

New COOL Tag Browser Release 10

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What is COOL Tag browser

User friendly graphical user interface for COOL Database which allows users:

- Access COOL
- Browse through it
- Retrieve Data
- Retrieve Database structure
- Payload specifications
- And more

What is COOL

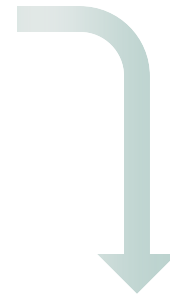
- API not Database
- COOL organizes data in folders, which each contain a set of data payload objects of the same type.
- Each object has an an interval of validity (IOV), defined by two endpoints, either run and luminosity block (LB) numbers, or absolute timestamps, which define the interval over which the object is considered valid.
- Folders are organized into foldersets in a tree or filesystem directory-like structure -foldersets (branch nodes) can contain a mixture of other foldersets and folders (leaf nodes) that contain the actual data. The root node of the tree is the folderset '/' and all other nodes descend from it. Each folder also has a folder description string associated to it, which in ATLAS is used to store meta-data about the folder, in particular how the data will be interpreted in Athena.

Cool CherryPy

Cool CherryPy is a web service for accessing the Cool db. It can retrieve and insert data, using xml as the format.

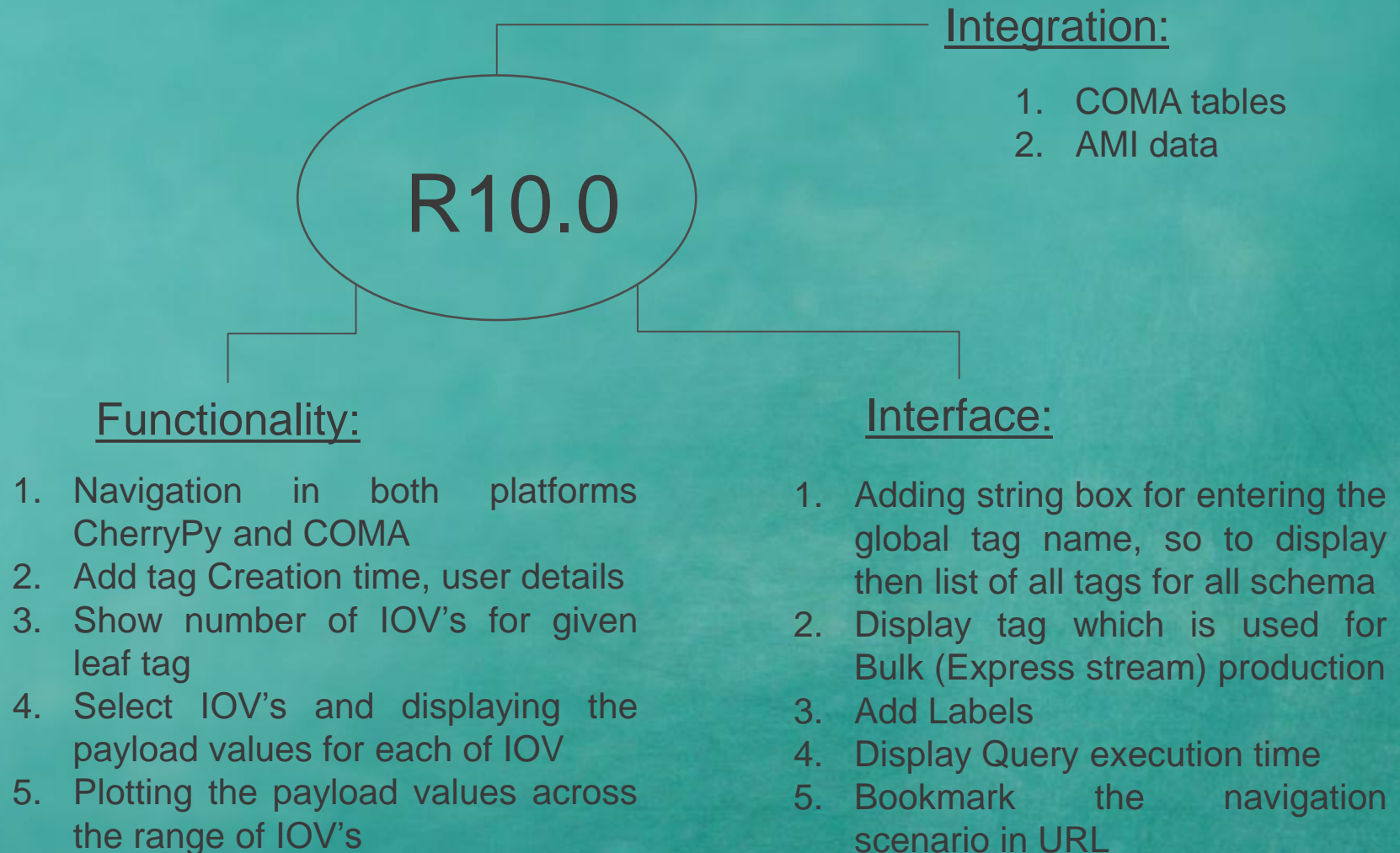
The interface methods are callable directly from a URL.

