# TAKING ACCELERATOR'S REFERENCES

BCWG#13 - AUG. 31ST 2018

### 2 REFERENCE ?

#### • Header

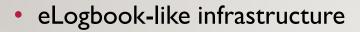
- Beam characteristics (Particle type, optic, integer tune part, etc...)
- TGM User Name
- LSA/Inca context name
- Etc...
- Data
  - Screenshots
  - Set of LSA/Inca settings
  - JAPC Acquired Parameter Values
  - Oasis signals
  - Extra type of data (Java object or external files?)
  - Tags/Keyword

## **3 REQUIREMENT**

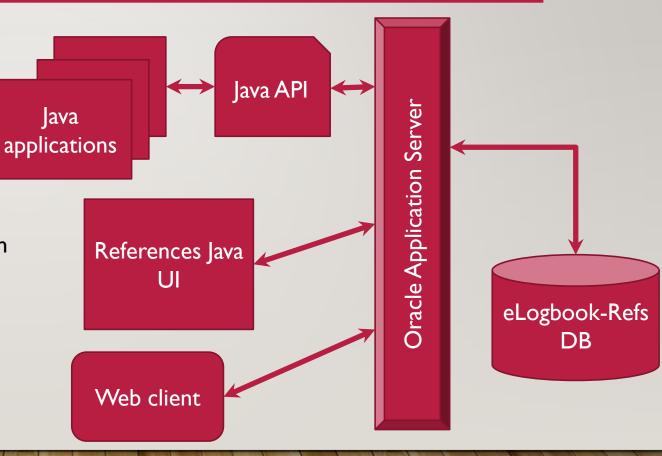
#### • Capture a set of relevant data

- 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



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



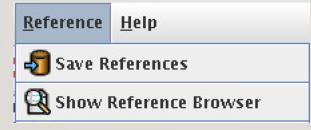
#### 5 PRINCIPLE

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

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### 6 PRINCIPLE (II)

- From operational applications
  - A simple Java API with only I 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

## **IO** 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.