Release 4.0 News

(That was the week that was)

Central Archive Server

- Central Archive System
  - Lots of code refactoring !
  - MARCH FEC (Data Acquisition)
    - Registers as "ARCHIVER" in designated context
    - Local equipment module "DAQEQM"
  - ARCSRV FEC (Archive readout)
    - Registers as "HISTORY" in designated context
    - Local equipment module "HSTEQM"
    - Manages archive configurations !!!
  - Archive Viewers :
    - Avoid local configuration files
    - Query ENS for contexts
    - Query ENS for servers called "HISTORY" in each context
    - Query the HISTORY server for configurations
  - TODO:
    - Allow millisecond timestamp data storage and faster access
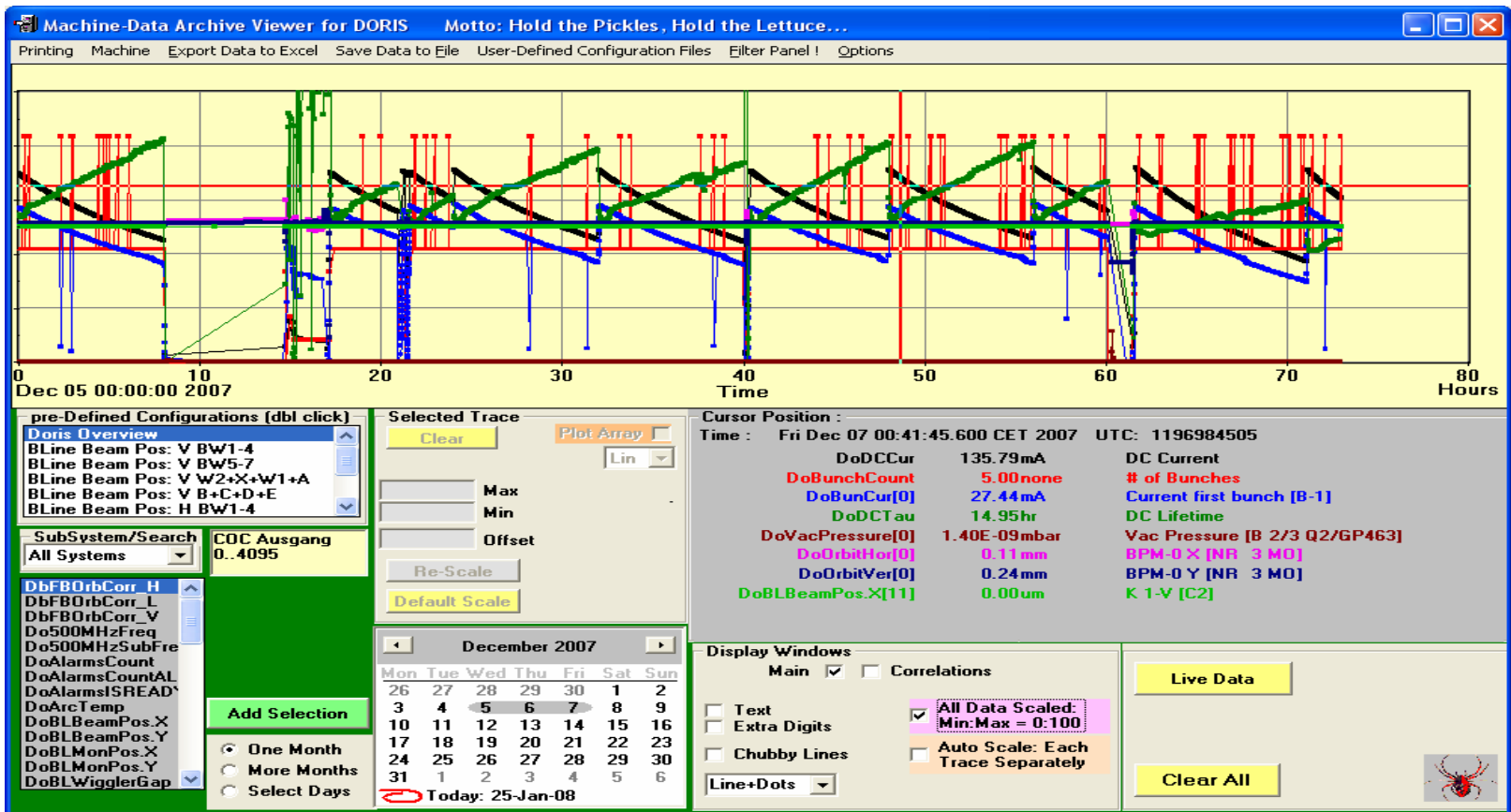   - Complex data types

