# TINE Release 4.0 News

(Sept 3, 2010: That was the month that was !)

“What a long, strange trip it’s been ….”

# Release 4.1.9

- Diagnostic Changes
  - Message Table improvements
    - Message Table is a ring buffer of ‘actions and events’ kept by the TINE kernel.
    - Add ‘get messages’ to the command line parser (was only an API interface).
      - Java: add a command line parser!
    - Helps to know what ‘else’ an application was doing at the time of a ‘problem’.
    - n.b. the ‘message’ table was invaluable in determining the root of the ‘Vladimir problem’

# Release 4.1.9

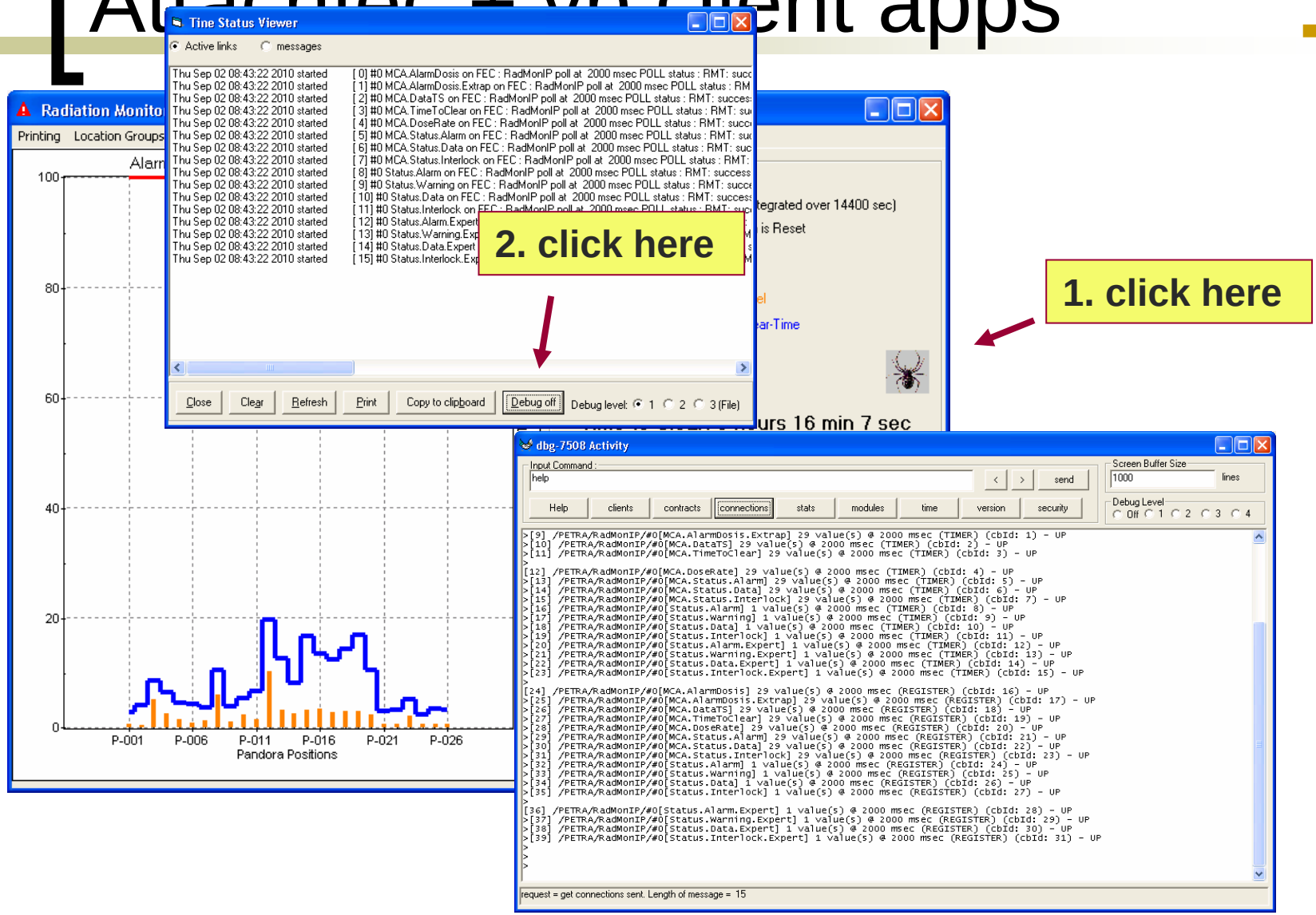
- Diagnostic Changes and ‘attachfec’
  - In the past:
    - **attachfec** only made use of a local named pipe in order to *send commands to* or *receive debug output streams from* a *server* process.
    - attachfec <fecname>
    - Then one types a command (*get* or *set* something) and the output is streamed over the pipe.

