
Field System Topics

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FS Linux Distribution

- ◆ FSL9
 - ⊕ Current Standard
 - ⊕ Based on Debian “**wheezy**”
 - ⊕ Older systems should be upgraded or be replaced
 - ⊕ Has some minor serial issues, but so far we have solutions
- ◆ FSL10
 - ⊕ Next standard
 - ⊕ Will be based on Debian “jessie”
 - ⊕ Availability TBD
- ◆ 64 vs 32 bit
 - ⊕ This is a looming issue
 - ⊕ Soluble but will take some effort, looks more promising than initially thought

Current FS Release: FS 9.11.8

- ◆ FiLa10G Support for DDC
 - ⊕ **It is necessary to run FMSET 's' each time DBBC (DDC or PFB) and/or FiLa10G is (re)-started**
- ◆ Mark 5C/6/Flexbuff support with jive5ab
- ◆ VLBC and CDAS racks
 - ⊕ Requires local `vs14` command
- ◆ Supports VDIF fanout_def track lay-outs in DRUDG
- ◆ Version logging for:
 - ⊕ DBBC, FiLA10G, and jive5ab
- ◆ Log output of arbitrary linux command
 - ⊕ `sy=popen 'bash-command 2>&1' &`
 - ⊕ No clean-up or time-out provided (yet)

Next release:9.11.16

- ◆ Ready for Session 3
- ◆ DBBC/PFB recording support
 - ⊕ `vsi1=list` and `vsi2=list` commands to select channels
 - ⊕ `form=flex`
 - ⊕ `mk5=vsi_align=0/1` as set by `skedf.ct1`
 - ⊕ 64 bit masks for `fila10g_mode` and `mk5c_mode`
 - ⊕ **Both v15 and v16 “supported”**
- ◆ CHEKR checking of DBBC version/personality
- ◆ Radiometry for DBBC/PFB
 - ⊕ Tsys including `tpicd` in background
 - ⊕ `onoff` and `fivpt`
 - ⊕ `gnplt` support for longer device names
- ◆ Continuous cal with PFB deferred
- ◆ Full support for non-bank mode deferred
 - ⊕ Adequate for operations, with some extra error messages

More 9.11.16: `if` Command

- ◆ `if` command introduction
 - ⊕ Suggested by Jon Quick
 - ⊕ Used to make SNAP procedures independent of DDC/PFB and continuous vs non-continuous cal
 - ⊕ Also used to limit commands in standard procedures to those needed for mode:
 - IFs, BBCs, Cores
 - Example SNAP procedures `bread` and `iread`
- ◆ `if=condition, true-statement, false-statement`
 - ⊕ Currently a limited range of *conditions* that can be tested: `pfb`, `ddc`, `bbcXX`, `ifX`, `coreX`
 - ⊕ More *conditions* can be added in future

More 9.11.16 - Even more `if` command

- ◆ **Escape character, backslash, “\”**
 - ⊕ Needed for commas in *statements* to be executed
 - Example command from `ifagc` SNAP procedure
 - `if=ifd,ifd=*\\,agc\\,*\\,*`
 - ⊕ Nested `if` commands possible:
 - Example of one level of nesting from `caltsys` SNAP procedure:
 - `if=cont_cal,,if=ddc\\,bbc_gain=all\\\,agc`
 - ▢ Meaning: if not continuous cal and if DDC, execute `bbc_gain=all,agc`
 - ▢ Need three backslashes for comma in the `bbc_gain` command
 - Arbitrary nesting is possible, but use of backslashes gets tedious
 - Detailed explanation with examples and suggestions for constructing commands included in `help` page