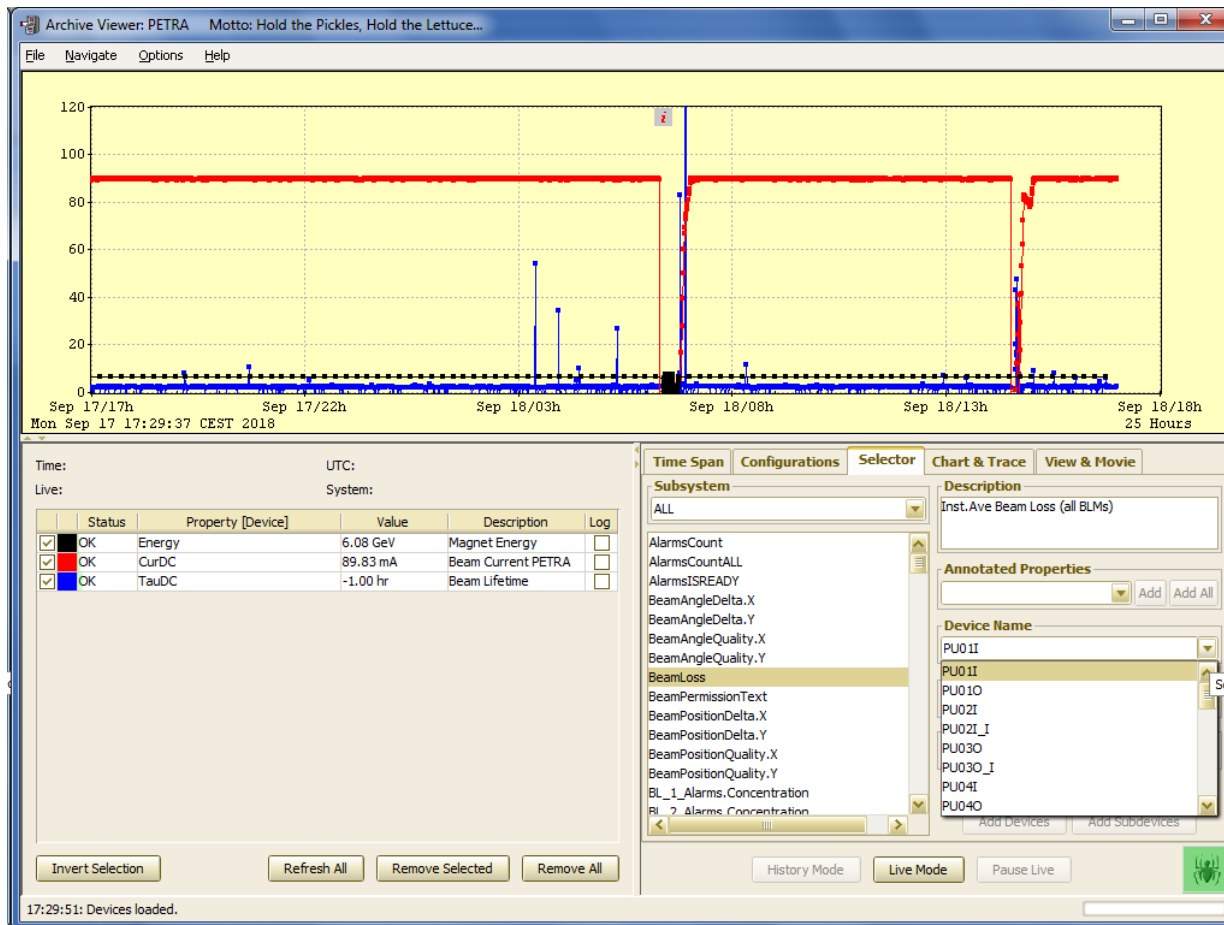# TINE Studio News

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The Archive Database Manager and other interesting tales …

# Archive Viewer

- Making life easy for yourself and others trying to look at archive data …

# Archive Data ...

- **Local archive** kept at the server
  - Not kept '*forever*' and there's no systematic backup ...
  - Usually configured by the server developer ...
  - Filtered on tolerance or other criteria supplied by the developer.
- **Central archive**
  - Kept '*forever*' ! And always on-line (you can still get HERA data from 1996 if you want ...)
  - Configured by an ADBM admin.
  - Data come from a targeted server and are converted into an archive record identified by a keyword.
  - Filtered on tolerance and various other systematically known criteria.
- Archive Viewer asks both local and central for the amount of data stored over a time range and makes the best decision possible as to which source to use.

# Central Archive Data ...

- There must be a server who can deliver the data (target server)
- The delivered data *can* be
  - Partitioned
  - Shifted or scaled prior to archive.
  - Assigned a proper timestamp if the target timestamp is not trustworthy
  - Assigned to an archive subsystem
  - Assigned units and max/min settings
- The delivered data *must* be
  - Assigned at least one keyword !
- *Keywords are properties* !
- The Central Archive Server is a 'property' server
  - A selected property can have its own set of associated devices!
    - => the property is then a Multi-Channel Array (**MCA**) !

# Archive Viewer

- Multi-Channel Arrays …

# Archive Database Manager

- 2 Entries !
  - get the Array of data
  - Get the channel names (store as <keyword.NAM> …

# Archive Database Manager

Some things are crying to be an MCA entry …

# Archive Database Manager

- When the target property doesn't offer a multi-channel array
  - The Combobulator to the rescue …



Unfortunately there is no combobulator editor other than excel … (new job for Cosylab?)

# Archive Database Manager

- The ADBM will suggest the Keyword name <server>.<property> (good chance of being unique!)
- But: P3MagTempProxy.Temperature is rather clumsy.
- Better: let the Archive Viewer user see something easier to digest …

# Archive Database Manager

- Some targets need to be split into multiple keywords!
- Each can have its own tolerance and settings ...

# Archive Database Manager

- What is the *Volatile* filter ?
    - Not really a filter.  It's a flag.
    - Signal that a MCA keyword is
        - also associated with defunct entries with different channel names sequence ... OR
        - the live entry can suddenly have a different channel names sequence
    - e.g. someone just has to insert a new temperature sensor in the middle (or remove one).
- Best practice:
    - Instruct the ADBM to acquire more elements from an MCA property than are currently registered
        - The stored record is longer than in needs to be but there is some buffer room
        - Some server unfortunately return 'dimension error' when you do this ...
    - Add new devices/channels at the end of the array (then you won't need the *Volatile* flag)
- Is there a *Volatile* penalty?
    - Yes! The archive server has to do a lot more scanning of the data sets when this flag is set.
    - But ... the Archive Viewer user might not notice ...

# Archive Database Manager

- Please use the 'help' when you have 'how to' questions …