Viewer Configuration Files

Archive Viewer configurations

History Group configurations

Multi-Channel Analyzer configurations

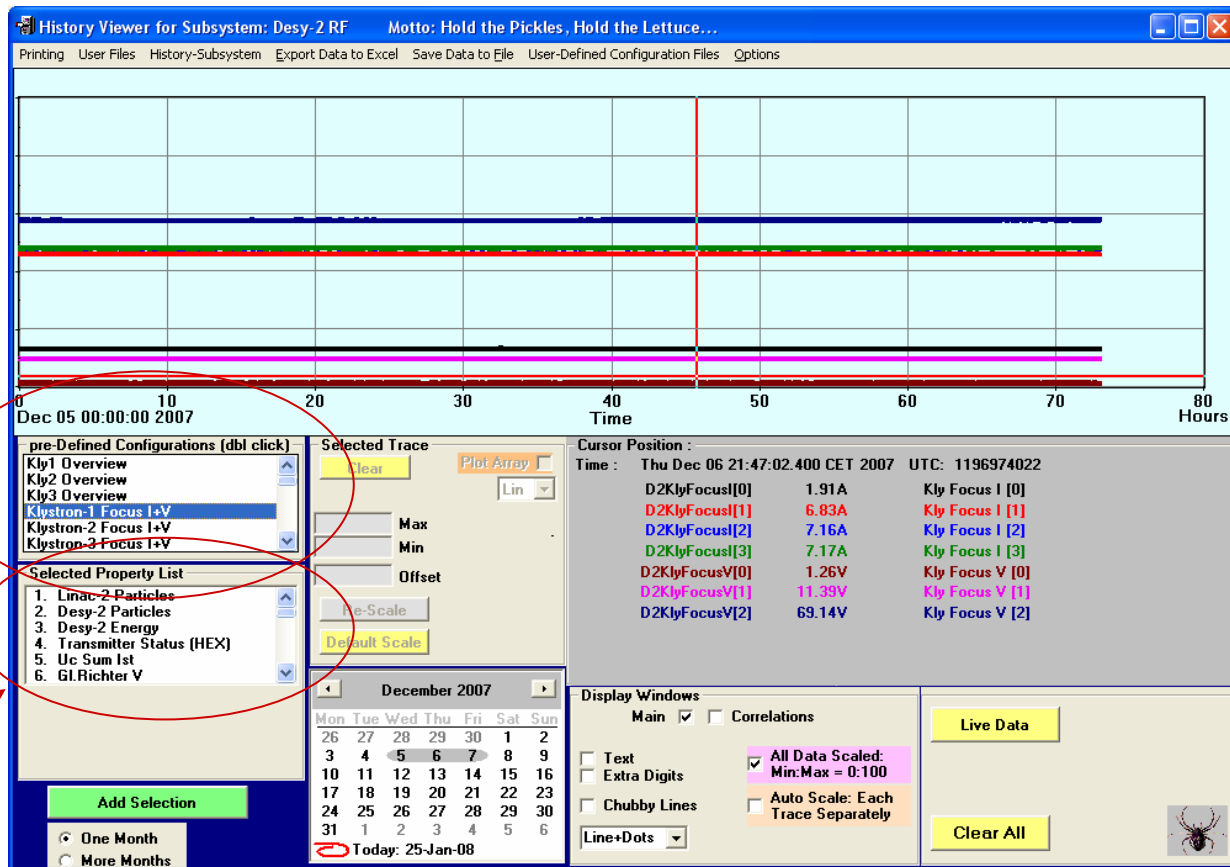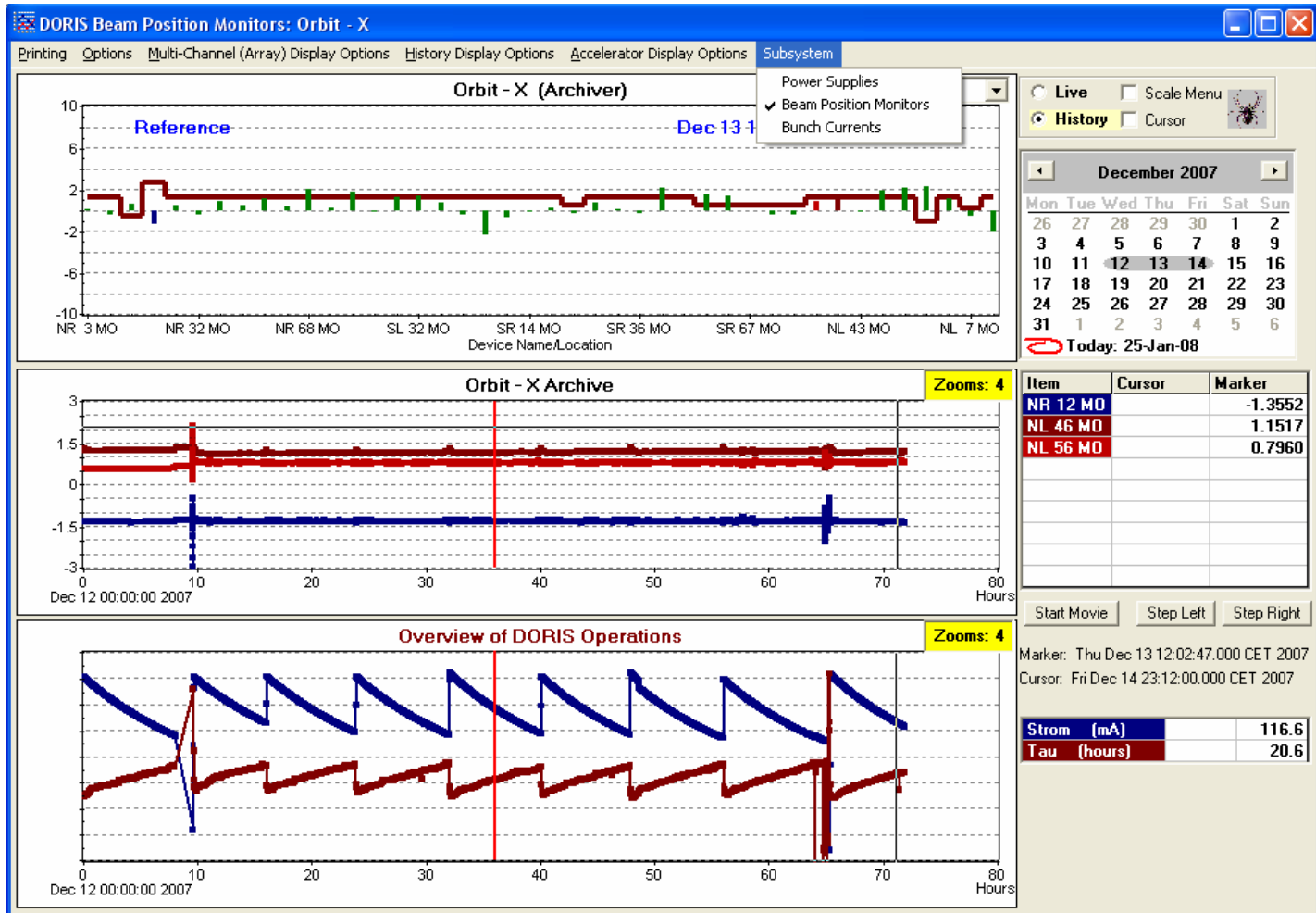# Archive Viewer (windows)