 voatlas256.cern.ch:8000/cooldb/ATLAS_COOLPROD/ATLAS_COOLOFL_CALO/



```
- <dbnameList server="ATLAS_COOLPROD" schema="ATLAS_COOLOFL_CALO">  
  <dbname>COMP200</dbname>  
  <dbname>OFLP200</dbname>  
</dbnameList>
```

New Features In COOL Tag Browser



COMA - ConditionsMetadata

Relational Database which includes Conditions and Configuration Metadata from COOL

Advantages:

- Integration with other DB's (AMI, TAG Catalog, TAG DB)
- performance

Coma Integration In Browser

switcher



The screenshot shows a web browser interface with a top navigation bar containing icons for 'COMA', 'COOL', 'Diff', 'Trace', 'B.Trace', 'Bookmark', 'Home', 'Contact', and 'About'. The 'COMA' and 'COOL' icons are highlighted with a red box. Below the navigation bar is a browser address bar with the URL 'ATLAS_COOLPROD ATLAS_COOLOFL_CALO COMP200 CALO/Ofi/HadCalibration2/CaloJetEnergyScale'. The main content area is divided into three columns: 'SCHEMA / DB', 'TAG', and 'DETAILS'. The 'SCHEMA / DB' column shows a tree view of database schemas under 'CALO', including 'COMP200', 'CALO', 'CALO/Ofi', 'CALO/Ofi/HadCalibration2', 'CALO/Ofi/HadCalibration2/CaloJetEnergyScale', 'CALO/Ofi/JetCalib', 'CALO/Ofi/JetCalib/EtaMassEnergyCorr', 'CALO/Ofi/JetCalib/JetPropertyInvertResponseTool', 'CALO/Ofi/JetCalib/MCNumInversionResponse', 'CALO/Ofi/JetCalib/OffsetCorrection', 'CALO/Ofi/JetCalib/TrackAngularCorrection', 'CALO/Ofi/JetCalib/TrackBasedResponseCorrection', 'CALO/Ofi/Noise', 'CALO/Ofi/Noise/CellNoise', 'CALO/Ofi/Noise/PileUpNoiseLumi', 'CALO/Ofi/Pedestal', and 'CALO/Ofi/Pedestal/CellPedestal'. The 'TAG' column has a search box and a search button. The 'DETAILS' column shows a list of tables, including 'CALOOfiHadCalibration2CaloJetEnergyScale-GEO08-QGSP-BERT' and 'CaloOfiHadJESCon2-GEO16-QGSP-BERT', each with a lock icon and a checkbox.

Global tag search

String box for Search

The screenshot shows the Tag Browser R10.0 interface. At the top, there is a toolbar with icons for COMA, COOL, Diff, Trace, B.Trace, Bookmark, Home, Contact, and About. The main window is divided into three panes: SCHEMA / DB, TAG, and DETAILS. The TAG pane shows a search for 'CALO' with a search button. The SCHEMA / DB pane shows a tree view of the database structure. The DETAILS pane shows the details of the selected tag, including its hierarchy and insertion time.

Search Result

Parameter:	Schema	Instance	Folder	Tag Name
COOLONL	CALO	COMP200	/CALO/Identifier	CALOIdentifierCaloTTONOffIdMapAtlas-0000
COOLONL	CALO	COMP200	/CALO/JetCalib/NumInvAntiKt4Topo	CALONoisePileUpNoiseLumi-mu8
COOLONL	CALO	COMP200	/CALO/JetCalib/NumInvAntiKt4Tower	CALONoisePileUpNoiseLumi-mu0
COOLONL	CALO	COMP200	/CALO/JetCalib/NumInvAntiKt6H1Topo	CALONoisePileUpNoiseLumi-1DD1-00
COOLONL	CALO	COMP200	/CALO/JetCalib/NumInvAntiKt6H1Tower	
COOLONL	CALO	COMP200	/CALO/JetCalib/NumInvKt6Topo	
COOLONL	CALO	OFLP200	/CALO/JetCalib/NumInvCone4H1Topo	
COOLONL	CALO	OFLP200	/CALO/JetCalib/NumInvCone4Topo	
COOLONL	CALO	OFLP200	/CALO/JetCalib/NumInvKt4H1Tower	
COOLONL	CALO	OFLP200	/CALO/JetCalib/NumInvKt4Tower	
COOLONL	CALO	COMP200	/CALO/Noise/PileUpNoiseLumi	
COOLONL	CALO	COMP200	/CALO/Noise/PileUpNoiseLumi	
COOLONL	CALO	COMP200	/CALO/Noise/PileUpNoiseLumi	

