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# Field System, Status and New Features

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# FS Linux Distribution

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## ◆ FSL10

- ⊕ Current standard
- ⊕ Based on Debian *stretch*
  - LTS expected until June 2022
- ⊕ 64-bit architecture
  - 32-bit also available
- ⊕ <https://nvi-inc.github.io/fsl10/>

## ◆ FSL11

- ⊕ Next standard
- ⊕ Based on Debian *buster*
  - LTS expected until June 2024
- ⊕ Availability TBD

# FS 10.0.0

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- ◆ Next release
  - ⊕ *beta2* is current pre-release, *beta3* soon, *rc1* follows
- ◆ Under test for more than six months
- ◆ Unification of main and VGOS branches
- ◆ Runs on both 32- and 64-bit systems
  - ⊕ Works for FSL9 and FSL10
  - ⊕ Works for FSL8 with display server disabled
    - FSL8 server support is being investigated
- ◆ Source is managed with *git*
- ◆ Distributed via *github*
- ◆ Update notes on web
  - <https://nvi-inc.github.io/fs/releases/10.0.0/beta2.html>
- ◆ Sign-up for release announcements at
  - <https://github.com/nvi-inc/fs>
  - Sign into *github* and click `Watch`
  - *vlbi-field-system* email list may be going away.

# *fesh* – Fetch and *drudg* schedule tool

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- ◆ Primarily changed for geo schedules, now supports:
  - ⊕ FTP-SSL and HTTPS for *cddis*
  - ⊕ FTP for *bkg* and *opar*
  - ⊕ Fixed answers for optional *drudg* prompts
    - Intended to allow use by astro/geo stations for geo
    - Only supports one mode per schedule
  - ⊕ Optional downloading of *.txt* files
- ◆ For astro schedules, now supports:
  - ⊕ FTP for *vlbeer*
    - Uses current *.latest* sub-directory as default
  - ⊕ Does not run *drudg*
    - Possibly added in the future

# DBBC3 Support – in development

## ◆ Finished:

- ⊕ *fvpt* and *onoff* support
- ⊕ Logging of multi-cast Tsys and other data
- ⊕ *bbcnnn* commands, *nnn* : 001-128
- ⊕ *ifx* commands, *x* : a-h
- ⊕ *iftpx* commands, *x* : a-h
- ⊕ *core3h\_moden*, commands, *n* : 1-8
- ⊕ Tsys display window
  - Cycles through all active IFs, showing active BBC sidebands
  - Can be locked to a single IF for troubleshooting

## ◆ To do:

- ⊕ *drudg* support
- ⊕ Final testing

## ◆ Currently only one mode per schedule

- ⊕ Mode change requires a *timesync*
  - Problematic to automate
- ⊕ Schedules will only check mode configuration
  - A command will be provided to set configuration beforehand

# VEX2 Status

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- ◆ Draft parser completed
- ◆ Now cleaning up document
- ◆ Committee planning to discuss final details
- ◆ Looking toward a brief public comment period
  - ⊕ Major changes will be deferred to a later version
- ◆ Announce standard, early 2021
- ◆ Begin implementation and testing

# More on *fesh*

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- ◆ Challenges for running *drudg* for astro schedules
  - ⊕ More than one mode per schedule
    - Going away in the future?
  - ⊕ Different configurations for different bands
    - Relatively easy to handle a single configuration
    - Different
  - ⊕ Selecting rack and recorder type for eVLBI
    - May be able to add an option to support
- ◆ *fesh2* is coming
  - ⊕ Background schedule download/*drudg*
  - ⊕ Geared to NASA operations
  - ⊕ Final features unclear at this time