

TAKING ACCELERATOR'S REFERENCES

BCWG#13 – AUG. 31ST 2018

2 REFERENCE ?

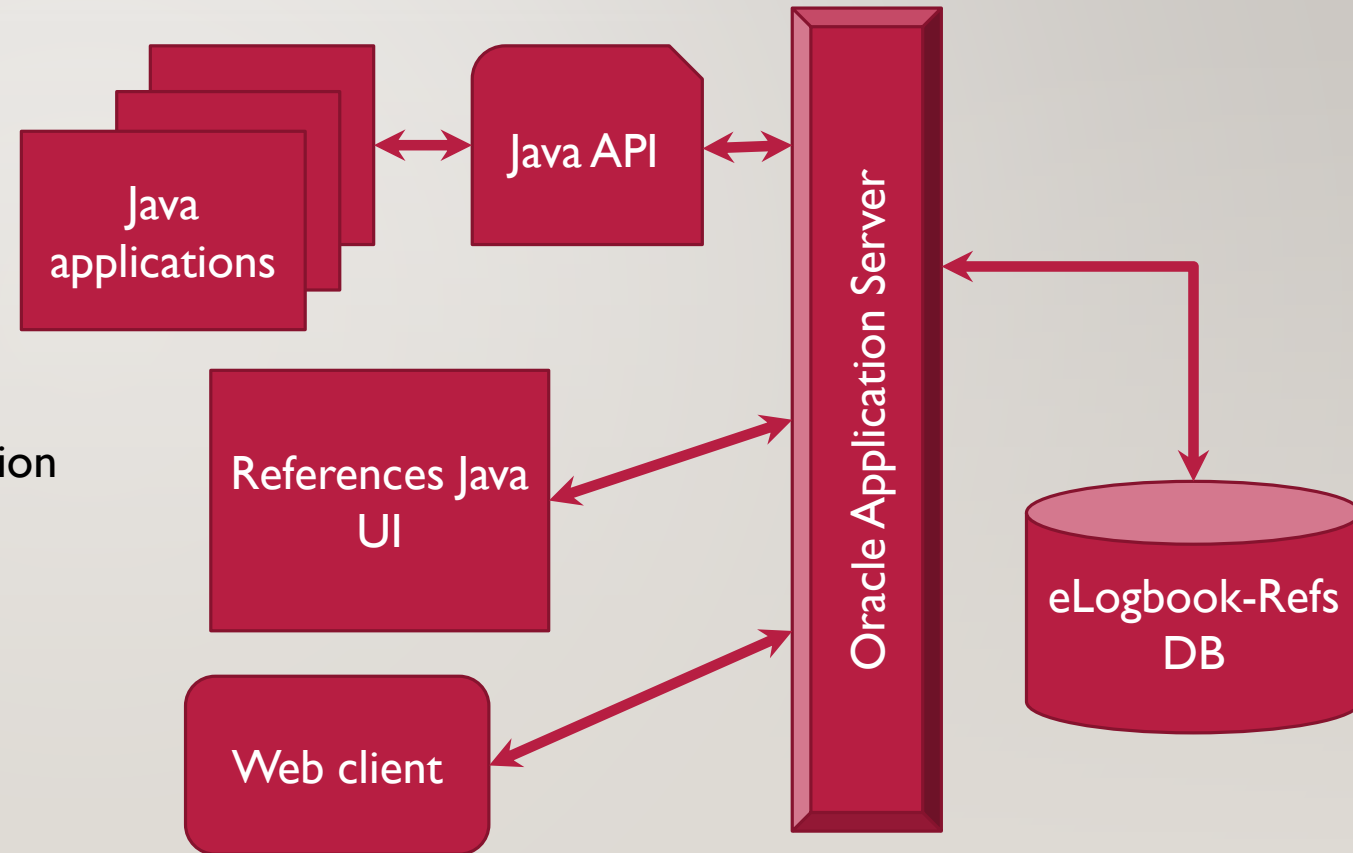
- Header
 - Beam characteristics (Particle type, optic, integer tune part, etc...)
 - TGM User Name
 - LSA/Inca context name
 - Etc...
- Data
 - Screenshots
 - Set of LSA/Inca settings
 - JAPC Acquired Parameter Values
 - Oasis signals
 - Extra type of data (Java object or external files?)
 - Tags/Keyword

3 REQUIREMENT

- Capture a set of relevant data
 - Grouped by beam specifications
 - Characterised with deterministic keywords
 - Timestamped
 - Support for multiple formats (java objects)
 - Simple Java-API that can be added to any application
 - Check-list to ensure all required data is present
- Ability to reload reference data
 - Directly from the application it has been taken
 - Immediate comparison with real-time