# Release 4.1.9

- Diagnostic Changes and ‘attachfec’
  - Now (release 4.1.9 +)
    - Pure *client* applications can open a pipe by passing a name (usually the *pid*) and use **attachfec** to debug the activity.
      - e.g. activeX spider now does this for those old VB6 applications
      - Jddd panels now offer this.

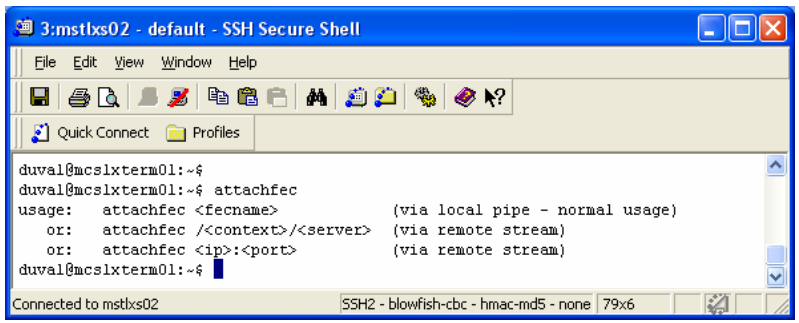
**Okay: so maybe ‘attachfec’ isn’t the best name for this any more …**

# Attachfec + vb client apps

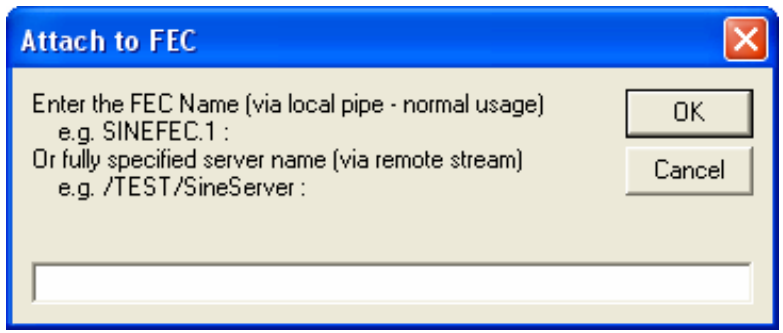


# Attachfec to a Remote Server

- Add a debug streaming socket to offer the same functionality over the net!
  - attachfec /<context>/<server>
  - Security is the local ipnets access list.
  - Caution:  this puts more of a load on the server than a named pipe!




