

ATLAS SW WEEK, CERN 26 FEBRUARY, 2014

Cool Tag Browser status and developments

Lasha SHARMAZANASHVILI
Georgian Team

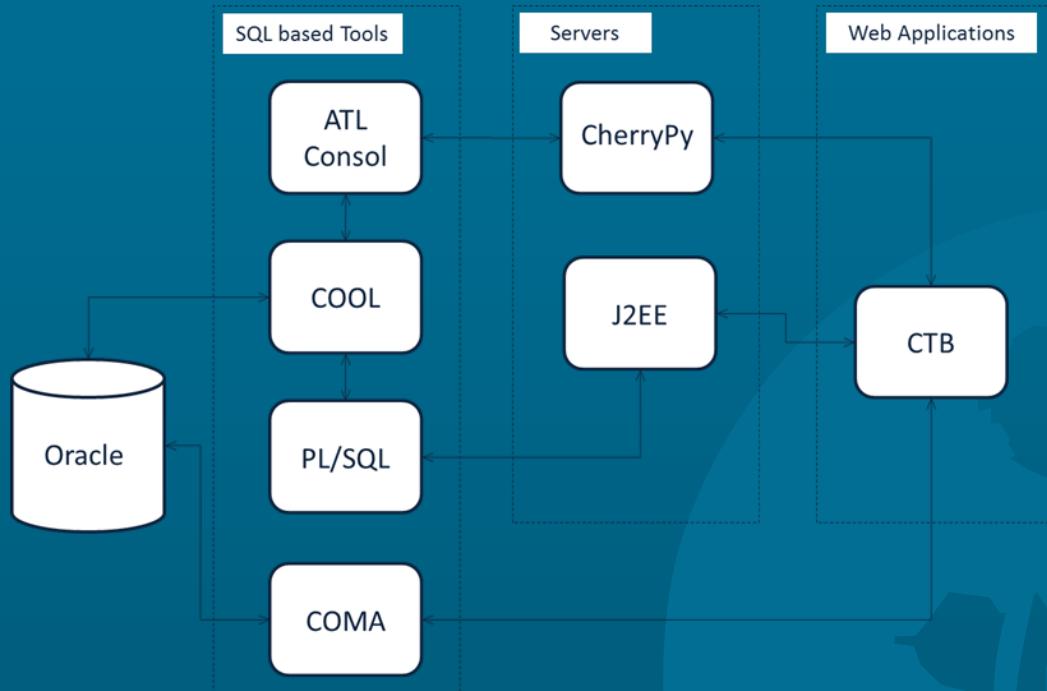
<http://www.cadcam.ge>



Basic Functionality

- Cool Tag Browser (CTB) is Python/Php/JavaScript based web read-only application for:
 1. Navigation through the COOL nodes
 2. COOL data retrieval and visualization
 3. Search
 4. IOV's statistics check
 5. Channels visualization
 6. Payload interpretation