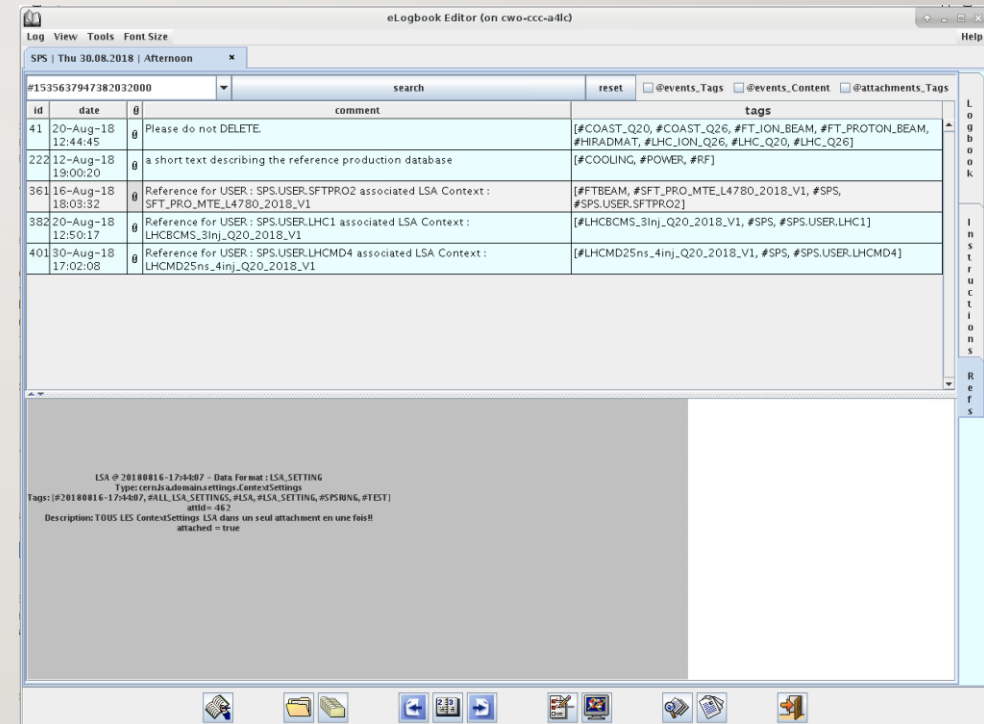
4 IMPLEMENTATION

- eLogbook-like infrastructure
 - Oracle database
 - Application server
 - Java client for API and browser tool (development ongoing)
 - Web page for browsing (implementation to come later)



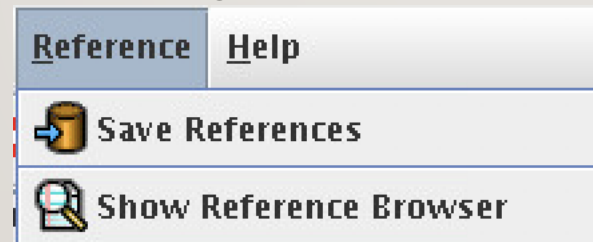
5 PRINCIPLE

- From eLogbook U.I.
 - One entry per reference
 - Header with beam definition and meta-data (to be completed)
 - Tags to ease identification and search process
 - Attachments linked to the reference
 - ANY kind of object
 - Tags



6 PRINCIPLE (II)

- From operational applications
 - A simple Java API with only 1 line of code “SpsReferencesApp.saveReference(…)”
 - Saving and tagging process included
 - Window for reference selection included
 - GUI components to integrate shall be available soon



7 PROJECT STATUS & PERSPECTIVES

- Works now
 - Saving mechanism and API are operational
 - Browsing available via eLogbook
 - Advanced java search methods for retrieving data available
- In progress
 - Generic U.I. for reference capture (screenshot, file import).
 - Checklist and reference completion tool
 - Tags definition AND requirement identification for checklist by accelerator

8 MORE?

- Web based solution for browsing and search
 - Study available technologies from eLogbook team
 - Spring rest, elastic search [etc...]
- Depending on previous progression, might move out from database driven solution.
- Offline accelerator data storage?

9 CONCLUSION

- Reference
 - Simple
 - Configurable
 - Supports multiple data format
- In progress
 - Storage solution available
 - More tools to come
 - Need feedback and return from experience

10 CONCLUSION (II)

- Need your input
 - Tags and checklist
 - Experience
 - New ideas?
- Thanks a lot to operators and EIC for their help and their work **DESPITE** their own workload and being on shift
 - J.C. Dumont
 - K. FuchsBerger
 - R. Maillet

THANK YOU FOR YOUR ATTENTION

IT'S ALMOST WEEK-END!

QUESTIONS



I3 F.A.Q

- Why this project does not use Logging / Timber?
 - Need to store pictures / files / Java object
 - Timber search is mostly timestamp driven -> no keyword / tags to help search
- Why not CO / NxCals?
 - NXCALS architecture would meet most of our requirement
 - Project not ready, data persistency was not guaranteed
 - CO would not commit into giving support before end of LS2
- Can I use python?
 - Web-based solution so, nothings opposes the use of any other language, but you'll have to do it yourself.