



Archiving Status

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Some figures

- **Accelerator (ORACLE DB):**
 - **HDB:** 14343 attributes
 - **TDB:** 8473 attributes
 - **SNAP:** 22 contexts of 180 attributes, 17252 snapshots
 - Became critical for Accelerator operation
- **Beamlines:**
 - **HDB (ORACLE):** 10 up to 450 attributes / beamline, used on all beamlines
 - **SNAP (MYSQL):**
 - Seldom use on most lines
 - Became critical for PX1/PX2

The Soleil DataBase Administrator diagnose application

Dernière analyse

HDB : 16/5/2013 13:20
TDB : 16/5/2013 13:33

Archivage HDB

32 KO sur 14379 [détail](#)

Archivage DCL

39 KO sur 3783 [détail](#)

Base DEGRAD

Last synchro OK
il y a 2.07 Heures.

Archivage TDB

AIDE

WatcherFiles

6 KO sur 8473

[Détail](#)

WatcherDB

6 KO sur 8473

[Détail](#)

JOB LOAD_DATA

JOBNAME	DUREE	TIME	status
LOAD_DATA3	07,45	16/05/2013 11:59:45	SUCCEEDED
LOAD_DATA4	03,06	16/05/2013 12:11:46	SUCCEEDED
LOAD_DATA5	03,05	16/05/2013 12:23:46	SUCCEEDED
LOAD_DATA6	03,22	16/05/2013 12:35:46	SUCCEEDED
LOAD_DATA7	03,18	16/05/2013 12:47:46	SUCCEEDED
LOAD_DATA8	03,14	16/05/2013 12:59:46	SUCCEEDED
LOAD_DATA9	04,55	16/05/2013 13:11:46	SUCCEEDED
LOAD_DATA0	03,58	16/05/2013 13:23:45	SUCCEEDED
LOAD_DATA1	03,19	16/05/2013 13:35:45	SUCCEEDED
LOAD_DATA2	02,33	16/05/2013 13:47:45	SUCCEEDED

Table Files

files0	9
files1	170
files2	2
files3	123
files4	93
files5	78
files6	47
files7	40
files8	36
files9	17

Partitions

P130515 : 5282
P130516 : 5282
P130517 : 5282

Taille Base de données

DGHDBDATA: 4186.88/6080.66 Go. (68.86%).
DGHDBREDO: 18.1/ 366.76 Go. (4.94%).
DGTDBDATA: 2120.68/3515.05 Go. (60.33%).
DGTDBREDO: 1.23/ 366.76 Go. (.33%).

