
Looking Down the Road Structural Transitions for DataFax 3.9

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Goals

Modernize & Simplify

- Easier to use
- Easier to maintain
- Better Looking
- More Secure

X11/Motif Tools

- **R.I.P.**
 - DFvalidate, DFreports, DFqc, DFidl, DFstatus, DFlite, DFexport, DFrouter, DFviewer
- **iDataFax**
 - Takes over as the primary data management tool
- **iDataFax, DFsetup, DFsystem**
 - Windows, MAC OS X and Linux versions
 - Internet ready
 - Unix user accounts no longer required
 - Exceed/Reflection X no longer required
 - Sealed server



Client/Server

- **Client tools**
 - Run locally on PCs, Mac, Linux
 - Reduces load on server
- **Server**
 - Is mostly database backend
 - Runs reports
 - Batch
 - Incoming/Outgoing

Group 'studies'

- We plan to get rid of this
- Better security - only 'datafax' can access data, config files, etc.
- Possibly add 'dfnobody' user with limited permissions

DATAFAX_DIR

- Use /opt/datafax (or Applications/datafax) as software location
- Makes finding shared libraries easier
- Alternate installation locations OK if there is a symbolic link to /opt/datafax
- Can then do away with DATAFAX_DIR
- More structured locations for files

Solaris

- We plan to drop Solaris 8, 9 and make Solaris 10 the minimum OS
- Older versions require older hardware
 - Driver issues
- Older versions have limitations
 - Maximum number of open files
- Older versions lack useful features
 - Zones
 - ZFS

Inbound Processing

- Move to E-mail
- Use IMAP or POP3 to fetch email
- Have HylaFAX pass received faxes as attachments
 - No more \$DATAFAX_DIR/incoming
 - Tightens permissions
- Handle multiple attachments
- Protus/MyFax support

Edit Checks

Obsolete Functions:

dfrun(), dfsystem(), dfopen(),
dfclose(), dfrewind(), dfread(),
dfwrite()



New Functions:

dfemail(), dffax(), dfprint(), dflog()

Database Backend

- New backend
- Always keep database sorted
 - No database resorts on study server shutdown
- Always reference data by keys
 - Legacy tools know too much about database structure
- All data records will require a unique raster name
- Secondary records only keep track of previous images (not previous data)

PostgreSQL?

- Popular open source SQL database
- Allows custom data types
 - Support for missing values
 - Support for partial dates
- Design Issues
 - Maintain simple plate = table structure?
 - Move configuration files into tables?
- Migration Issues
 - Need to fix any conflicts between variable names and SQL reserved words
 - Need to migrate the audit trail

Implications

- Stricter rules
- Script writers will need to check their assumptions
 - Use defined interfaces when possible
- Start getting familiar with new tools

Questions?