**Unix/linux: (command line)**



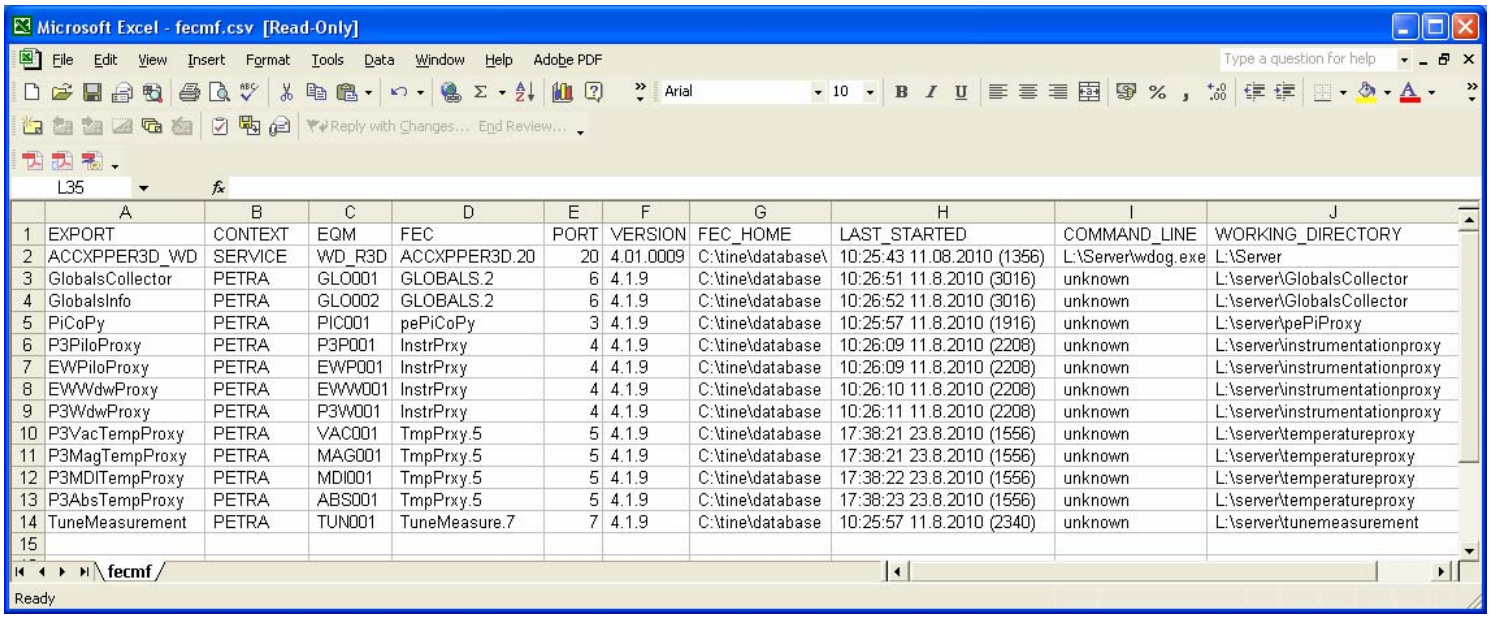

**Windows (GUI)**

# Attachfec to a Remote Server

- Java and VxWorks servers are now ‘attachable’ !
- Time for a demo !

# Release 4.1.9

- Other features
  - New stock property “SRVPID”
    - Returns process ID of server
  - PID also written in manifest along with most recent start time
    - “hh:mm:ss dd.mm.yyyy (pid)”
    - Windows Watchdog can now associate a PID with a FEC process (if the alias in not set correspondingly)!



Microsoft Excel - fecmf.csv [Read-Only]

File Edit View Insert Format Tools Data Window Help Adobe PDF

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| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EXPORT | CONTEXT | EQM | FEC | PORT | VERSION | FEC_HOME | LAST_STARTED | COMMAND_LINE | WORKING_DIRECTORY |
| 2 | ACCXPPER3D_WD | SERVICE | WD_R3D | ACCXPPER3D.20 | 20 | 4.01.0009 | C:\tine\database\ | 10:25:43 11.08.2010 (1356) | L:\Server\wdog.exe | L:\Server |
| 3 | GlobalsCollector | PETRA | GLO001 | GLOBALS.2 | 6 | 4.1.9 | C:\tine\database | 10:26:51 11.8.2010 (3016) | unknown | L:\server\GlobalsCollector |
| 4 | GlobalsInfo | PETRA | GLO002 | GLOBALS.2 | 6 | 4.1.9 | C:\tine\database | 10:26:52 11.8.2010 (3016) | unknown | L:\server\GlobalsCollector |
| 5 | PiCoPy | PETRA | PIC001 | pePiCoPy | 3 | 4.1.9 | C:\tine\database | 10:25:57 11.8.2010 (1916) | unknown | L:\server\pePiProxy |