Search Result Window

Bulk production Tags

The screenshot shows the Tag Browser R10.0 interface. At the top, there are navigation icons for COMA, COOL, Diff, Trace, B.Trace, Bookmark, Home, Contact, and About. The main interface is divided into three panels: SCHEMA / DB, TAG, and DETAILS. The SCHEMA / DB panel shows a tree view of schemas, with COMP200 and OFPL200 expanded. The TAG panel shows a list of tags, with two tags selected: CALOOfJetCalib-01-01-01 and CALOOfJetCalib-01-09. The DETAILS panel shows a hierarchy of tags, including CALOOfJetCalib, CALOOfJetCalib/EtaMassEnergyCorr, CALOOfJetCalib/JetPropertyInvertResponseTool, CALOOfJetCalib/MCNumInversionResponse, CALOOfJetCalib/OffsetCorrection, CALOOfJetCalib/TrackAngularCorrection, and CALOOfJetCalib/TrackBasedResponseCorrection. At the bottom, there is a status bar with the following information: 3247.00 ms 1111.00 ms, Current : COMCOND-BLKPA-006-05, CurrentES : COMCOND-ES1PA-006-04, Next : COMCOND-BLKPA-006-06, and NextES : COMCOND-ES1PA-006-05. A red arrow points to the CurrentES value.

Tag BROWSER R10.0

ATLAS_COOLPROD ATLAS_COOLOFL_CALO COMP200 CALOOfJetCalib

SCHEMA / DB TAG Search DETAILS

OFFLINE CALO

COMP200

- CALO
- CALO/Of
- CALO/Of/HadCalibration2
- CALO/Of/HadCalibration2
- CALO/Of/JetCalib
- CALO/Of/JetCalib/EtaMassEnergyCorr
- CALO/Of/JetCalib
- /JetPropertyInvertResponseTool
- CALO/Of/JetCalib
- /MCNumInversionResponse
- CALO/Of/JetCalib/OffsetCorrection
- CALO/Of/JetCalib
- /TrackAngularCorrection
- CALO/Of/JetCalib
- /TrackBasedResponseCorrection
- CALO/Of/Noise
- CALO/Of/Noise/CellNoise
- CALO/Of/Noise/PileUpNoiseLumi
- CALO/Of/Pedestal
- CALO/Of/Pedestal/CellPedestal

OFPL200

CALOOfJetCalib-01-01-01

CALOOfJetCalib-01-09

Hierarchy:

- CALO/Of/JetCalib/CALOOfJetCalib-01-01-01
- CALO/Of/JetCalib/EtaMassEnergyCorr/CALOOfJetCalibEtaMassEnergyCorr-1-1-1
- CALO/Of/JetCalib/JetPropertyInvertResponseTool/CALOOfJetCalibJetPropertyInvertResponseTool-2011
- CALO/Of/JetCalib/MCNumInversionResponse/CALOOfJetCalibMCNumInversionResponse-2011
- CALO/Of/JetCalib/OffsetCorrection/CALOOfJetCalibOffsetCorrection-2011
- CALO/Of/JetCalib/TrackAngularCorrection/CALOOfJetCalibTrackAngularCorrection-2011
- CALO/Of/JetCalib/TrackBasedResponseCorrection
- CALOOfJetCalibTrackBasedResponseCorrection-2011

3247.00 ms 1111.00 ms

Current : COMCOND-BLKPA-006-05
CurrentES : COMCOND-ES1PA-006-04
Next : COMCOND-BLKPA-006-06
NextES : COMCOND-ES1PA-006-05

Label for Displaying tag which is used for Bulk (Express stream) production

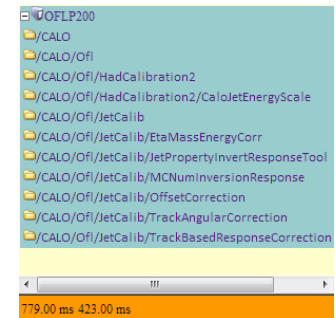
Some minor features

- Button to bookmark the navigation scenario in URL

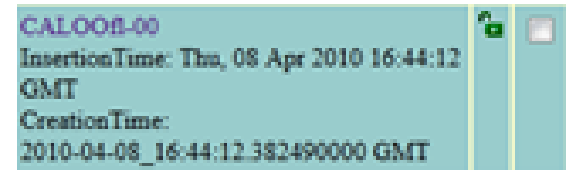
Copy to URL:

CALO/Ofi/HadCalibration2/CaloJetEnergyScale&surtag= &

- Label for query execution time for every and previous request for comparison.



- Browser displays Tag Creation time. users also wanted user details but we don't have any sources, so it's impossible.



Next Steps

1. Show number of IOV's for given leaf tag
2. Select IOV's and displaying the payload values for each of IOV
3. Plotting the payload values across the range of IOV's
4. Integration AMI

Thank You For Attention!