NXCALS
API Status

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NXCALSL Teams

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Project Status & Wikis

- **Wiki with Epics**
  - [https://wikis.cern.ch/pages/viewpage.action?pageId=90724501](https://wikis.cern.ch/pages/viewpage.action?pageId=90724501)

- **Wiki with Project Q/A**
  - [https://wikis.cern.ch/pages/viewpage.action?pageId=109351564](https://wikis.cern.ch/pages/viewpage.action?pageId=109351564)

- **Recent CO3 Presentation with extended Q/A**
  - [https://indico.cern.ch/event/788781](https://indico.cern.ch/event/788781)
Project Work Packages

Status

WP1 (Core)
WP2 (Data Migration)
WP3 (API Backport)
WP4 (GUIs & Tools)
WP5 (Performance)

7 August 2019
WP 3 – CALS Extraction API Backport (In Progress)

• **Purpose:** minimize the impact on existing CALS user applications

• **Work foreseen:**
  – Adaptation of the old code, cleanup (done)
  – Old CALS API - 126 methods (in progress)
    • Meta-data (variables, filters, etc.) needed work on NXCALS first
    • Data (with Spark)
  – Timber Users & Groups
  – Timber Variable Lists & Snapshots
  – Derived Variables
  – BLM Contexts (dedicated BLM names for array extraction)
  – CALS command line interface

• Estimated to be **1 year of development (for 1 person)**

• **Progressive releases** planned for early adopters
  – Focusing on methods requested by the users
  – **First release in 3 weeks with 12+ basic methods**

*Required to phase-out CALS in 2020*
Methods Implemented

- getDataInTimeWindow
- getDataAlignedToTimestamps
- getDataInTimeWindowOrLastDataPriorToWindowWithinDefaultInterval
- getDataInTimeWindowOrLastDataPriorToWindowWithinUserInterval
- getVariableStatisticsOverMultipleVariablesInTimeWindow
- getLastDataPriorToTimestampWithinDefaultInterval
- getLastDataPriorToNowWithinDefaultInterval
- getLastDataPriorToNowWithinUserInterval
- getLastDataPriorToTimestampWithinUserInterval
- getNextDataAfterTimestampWithinDefaultInterval
- getNextDataAfterTimestampWithinUserInterval
Not Implemented Yet

- **Fills** & **BeamModes**
  - Waiting for NXCALS model & migration (in progress)
- **Fundamentals**
  - In the pipeline, NXCALS model & migration done
- **Meta-data search API** (Variables, etc)
  - In progress but needed to redesign some NXCALS APIs to clean up things, fix bugs & design flaws
  - Crucial for Variable searches
First Release?

• ASAP (planned for next week)
• But impacted by
  – Holidays
  – IT infrastructure upgrades (DBs & storage, Elastic, Hadoop servers, etc)
    • Need to constantly fix related issues
  – General support (CALS, NXCALS, TRACING)