| 6 | P3PiloProxy | PETRA | P3P001 | InstrPrxy | 4 | 4.1.9 | C:\tine\database | 10:26:09 11.8.2010 (2208) | unknown | L:\server\instrumentationproxy |
| 7 | EWPiloProxy | PETRA | EWP001 | InstrPrxy | 4 | 4.1.9 | C:\tine\database | 10:26:09 11.8.2010 (2208) | unknown | L:\server\instrumentationproxy |
| 8 | EWWdwProxy | PETRA | EWW001 | InstrPrxy | 4 | 4.1.9 | C:\tine\database | 10:26:10 11.8.2010 (2208) | unknown | L:\server\instrumentationproxy |
| 9 | P3WdwProxy | PETRA | P3W001 | InstrPrxy | 4 | 4.1.9 | C:\tine\database | 10:26:11 11.8.2010 (2208) | unknown | L:\server\instrumentationproxy |
| 10 | P3VacTempProxy | PETRA | VAC001 | TmpPrxy.5 | 5 | 4.1.9 | C:\tine\database | 17:38:21 23.8.2010 (1556) | unknown | L:\server\temperatureproxy |
| 11 | P3MagTempProxy | PETRA | MAG001 | TmpPrxy.5 | 5 | 4.1.9 | C:\tine\database | 17:38:21 23.8.2010 (1556) | unknown | L:\server\temperatureproxy |
| 12 | P3MDITempProxy | PETRA | MDI001 | TmpPrxy.5 | 5 | 4.1.9 | C:\tine\database | 17:38:22 23.8.2010 (1556) | unknown | L:\server\temperatureproxy |
| 13 | P3AbsTempProxy | PETRA | ABS001 | TmpPrxy.5 | 5 | 4.1.9 | C:\tine\database | 17:38:23 23.8.2010 (1556) | unknown | L:\server\temperatureproxy |
| 14 | TuneMeasurement | PETRA | TUN001 | TuneMeasure.7 | 7 | 4.1.9 | C:\tine\database | 10:25:57 11.8.2010 (2340) | unknown | L:\server\tunemeasurement |
| 15 | | | | | | | | | | |

