# ACE

## A COOL Editor

ATLAS Level-1 Calorimeter Trigger Joint Meeting

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# Contents

ACE

# Current situation

- There are tools available that provide varying access to COOL.

  - KTIDBExplorer (Read-only access)

  - Various useful scripts are available to create and populate COOL folders e.g. testInitCool, initcalib, etc.

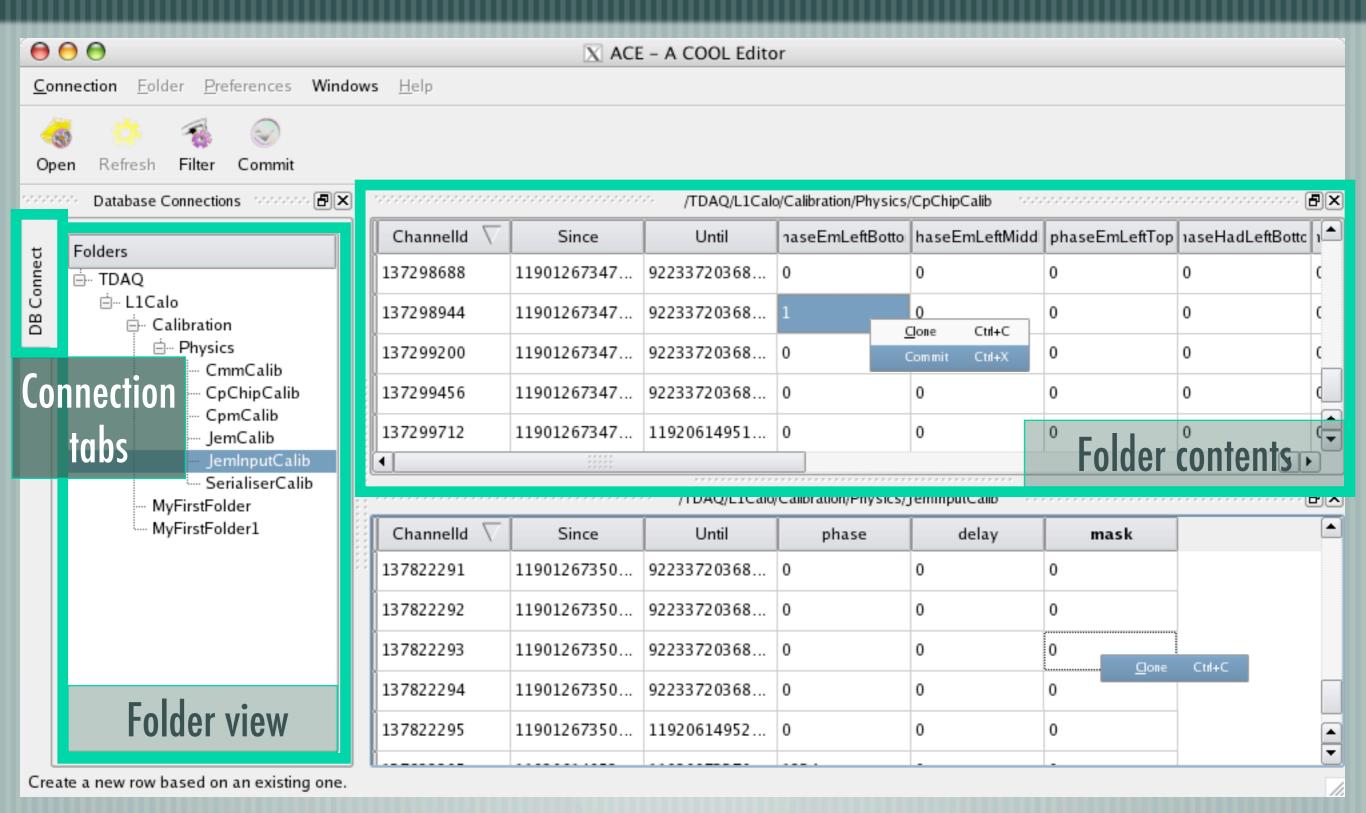- Ad-hoc modification of folder entries is tedious and error prone.

# Basic requirements

Browse existing COOL folders

Add new rows based on existing ones

Commit new rows to COOL

# A first look...

**ACE**



ACE – A COOL Editor

Connection    Folder    Preferences    Windows    Help

Open    Refresh    Filter    Commit

Database Connections

DB Connect

**Connection tabs**

**Folder view**

Folders
- TDAQ
  - L1Calo
    - Calibration
      - Physics
        - CmmCalib
        - CpChipCalib
        - CpmCalib
        - JemCalib
        - JemInputCalib
        - SerialiserCalib
  - MyFirstFolder
  - MyFirstFolder1

/TDAQ/L1Calo/Calibration/Physics/CpChipCalib

| ChannelId | Since | Until | haseEmLeftBotto | haseEmLeftMidd | phaseEmLeftTop | haseHadLeftBottc |
|-----------|-------|-------|------------------|-----------------|-----------------|-------------------|
| 137298688 | 11901267347... | 92233720368... | 0 | 0 | 0 | 0 |
| 137298944 | 11901267347... | 92233720368... | 1 | 0 | 0 | 0 |
| 137299200 | 11901267347... | 92233720368... | 0 | 0 | 0 | 0 |
| 137299456 | 11901267347... | 92233720368... | 0 | 0 | 0 | 0 |
| 137299712 | 11901267347... | 11920614951... | 0 | 0 | 0 | 0 |

Clone    Ctrl+C
Commit    Ctrl+X

**Folder contents**

/TDAQ/L1Calo/Calibration/Physics/JemInputCalib

| ChannelId | Since | Until | phase | delay | mask |
|-----------|-------|-------|-------|-------|------|
| 137822291 | 11901267350... | 92233720368... | 0 | 0 | 0 |
| 137822292 | 11901267350... | 92233720368... | 0 | 0 | 0 |
| 137822293 | 11901267350... | 92233720368... | 0 | 0 | 0 |
| 137822294 | 11901267350... | 92233720368... | 0 | 0 | 0 |
| 137822295 | 11901267350... | 11920614952... | 0 | 0 | 0 |

Clone    Ctrl+C

Create a new row based on an existing one.

# A first look...

- Very unpolished. Most buttons not activated yet.

- Connection string hard-coded at the moment!

- Only the essential browse, add and commit functions are ready.

# Features

Dedicated tab for separate COOL connections.

Tabulated folder contents including Channel Id, Since and Until fields.

Cloning of existing rows and commit to COOL when changes to new rows have been finalised.

Dockable windows for folder content tables and folder view.

# Software dependencies

ACE

COOL v2.1.1 and above

TDAQ-01-08-00 and above

modified qtExternal package from L1Calo software

Qt v4.3 and above

# Other requirements?

- Folder construction from
  - scratch
  - XML specification
- Lazy loading
- XML export
- Filter mechanisms

# Next steps

**Immediate term**

- Update ACE to build against TDAQ-01-08-03
- Enable all GUI buttons
- Remove hard-coded connection string

**Medium term**

- Polish GUI
- Lazy loading
- filter mechanisms