren: fb21 only one w/ HDDs into stand-by, but should be  $\sim$ 30min before it kicks in]. Validity tracking added all the way through the correlator: invalid data in fft? flag whole fft. Expect no significant performance loss. cuFFTDx kernels are compiled at runtime, which can take several seconds overhead, so built a cache w/ hash over kernel source + params.

Marjolein: over the last few weeks used Windsurf/AI a lot to add many features/fixes to etc/etd, TCP\_KEEPALIVE support, timeout on stalled transfer, tagging log output with per-transfer identification, fixing a race condition when ^C-ing etd ("lambda used thread's stack memory after thread exit"; AI robot found + fixed in  $<$  15 minutes ...), add support for Access Control Lists in etd, add SRT as 'better/more stable UDT'.

Quick-strategy:

#1330 JIVE vs Geodesy

Marjolein: we now have Real VGOS™ data in da house; widely separated wide bands – good testing stuff (data rate, fringe fit, linear pols, ...]

#1333 Make j2ms2 MeasurementSets work in CASA

Marjolein: I updated the ticket; new FLAG\_CATEGORY shape might be better.

# 1340 SWEEPS : no updates?

Now goes through BobC, informed there is currently small storage (test cluster), still needs rolling out on prod cluster.

#1364 EVN Storage Pool Refresh

Marjolein: document with financial impact per partner prepared for last week's CBD. No idea if it was discussed or if anyone takes any action. Unless we get \$MONEYS or Stuff™ this is on hold.

[Marjolein: should we add MSv4 support for local / in-house tooling to strategy?]

Discussion: not a bad time to start thinking about it; correlator might dump zarr and then "j2ms4" could add meta data – sounds doable.

Marjolein: What about jiveplot visualisation?

After discussion: Des, Mark to bring up MSv4 'plotting' in bi-weekly meeting, may want to talk to SAfricans (e.g. state of shadeMS)

Outcome: not high prio right now

AOB:

Wybren: attended SURF Nextcloud training, nice feature is (proper) cross-cloud federated sharing of folders/documents, users log in at own cloud, if so configured access resources in other Nextcloud.