fecmf

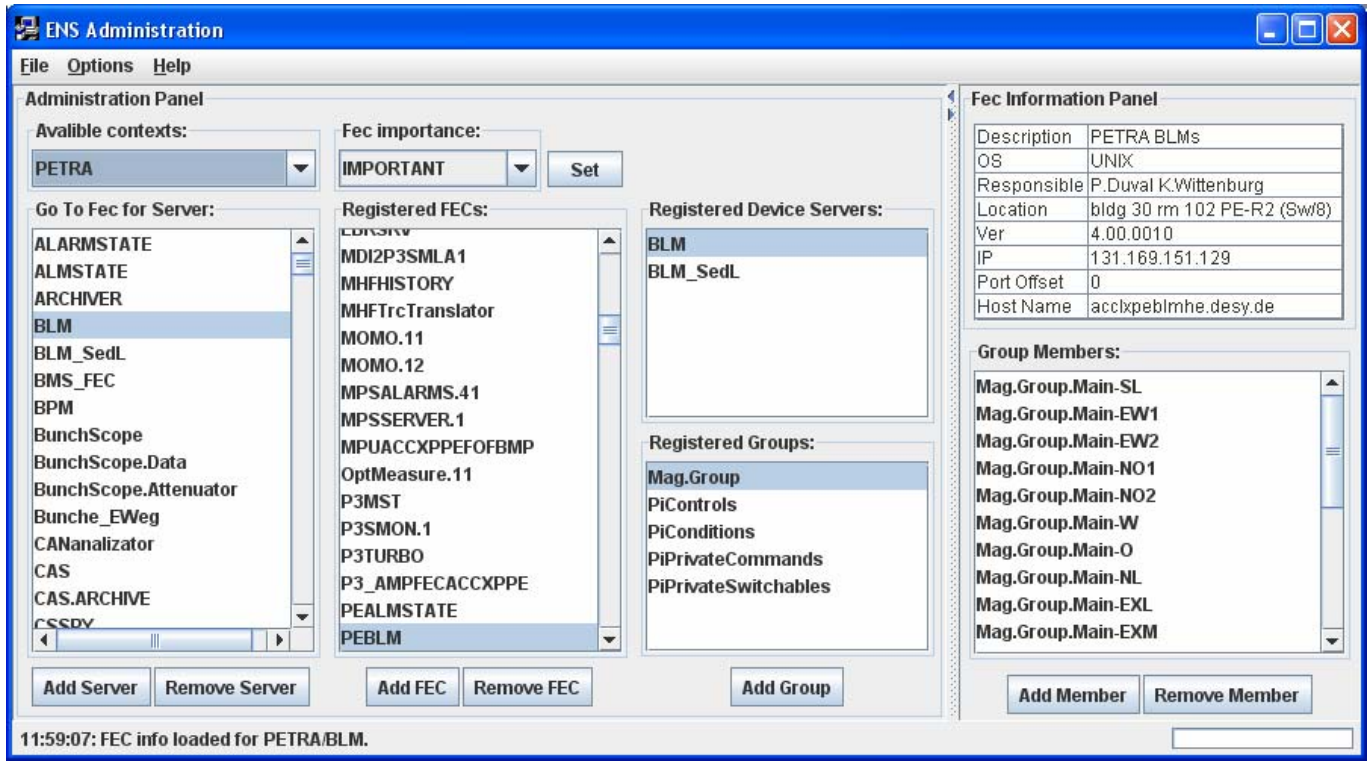
Ready

# Release 4.1.9

- Important Bug Fixes:
  - The ‘Vladimir’ problem finally found and solved !
    - Symptoms:
      - seg fault and core ~ 1 or 2 times per week in a middle layer process
      - Core with nonsense at point of failure
    - No idea what the application was doing.
    - But core contains the ‘message table’ !
    - Numerous links to Magnet Server
      - Happily collapsing to small number of MCA links
    - Periodic traversal of the same devices from the same server in a loop with synchronous calls (in another thread) !!!!
      - (why?)
      - Synchronous links are then marked as ‘dependent’ to their asynchronous partners.
      - Data copied, link returned, link removed -> remove dependency.
      - Concurrency problem if exactly during this loop traversal an update comes in over the net !! (happens rarely, but it happens!).
  - Memory Leak in java client using TCP connections found !