Archive Viewer (java)
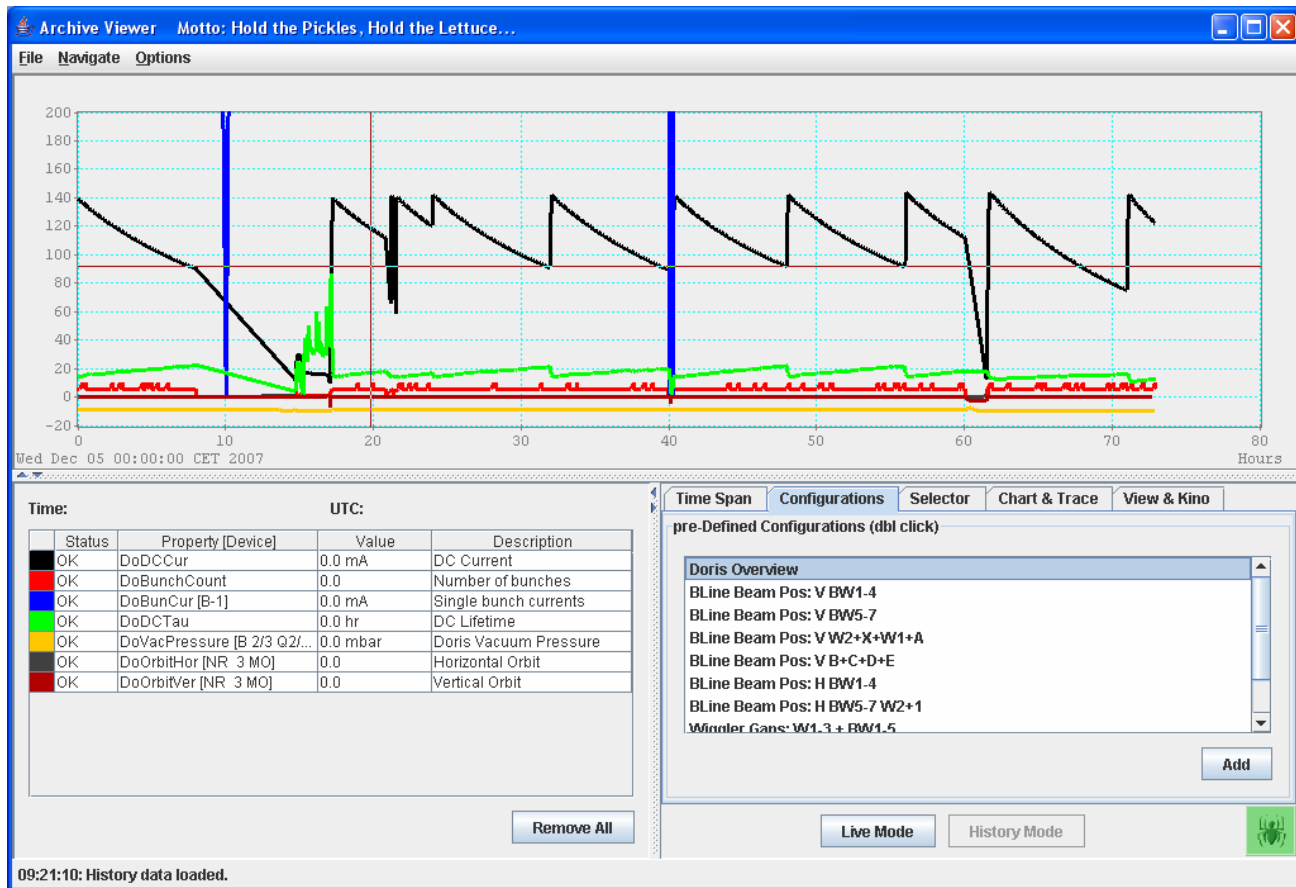
History Viewer (windows)

