Field System Future Plans

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- **FS Linux 8 Distribution**
  - Currently distribution FSL8 “lenny” is standard, with RAID1
  - FSL9 will be available later this year, based on Debian “squeeze”

- **FS 9.11.0** (spring 2011)
  - Critical Bug Fixes
  - C++ include file changes
  - Remote Operation Interface (Wettzell)

- FS 9.11.1 (summer 2011)
  - ADS 3000+ Support
  - DBBC Support
  - RDBE Support
  - Mark 5C Support
  - Minor bugs fixed

- **FS 9.11.2** (fall 2011)
  - Slow disk warnings
  - RXG file related:
    - New `rxgfile` SNAP command to allow RXG file updates without restart
    - Logging of RXG file identification information for better accountability
    - Two Trec (LCP and RCP) values in RXG files
    - New gnplt
  - New logpl
  - 30 minute periodic “BEOB” procedure in place of “MIDTP”
  - Improved rack=none set-up comments
  - LO_CONFIG command

❖ Longer term items

- Phase-cal extraction support for Mark IV decoders
- CHEKR monitoring of Mark5
- Update Mark 5 “Remaining Capacity” display while recording
- Convert from fort77/f2c to gfortran
  - Will allow use of source level debugger
  - Must maintain compatibility with f2c for older distributions
- Documentation Update, move to Wiki web pages
- Improve prediction disk pack change times
- Band switching
  - Most of the items for this are complete with the improved Tsys features
  - Band configuration procedures added to set-up DRUDG. The DRUDG control file will be expanded to include a table of station defined procedures that can be used to set-up local station equipment for a band. These procedures can also be used manually by the operator as needed. Note that use of the existing SAVE_FILE command can be used in these procedures and INITI to recover the receiver set-up between FS terminations and restarts.
  - CALON and CALOFF SNAP variables. This intended to deal with stations that have different cal control methods for different bands. The idea is that variables will be introduced into SNAP, specifically two: CALON and CALOFF. These can be defined by the band set-up procedures described above and used as $CALON and $CALOFF in procedures when the noise diode needs to be controlled.
- Pointing software clean-up
  - Eliminate redundancies in pointing configuration information by introducing a source coordinate database file and reorganizing point.prc, parpo.ctl, and ctlpo.ctl (aquir control file).
  - Documentation clean-up to reflect new procedures and utilities
- ERRCH
  - Initial implementation of a display program for monitoring error
  - Multiple colors (and histogram) for different severities
- Fast set-up. The time between source scans will be shortened when there is no head motion and the formatter setup does not change. The FORM commands will be modified to not set up the formatter if the current mode is the one desired. Other commands will be modified as necessary to reduce the total time required. Documentation for all modified commands will be updated to reflect the changes.
- Improved Tsys
  - Most items completed
  - Post processing program to generate AIPS (ANTAB) format TSYS files
    A. Periodic firing of Cal diode with flagging needed

❖ Additional Future Items

I. IF patching automation

EVN has hardware design, but not implemented in field yet. I assuming we will need to add one relatively simple SNAP command to support it (a special version of PATCH and a way to control which version is used).

II. Mark IV decoder support

This is beyond the phase-cal monitoring mentioned above, mainly a few SNAP commands to control the decoder manually. Most of the effort here is actually divining what is needed and developing documentation

III. Phase-cal control monitoring from VEX schedules

A. Support for VLBA digital switch board
B. ANTAB table from post-processing
C. Mark IV decoder support already planned