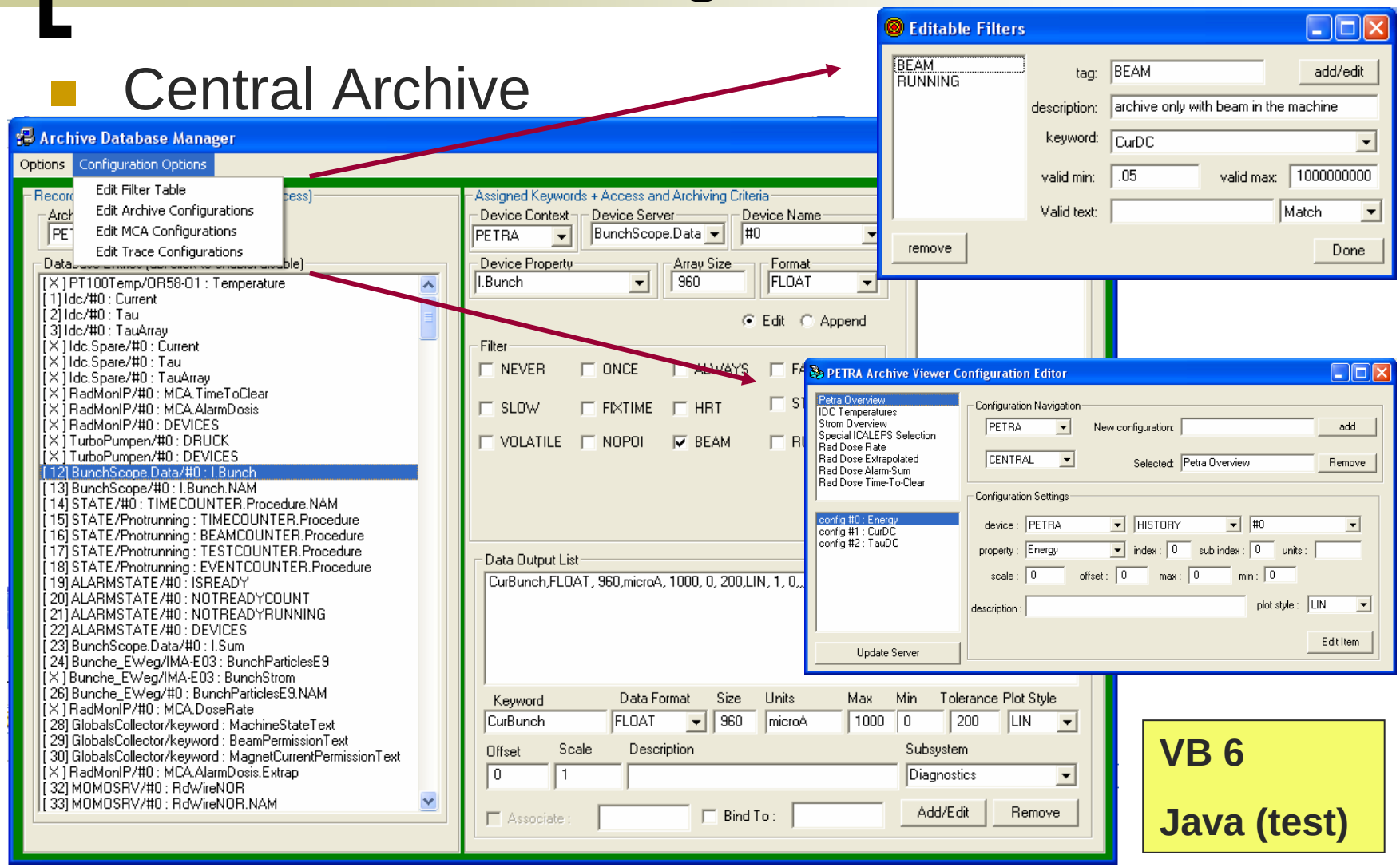
# Database Managers

- (all central service servers) !
- ENS:



