
A Review of Changes to DataFax Since Release 3.4

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Edit Checks

- **New functions**
 - Ask user a question
`answer=dfask("question", default, opt1, opt2)`
 - Execute a system command and return results
`result=dfrun(system_command)`
 - Determine information about a variable
`info=dfvarinfo(variable, option, optional_arg)`
 - File operations
`dfopen(), dfread(), dfwrite(),
dfrewind(), dfclose()`

Edit Checks

- **Global variables**
 - declare/initialize outside scope of functions
- ```
number n=50;
edit increment() { n=n+1; }
```

## Reports

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- **DF\_QCreports**
  - customized titles, center messages, cover sheets
  - split QC report across pages by patient
  - more formatting options such as line/space between notes and between patients
- **DF\_ICkeys**
  - determine legal visits from visit map, schema, both
  - check consistency of patient initials

## DFexport.rpc

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- Select by create and modify time

```
DFexport.rpc -C "99/01/01-today" 254 1 -
```

- Insert fixed fields

```
DFexport.rpc -G "ID-S1DATE,'ABC',S2DATE" 254 1 -
```

- Export original date values

```
DFexport.rpc -G "S1DATE,S1DATE:o" 254 1 -
```

## DFsas

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- Split input field into multiple output fields

```
18:3x200c DFQCNOTE QC Resolution Note
```

- Filter data sets by patient ID ranges

```
PATIENTS 99001-99499
```

- Set SAS execution directory

```
RUNDIR c:\sas\254\job1
```

- Flag problems by severity

```
WARNING field 18 is 500 chars, > SAS 200 max
```

- Sort normalized records

```
SORT 1:n 2
```

## Miscellaneous

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- **DFuserPerms**
  - command-line equivalent to DFsystem – Users  
`DFuserPerms -l valid1`
- **Login names appear in title of every tool**
  - as recommended by FDA's CFR-11
- **DFvalidate: unsaved changes handling**
  - now also discards unsaved QC notes

## Early Access Program

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- **DF\_ICschema**
  - rigorous checking of study schema for problems
- **+ (be patient)**

## Y2K (Y\*C) Issues

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- DF\_ATfaxes
  - date sorting is not century sensitive

```
fax 0001/0001 pages 5 2000/01/01 00:03:15
fax 9950/0001 pages 3 1999/12/14 16:06:22
fax 9953/0001 pages 8 1999/12/31 23:07:16
```
- faxcron
  - date sorting is not century sensitive, resulting in output including ALL previous faxes
  - resolve by removing  
`/var/spool/fax/etc/xferlog`

## What Are We Working on?

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- Oracle
- Batch Edit Checks
- Web Content Delivery
- DF lite

## Oracle – What's Complete?

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- Tool to convert DataFax database to Oracle tables:
  - DataFax plate -> Oracle table
  - partial dates, missing values -> missing table
  - key includes image id
  - generate unique keys for 'duplicate' records
  - DFin.dat -> plate table
  - lost records -> new table
  - journals are not imported, yet
  - one way trip

## Oracle – Implications

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- Requires existing Oracle 7 installation
- One way!
- Leverages existing Oracle tools

## Oracle - What Needs to Be Done?

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- Database redesign
  - more key fields, larger key fields, more than 1 QC
  - normalization
  - journalling
- Compatibility layer
- All tools and reports get re-written
- Underlying file formats will change
- User permissions

## Oracle – No Way!

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- Existing studies can continue with DataFax database or convert
  - Choose database driver at study definition time
- DataFax database will, over time, acquire new functionality