Espace disque

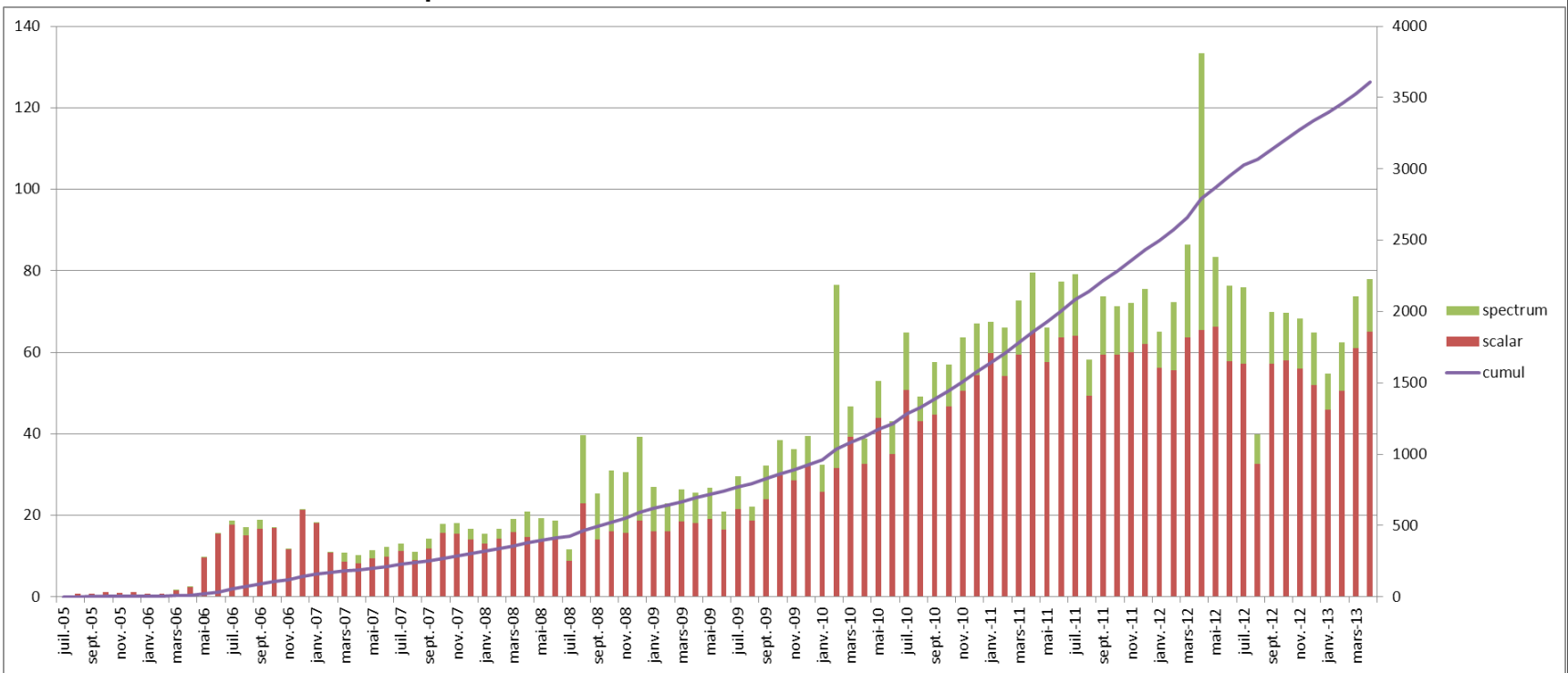
BACKUP : 50%
CALLIOPE : 57%
EUTERPE : 58%
TDBARCHIVER: 58%
THALIE : 55%

Database size (Accelerator HDB)

From 2005 until today

Today is 3.6TB

~ 60 → 80GB / per month



Accelerator Running Devices

bradley (Archvage HDB) Control

Start New Start All Stop All Display All

59 Controlled Servers on bradley

- Level 1
 - ds_CompactPCICrate/bradley
 - HdbArchiver/01
 - HdbArchiver/02
 - HdbArchiver/03
 - HdbArchiver/04
 - HdbArchiver/05
 - HdbArchiver/06
 - HdbArchiver/07
 - HdbArchiver/08
 - HdbArchiver/09
 - HdbArchiver/10
 - HdbArchiver/11
 - HdbArchiver/CIG1
 - HdbArchiver/CIG2
 - HdbArchiver/MON1
- Level 2
 - HdbArchiver/12
 - HdbArchiver/13
 - HdbArchiver/14
 - HdbArchiver/15
 - HdbArchiver/16
 - HdbArchiver/17
 - HdbArchiver/18
 - HdbArchiver/19
 - HdbArchiver/20
 - HdbArchiver/21
 - HdbArchiver/22
 - HdbArchiver/23
 - HdbArchiver/24
 - HdbArchiver/25
- Level 3
 - HdbArchiver/26
 - HdbArchiver/27
 - HdbArchiver/28
 - HdbArchiver/29
 - HdbArchiver/30
 - HdbArchiver/31
 - HdbArchiver/32
 - HdbArchiver/33
 - HdbArchiver/34
 - HdbArchiver/35
 - HdbArchiver/36
 - HdbArchiver/37
 - HdbArchiver/38
 - HdbArchiver/39
- Level 4
 - HdbArchiver/40
 - HdbArchiver/41
 - HdbArchiver/42
 - HdbArchiver/43
 - HdbArchiver/44
 - HdbArchiver/45
 - HdbArchiver/46
 - HdbArchiver/47
 - HdbArchiver/48
 - HdbArchiver/49
 - HdbArchiver/50
 - HdbArchiver/51
- Level 5
 - ArchivingManager/1
 - HdbArchivingWatcher/1
 - HdbExtractor/1
 - HdbExtractor/2

270 HDBArchiver devices

Dismiss

aho (Archiving TDB (archiver 1-20)) Control

Start New Start All Stop All Display All

21 Controlled Servers on aho

- Level 1
 - ds_CompactPCICrate/aho
- Level 2
 - TdbArchiver/001
 - TdbArchiver/002
 - TdbArchiver/003
 - TdbArchiver/004
 - TdbArchiver/005
 - TdbArchiver/006
 - TdbArchiver/007
 - TdbArchiver/008
 - TdbArchiver/009
 - TdbArchiver/010
- Level 3
 - TdbArchiver/011
 - TdbArchiver/012
 - TdbArchiver/013
 - TdbArchiver/014
 - TdbArchiver/015
 - TdbArchiver/016
 - TdbArchiver/017
 - TdbArchiver/018
 - TdbArchiver/019
 - TdbArchiver/020

