To Do List from Perth Meeting, September 2009

High Priority

- ~~phase cal extraction (nearly done) (Bonn)~~
- ~~DiFX to HOPS converter (HR,JM,RO)~~
- Regression/benchmark testing scripts
- Mk5C/VDIF support (AD,CP)
- ~~VEX review (WB et al.)~~
- ~~MPIFxCORR to alert whether difxmessage is being used (AD)~~
- ~~calcserver running on a 32 bit VM (CR)~~
- Migrating to python3.0 (ensure current compatibility with python2.6) (everyone)
- ~~Commenting in setup.bash about IPP library mess. (AD)~~
- DiFX2fits uv shifting in trunk (JM/AD)

Medium Priority

- ~~DiFX internal buffer monitoring (difxmessage sends about once per second or so) (AD)~~ *done in DiFX2.0 only*
- ~~"Neutered" version of DiFX (runtime? compile time?) that does no processing at the Core (AD)~~ *done in DiFX2.0 only*
- ~~Monitoring at the FxManager of how many subints have arrived from each Core, difxmessage that every integration (AD)~~ *done in DiFX2.0 only*
- Documentation Algorithms
    - ~~SWIN format (channel ordering) (AD)~~ *see http://cira.ivec.org/dokuwiki/doku.php/difx/files, at the bottom*
    - ~~Nchannel+1 issue (AD)~~ *see http://cira.ivec.org/dokuwiki/doku.php/difx/channelisation*
    - parameter optimisation (AD)
    - monitoring, etc - (list of error codes) (AD)
    - setting up native Mark5 access (WB+)
- evlbi
    - reconnection/long term drop-outs (CP)
    - real-time delay/rate adjustment (CP)
- FITS converter
    - ~~Deal with complicated configurations in a more optimal way (WB)~~
- ~~Input file parse errors to be returned only from the master node (AD)~~ *(Done in DiFX2.0 only)*
- Test datasets:
    - Add large (~1 TB) dataset with variety of modes (NRAO)
    - Mirror at several sites. (Bonn, Curtin, NRAO)
- Maintain database of benchmarking results (JM)
- ~~Bug fix: last integrations have less than 100% weight (early core shutdown) (AD)~~ *Fixed in DiFX2.0?*
- Phased array (RS, CR).
- ~~Input file:~~ *Done (in DiFX2.0 only obviously)*
    - ~~Phased array (AD)~~
    - ~~phasecal specifications (AD)~~
- Benchmarking scripts (CP,JM,CZ)
- Auto machine/thread file creation - genmachines (CR)

- ~~Improvements to errormon filtering (HR)~~
- Explore general version of NRAO Monitoring GUI (HR)
- ~~Rationalize setup.bash (remove NRAO specifics) (CP)~~ *Done - ATD*
- visplot (Aquib)
- Investigate sampler stats monitoring (AD/WB/CP)
- subband distribution/parallelisation (with VDIF) (AD/CP)
- Play back from both Mk5 banks in parallel (WB)
- Transition to using band centres instead of band edges (WB)
- Baseband data generator for producing test datasets. (WB)
- Parallelised calc server
- Store polynomial tau(l, m) generalized delay model in FITS (WB,JM)

Low Priority

- Single process multi-threaded non-mpi program for DiFX-specific CPU benchmarking.
- Future proofing via non-prescriptive format (AD)
- K5 format support
- Space VLBI
    - Orbit model
    - Baseline dependent averaging
- eVLBI gui
- Tsys determination
- ~~Compare infiniband and 1G-E performance (HR, CP)~~
- IPP alternatives
- Generic startup scripts (CR)
    - Documentation of startup philosophy
- Shifted FT (moving channel boundary to edge of band) (AD)
- ~~RFI mitigation in correlator (AD)~~

From:
https://www.atnf.csiro.au/vlbi/dokuwiki/ - **ATNF VLBI Wiki**

Permanent link:
https://www.atnf.csiro.au/vlbi/dokuwiki/doku.php/difx/difx-todolist-2009

Last update: **2015/10/21 10:08**