Subsystem : DESY 2 RF

Relevant Properties
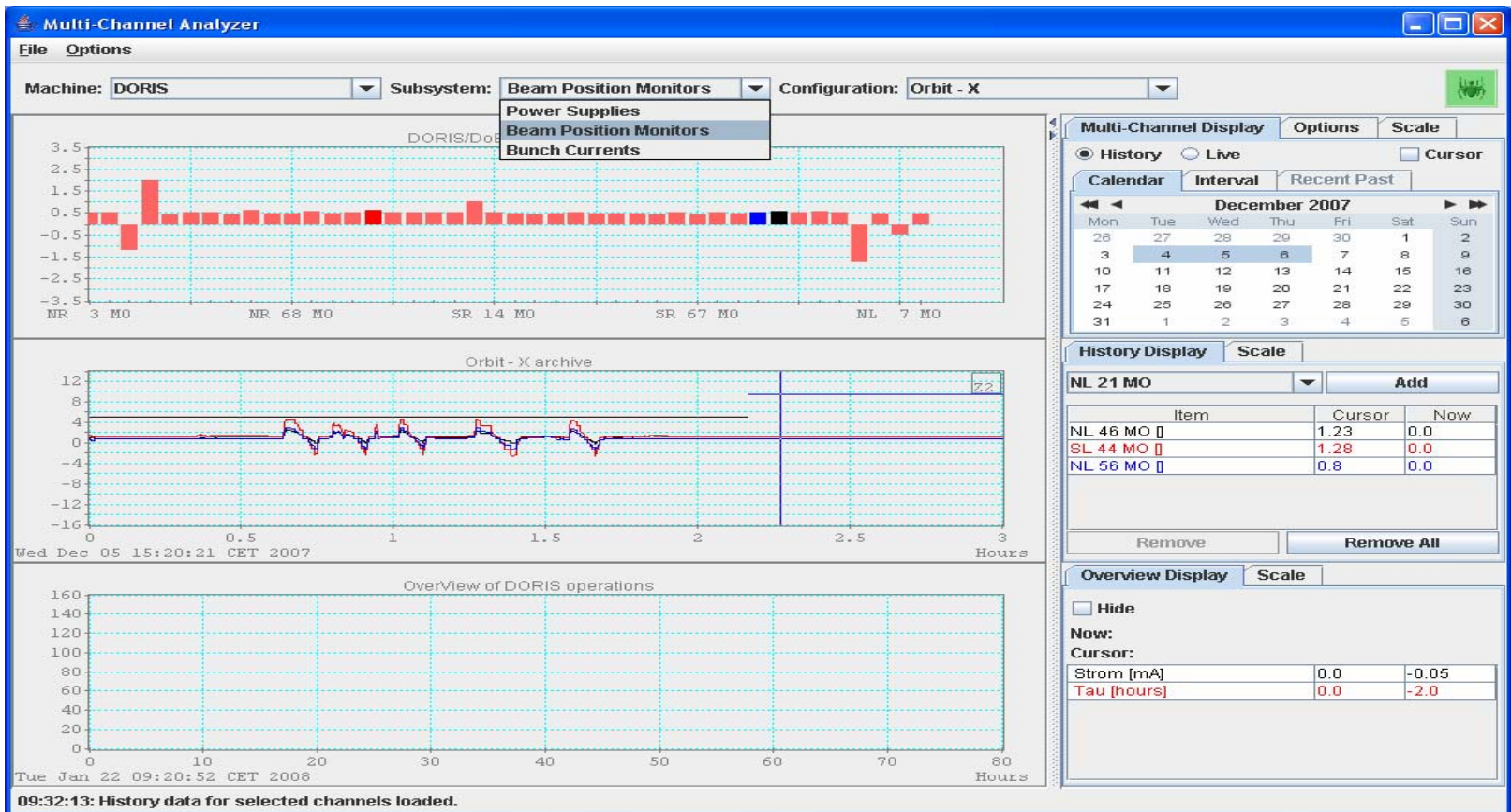
Multi-Channel Analyzer (windows)

Multi-Channel Analyzer (java)