# Database Managers

- Central Archive

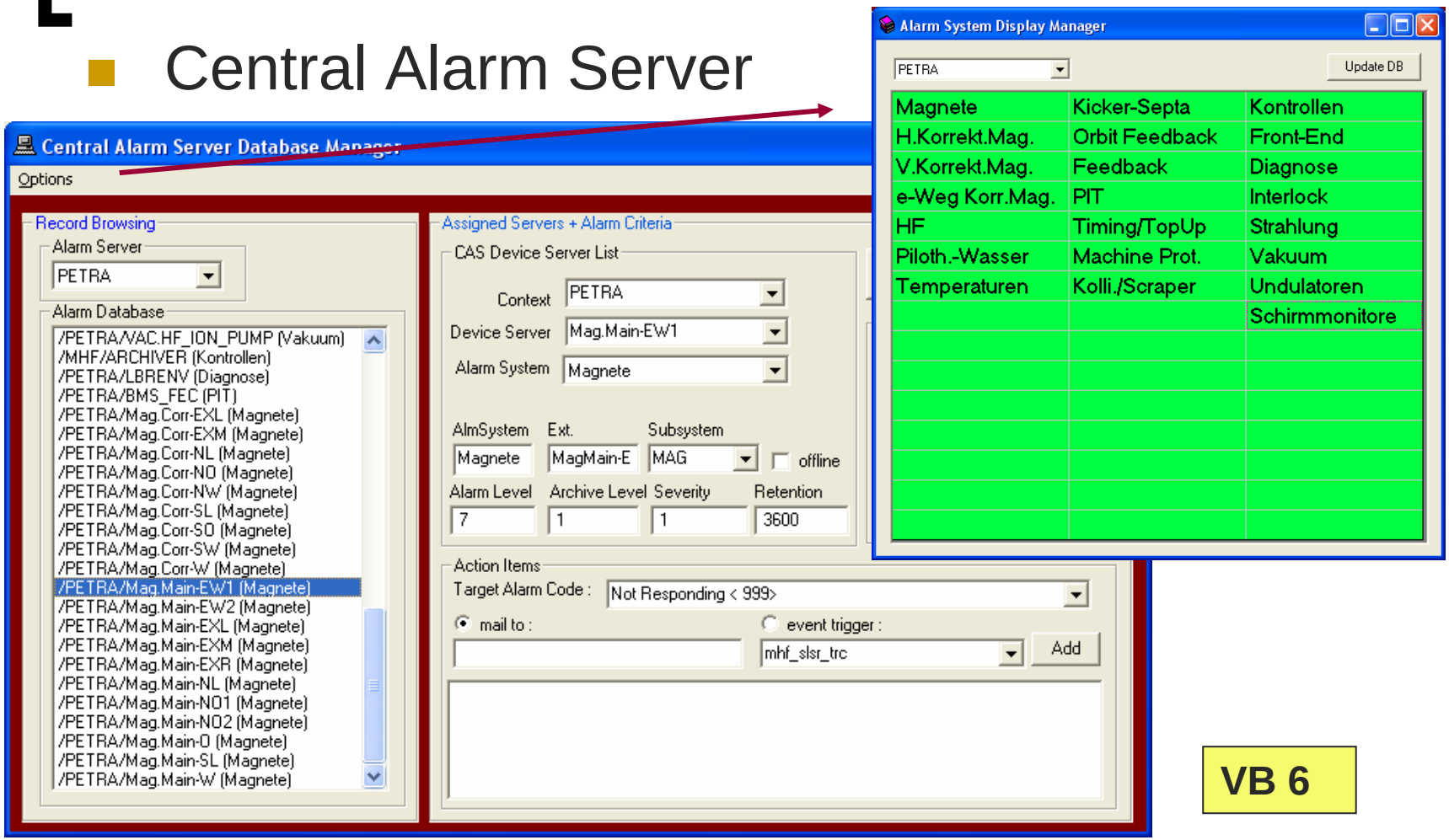



**VB 6**

**Java (test)**

# Database Managers

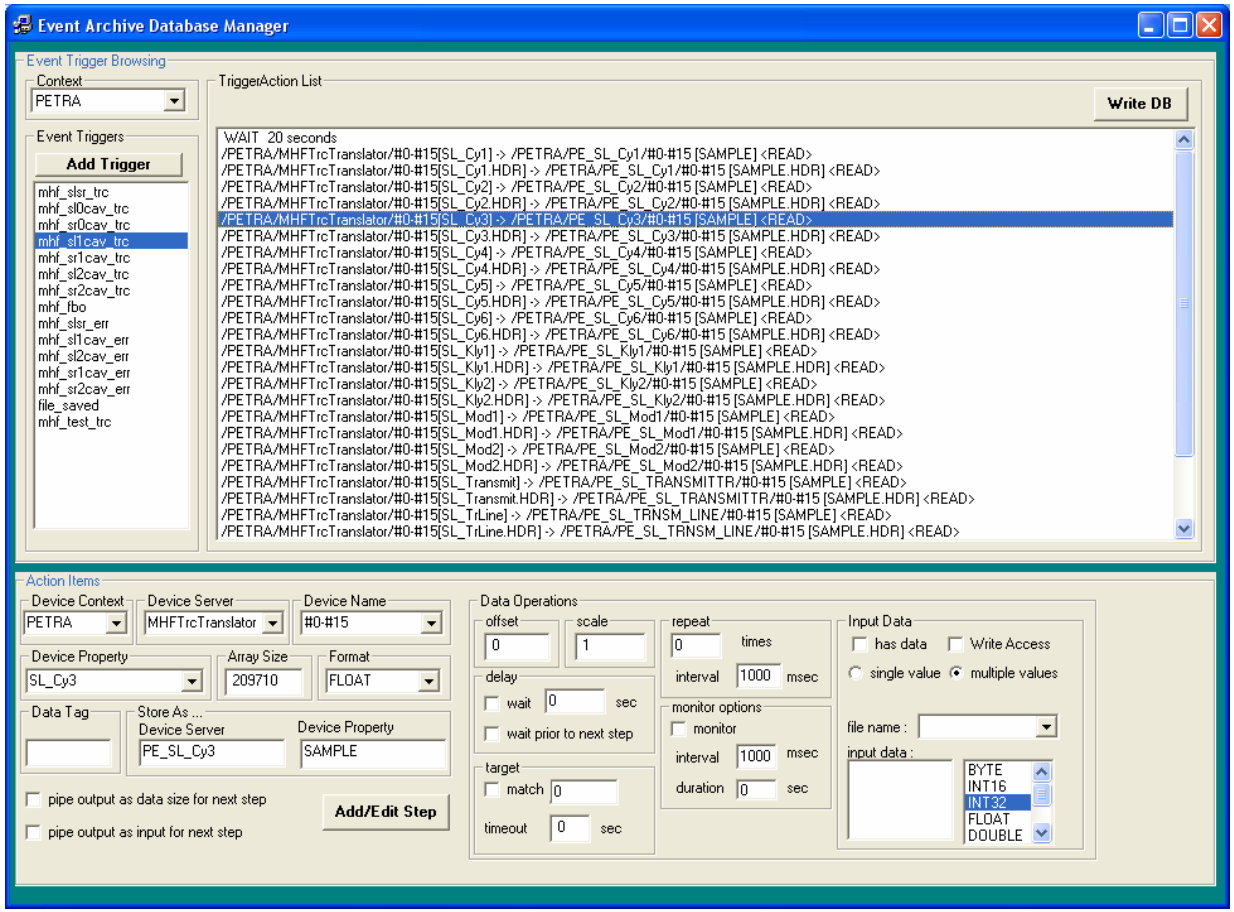
- Central Alarm Server




VB 6

# Database Managers

- Event Archive

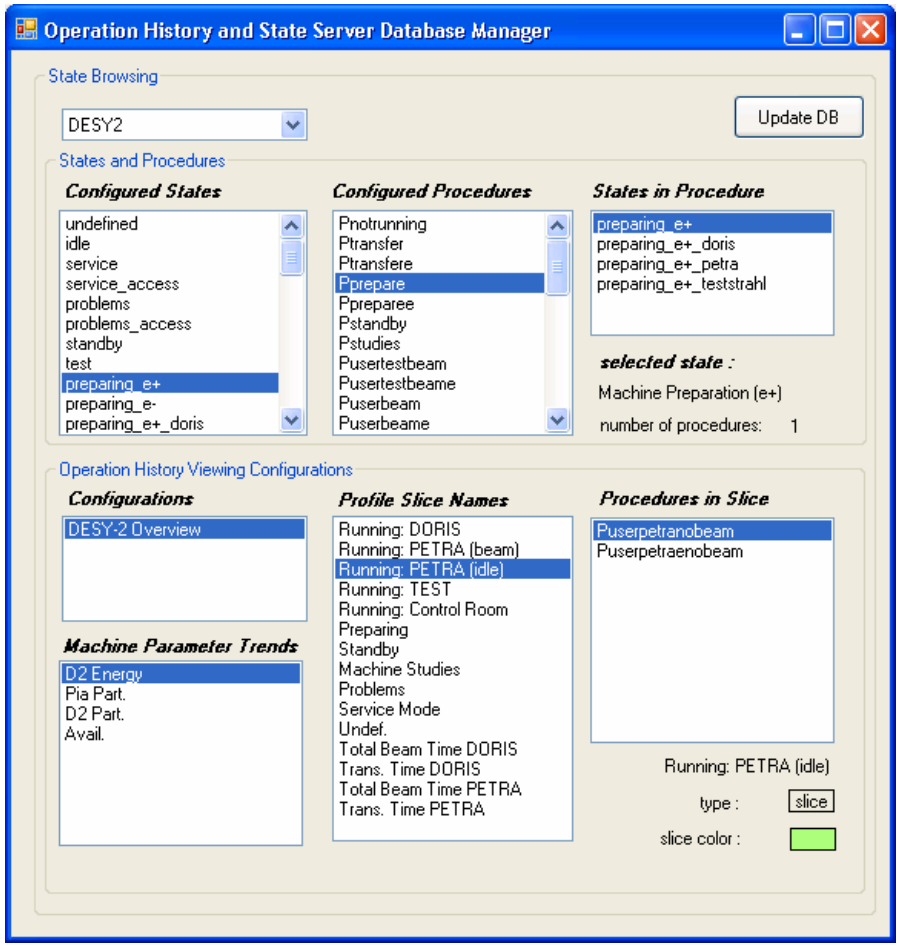



**No TRC viewer configuration editor yet !**

**VB 6**

# Database Managers

- Operation History/State Manager




**VB.NET**

**Reads/Configures**

**-State server database**

**-Slice Profiles**

**-Parameter Trends**

**Updates**

**- Archive database (if necessary)**

# Release 4.1.9

- Latest News on MCA acquisition coercion
  - DOOCS panels, Sequencer now appear to run stably (and they ‘don’t know the difference!)
  - More from Steve …