Basic Sources

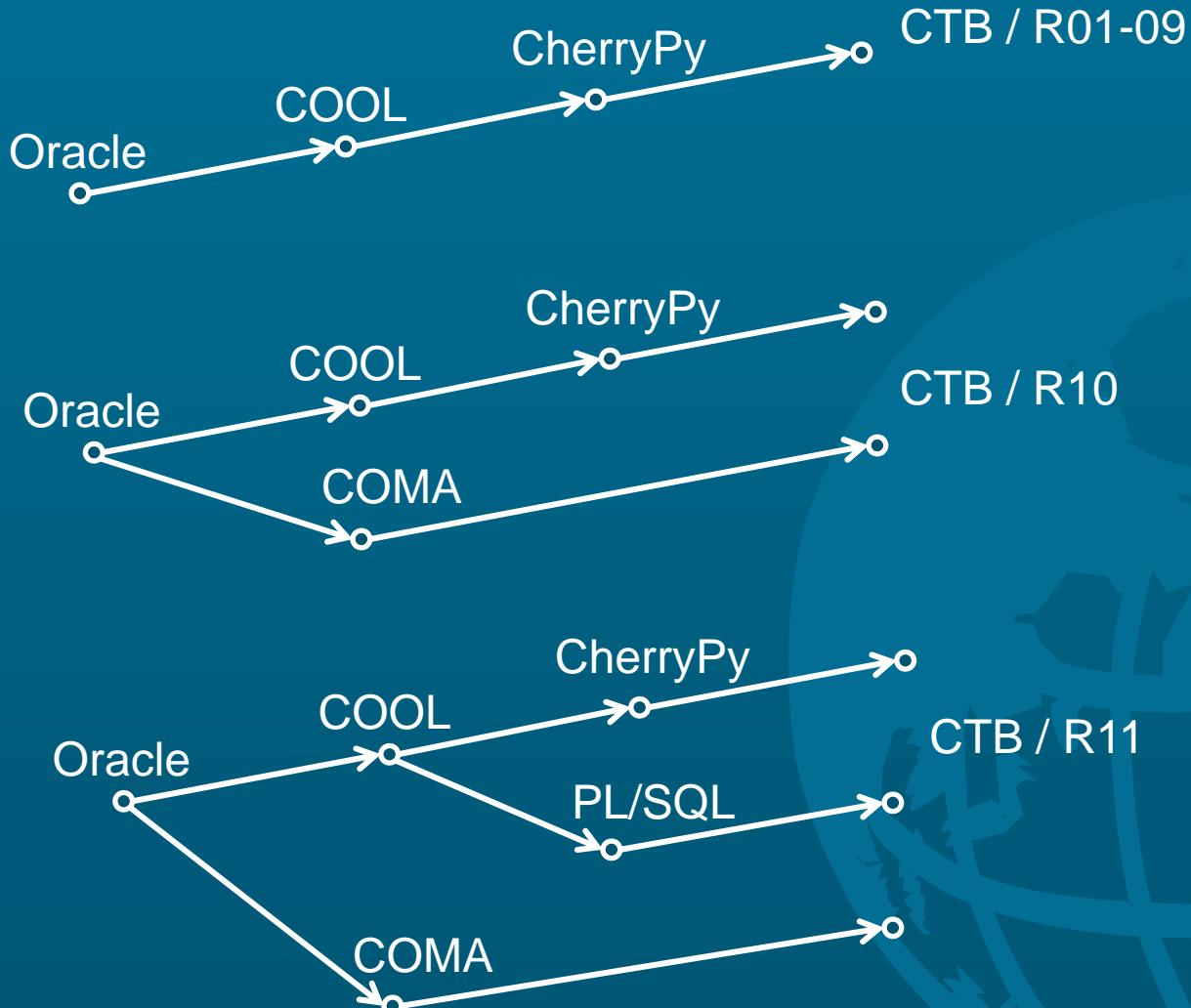


CherryPyCool – Python based RESTfull web service
{GET, PUT, POST HTTP} methods

COMA– Daily updated subset of Oracle tables
{SQL query} method

PL/SQL – Java based RESTfull web service
{GET, PUT, POST HTTP} methods

CTB Evolution



Integration Tasks

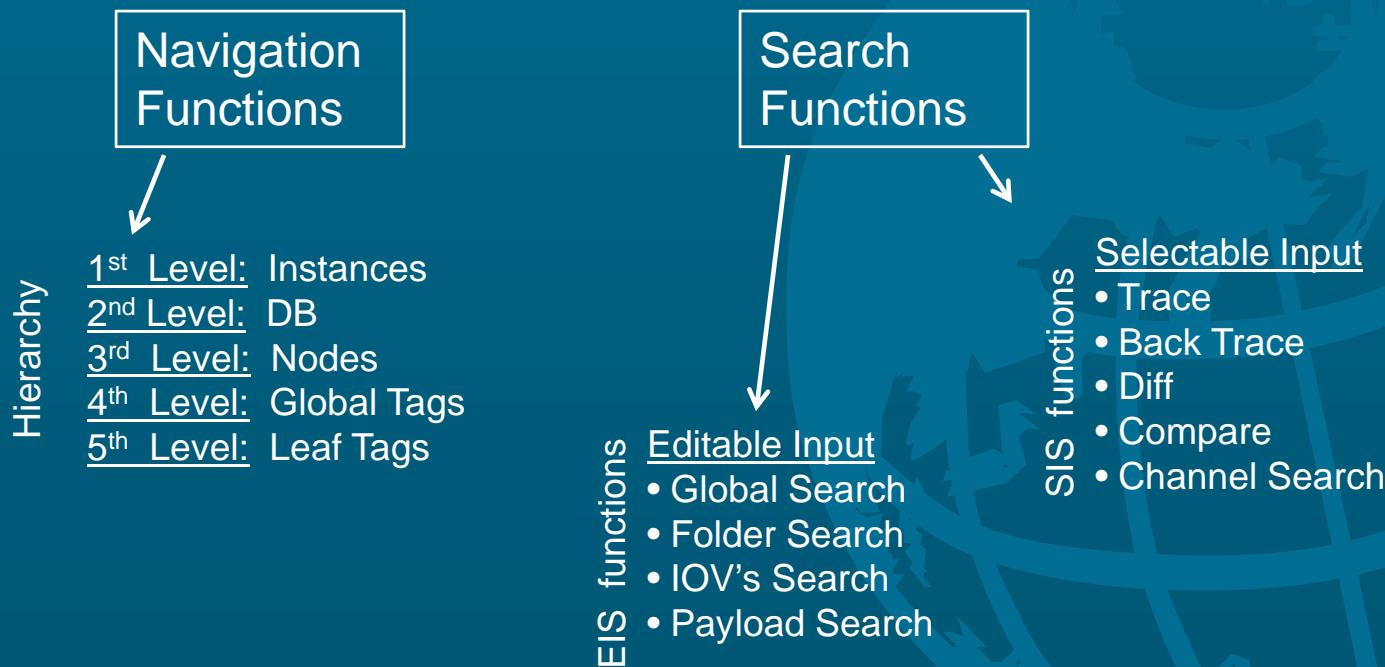
- CTB R11 integrates all 3 main sources – CherryPy, COMA, PL/SQL
- 2 most important subjects to be solved for successful integration, are:
 1. Synchronization issue
 2. Decide which source should be implemented for what