Configurations Management

Configuration Management
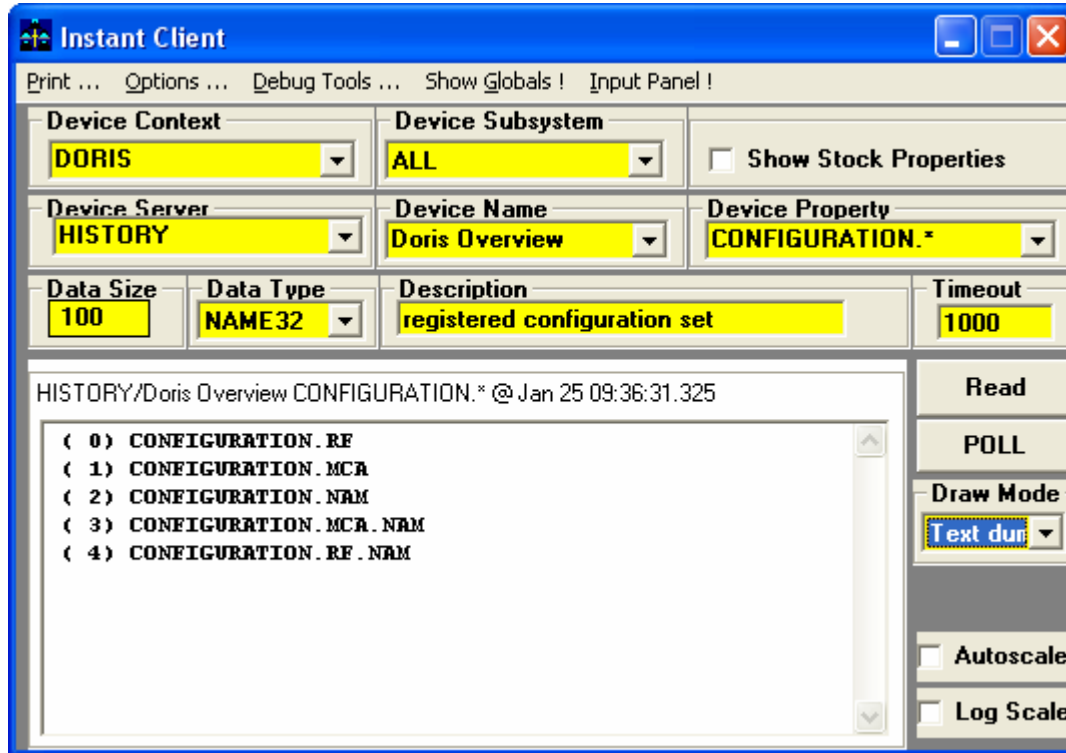
Wildcard query for 'decorated' CONFIGURATION properties !

Notes:

- Central Archive systems have been split into their individual facillities
  - DESY ->
    - DESY2, LINAC2
    - DESY3, LINAC3 (retired)
  - Keywords and server names no longer begin with e.g. "D2"
    - D2Cur -> Cur in Context DESY2
    - DESYDATA -> ARCHIVER in context DESY2
    - Etc.

Globals Server

- Globals Server
  - Is a "MARCH" Server with
    - A globals list
    - Multicasting enabled
    - Registered as "GLOBALS" in designated context
  - "Site" globals server in "SERVICE"
    - Reference to the Time Server (also sent on the Site Globals multicast group)
  - "Context" globals
    - Each context can have a globals server with its own multicast group

DESY Site Globals

Globals	
Parameter	**Value**
L2ENERGY	6.287604E+26
L2CURRENT	0
L2TEXT	Positronen Betrieb
PIACUR-EJ	-6.669871E-03
D2ENERGY	1.77E+30
D2CURRENT	0
D2TEXT	Positronen Standby
DOENERGY	0
DOCURRENT	-5.315745E-02
DOTEXT	SHUTDOWN
DONextFill	21.12.07 16:00:00

What else ?

Context Specific Globals Server for:

1) LINAC2

2) DESY2

3) DORIS

4) PETRA3

5) FLASH

Central Services

- ## Central Logging Server
  - To be commissioned soon!
  - C API:

    int clslog(context, tag, logger, priority, status, text)

    Context = "PETRA" (32 char)

    Tag = "RF" (32 char)

    Logger = "Operator" or "Bacher", etc. (32 char)

    Priority = 1

    Status = 0

    Text = "bla bla"

Central Logger

Possible status and priority definitions (?)

```
#define CLOG_STATUS_NONE 0
#define CLOG_STATUS_INFO 1
#define CLOG_STATUS_WARN 2
#define CLOG_STATUS_ERR 3

#define CLOG_PRIORITY_NONE 0
#define CLOG_PRIORITY_USEFUL 1
#define CLOG_PRIORITY_IMPORTANT 2
#define CLOG_PRIORITY_URGENT 3
```

This is NOT an Alarm System !

Automatic central logging :

1) State Changes (State Server)

2) Events (Event Archive Server)

3) Some Alarms (configured at the CAS, e.g. server down alarm?)

4) Restart of 'important' FECs

5) ????