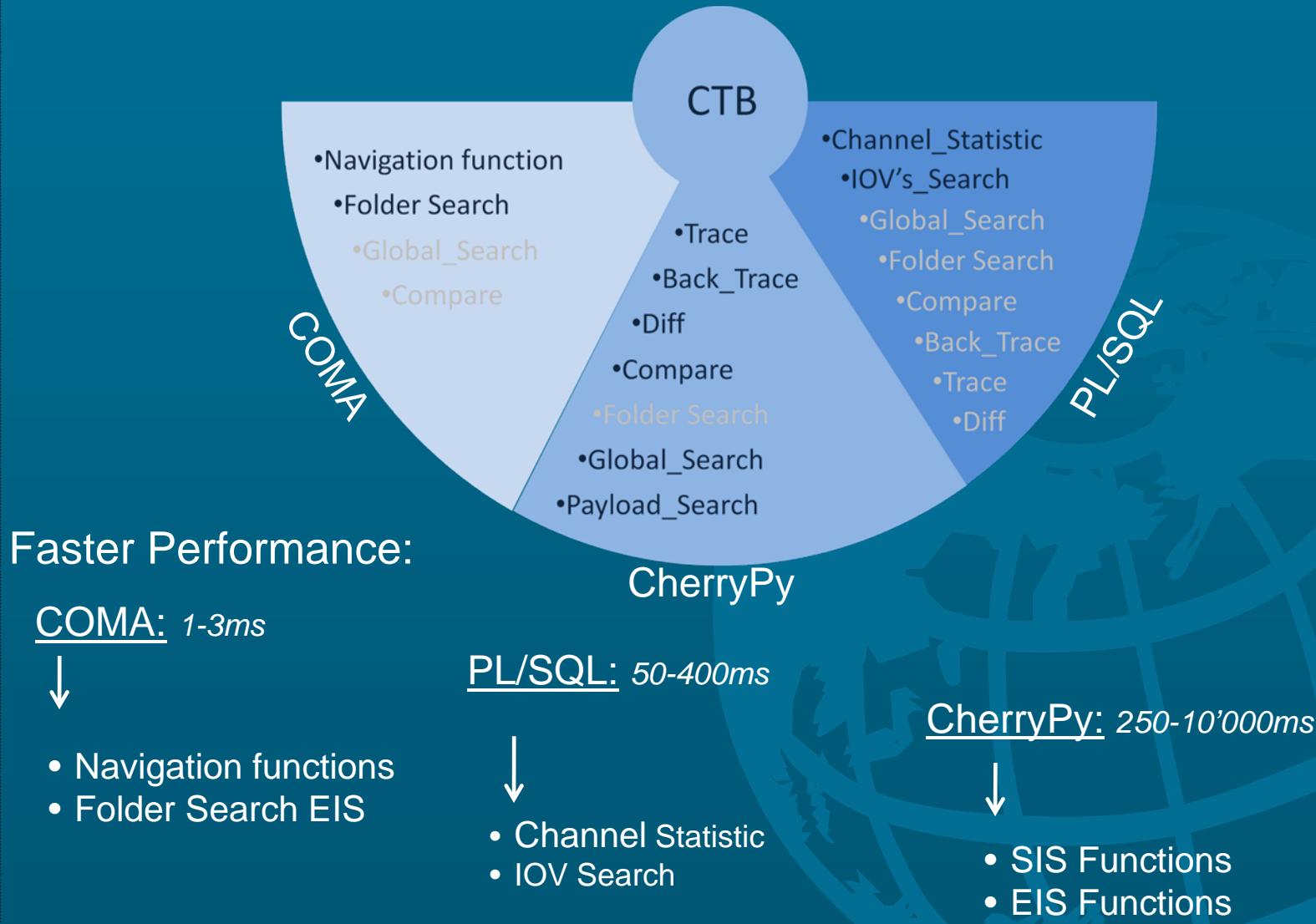
Development of clear concept

CTB R11 Concept

- CTB R11 architecture consists of 5 Php modules executing on the server and 8 JavaScript modules executing locally
- Php modules contain 2 categories of functions:



Distribution of Functions



CTB R11 Concept

User interface functions based on JavaScript enable functionalities for:

- Parsing XML/JEISON data from servers
- Bookmarking current navigation scenario into a URL
- Showing navigation path in a status string
- Displaying job execution time to estimate system performance
- Filtering of large tag list in a given folder
- Displaying names of special Global Tags – Current, CurrentES, Next and NextES.

CTB R11 Interface

Dynamical Navigation Menu

ONLINE ●
OFFLINE ●

CALO	COMP200	/CALO	CALO-COM-003-00	CALO-COM-004-00	CALO-COM-005-00	CALO-COM-006-00	CALO-COM-007-00	CALO-COM-008-00	CALO-COM-009-00	CALO-COM-010-00	CALO-COM-011-00	CALO-COM-012-00	CALO-COM-013-00	CALO-COM-017-00	CALO-COM-018-00	CALO-COM-019-00	CALO-COM-020-00	CALO-COM-021-00	CALO-COM-022-00
CSC	OFLP200	/CALO/Ofl	CALO-COM-004-00	CALO-COM-004-00	CALO-COM-005-00	CALO-COM-006-00	CALO-COM-007-00	CALO-COM-008-00	CALO-COM-009-00	CALO-COM-010-00	CALO-COM-011-00	CALO-COM-012-00	CALO-COM-013-00	CALO-COM-017-00	CALO-COM-018-00	CALO-COM-019-00	CALO-COM-020-00	CALO-COM-021-00	CALO-COM-022-00
DCS		/CALO/Ofl/HadCalibration2																	
FWD		/CALO/Ofl/HadCalibration2/CaloJetEn...																	
GLOBAL		/CALO/Ofl/Noise																	
INDET		/CALO/Ofl/Noise/CellNoise																	
LAR		/CALO/Ofl/Pedestal																	
MDT		/CALO/Ofl/Pedestal/CellPedestal																	
MUONALIGN		/CALO/Ofl/Noise/PileUpNoiseLumi																	
PIXEL		/CALO/Ofl/JetCalib																	
RPC		/CALO/Ofl/JetCalib/EtaMassEnergyCor...																	
SCT		/CALO/Ofl/JetCalib/JetPropertyInver...																	
TGC		/CALO/Ofl/JetCalib/MCNumInversionRe...																	
TILE		/CALO/Ofl/JetCalib/Offset_Correction																	
TRIGGER		/CALO/Ofl/JetCalib/TrackAngularCorr...																	
TRT		/CALO/Ofl/JetCalib/TrackBasedRespon...																	

Triangular markers
notify is there
something inside or not

Open Pandora with single Click

SIS / EIS functions Results

The diagram illustrates the flow of data from the COMA interface through several processing components:

- COMA**: The starting point, shown as a blue box containing a list of modules: CALO, CSC, DCS, FWD, GLOBAL, INDET, LAR, MDT, MUONALIGN, PIXEL, RPC, SCT, TGC, and TILE.
- CherryPy**: Represented by three blue boxes. One is associated with the **General** section of the COMA interface, which displays details like Name: CALOOflNoisePileUpNoiseLumi-mu30, DataBase: COMP200, Schema: CALO, and Folder: /CALO/Ofl/Noise/PileUpNoiseLumi. Another CherryPy box is associated with the **Trace** section, showing a trace path from /CALO/Ofl/Noise/PileUpNoiseLumi to /CALO/Ofl/NoisePileUpNoiseLumi-mu30. A third CherryPy box is associated with the **BackTrace** section, showing a backtrace path from CALOOflNoisePileUpNoiseLumi-mu30 up to COMCOND-BLKPA-006-12.
- PL/SQL**: Represented by a blue box associated with the **Channels** section of the COMA interface, which lists Channel ID: 0, Type: run-lumi, Number: 1, Minimum: , Since: 0, Until: 9223372036854775807, Maximum: , Since: 0, Until: Inf, Hole: 0, and Channel ID: 1, Type: run-lumi, Number: 1, Minimum: , Since: 0, Until: 9223372036854775807, Maximum: .
- CherryPy**: Represented by a blue box associated with the **Active Tag's** section of the COMA interface, which lists Current: COMCOND-BLKPA-RUN1-03, CurrentES: COMCOND-ES1PA-006-05, and Next: COMCOND-BLKPA-RUN1-04.

CTB R11 Configuration

Draft folder:

<https://atlas-coolbrowser.web.cern.ch/atlas-coolbrowser/R11/>

- This is not evolution of R10 code but completely new
- 1'700 program strings in 8 .js modules

Thank You,

All comments are welcomed

Lasha @ Georgian Team

Lasha.Sharmazanashvili@cern.ch