gernelle (Archiving TDB (archiver 41-60) - TDB Watcher & Extracto

Start New Start All Stop All Display All

28 Controlled Servers on gernelle

- Level 1
 - ds_CompactPCICrate/gernelle
- Level 2
 - TdbArchiver/041
 - TdbArchiver/042
 - TdbArchiver/043
 - TdbArchiver/044
 - TdbArchiver/045
 - TdbArchiver/046
 - TdbArchiver/047
 - TdbArchiver/048
 - TdbArchiver/049
 - TdbArchiver/050
- Level 3
 - TdbArchiver/051
 - TdbArchiver/052
 - TdbArchiver/053
 - TdbArchiver/054
 - TdbArchiver/055
 - TdbArchiver/056
 - TdbArchiver/057
 - TdbArchiver/058
 - TdbArchiver/059
 - TdbArchiver/060
- Level 4
 - TdbArchivingWatcher/1
- Level 5
 - TdbExtractor/1
 - TdbExtractor/2
 - TdbExtractor/3
 - TdbExtractor/4
 - TdbExtractor/5
 - TdbExtractor/6

300 TDBArchiver devices

Dismiss

Joy (Archiving TDB (archiver 21-40)) Control

Start New Start All Stop All Display All

21 Controlled Servers on joy

- Level 1
 - ds_CompactPCICrate/joy
- Level 2
 - TdbArchiver/021
 - TdbArchiver/022
 - TdbArchiver/023
 - TdbArchiver/024
 - TdbArchiver/025
 - TdbArchiver/026
 - TdbArchiver/027
 - TdbArchiver/028
 - TdbArchiver/029
 - TdbArchiver/030
- Level 3
 - TdbArchiver/031
 - TdbArchiver/032
 - TdbArchiver/033
 - TdbArchiver/034
 - TdbArchiver/035
 - TdbArchiver/036
 - TdbArchiver/037
 - TdbArchiver/038
 - TdbArchiver/039
 - TdbArchiver/040

Not Controlled

Dismiss

Beamlines Running devices

The screenshot shows the Jive 4.28 (Read Only) interface. The window title is "Jive 4.28 (Read Only) [tangodb:20001,tangodb:20002]". The menu bar includes "File", "Edit", "Tools", and "Filter". Below the menu bar, there is a status bar indicating "Read only mode (No write access to database allowed)".

The main area is divided into two panes. The left pane shows a tree view of devices under the "Server" tab. The tree view is organized as follows:

- Server
 - ds_TurboPump
 - ds_VacuumInterlockViewer
 - ds_VacuumThermocouple
 - ds_VacuumValve
 - ds_WaterFlowMeter
 - ds_XbpmBeamLine
 - ds_XPAD
 - EnumeratedAttribute
 - EnumeratedCommand
 - HdbArchiver
 - 01
 - HdbArchiver
 - archiving/hdb/hdbarchiver.01_01
 - archiving/hdb/hdbarchiver.01_02
 - archiving/hdb/hdbarchiver.01_03
 - archiving/hdb/hdbarchiver.01_04
 - archiving/hdb/hdbarchiver.01_05
 - HdbArchivingWatcher
 - HdbExtractor
 - MicrodiffDS
 - Publisher
 - PX1CollectServer
 - PX1LoggingServer
 - SnapArchiver

The right pane is empty, with a "Refresh" button at the bottom. A text box in the center of the right pane reads:

**5 HDBArchiver
devices
per beamline**

Last Evolutions

- Use Comete Chart V2 in Mambo and Bensikin

The screenshot displays the Mambo v2.5.3-SNAPSHOT interface. On the left, the 'Archiving configuration' panel shows a tree view of data sources under 'calypso:20001', including 'tango' and 'tangotest'. The 'View configuration' panel on the right shows the 'HDB global test' configuration, including a table of variables and their modes.

Mode	Variable	in AC
Periodic	Period	10s

The main area features a 'Number and Boolean Scalars' chart. A red dashed box highlights a warning message: **Warning: too many points in views. Sampling used**. The chart displays data for various series over time, with a legend at the bottom identifying series like 'tango/tangotest/1/ampli/write (Y1)'. The time range is set from 2013-04-16 to 2013-05-16.

At the bottom of the window, a status bar shows the message: '16-05-13 15:58:27.820 - INFO: extract from DB for tango/tangotest/1/uchar_spectrum_ro took: 2640 ms'.

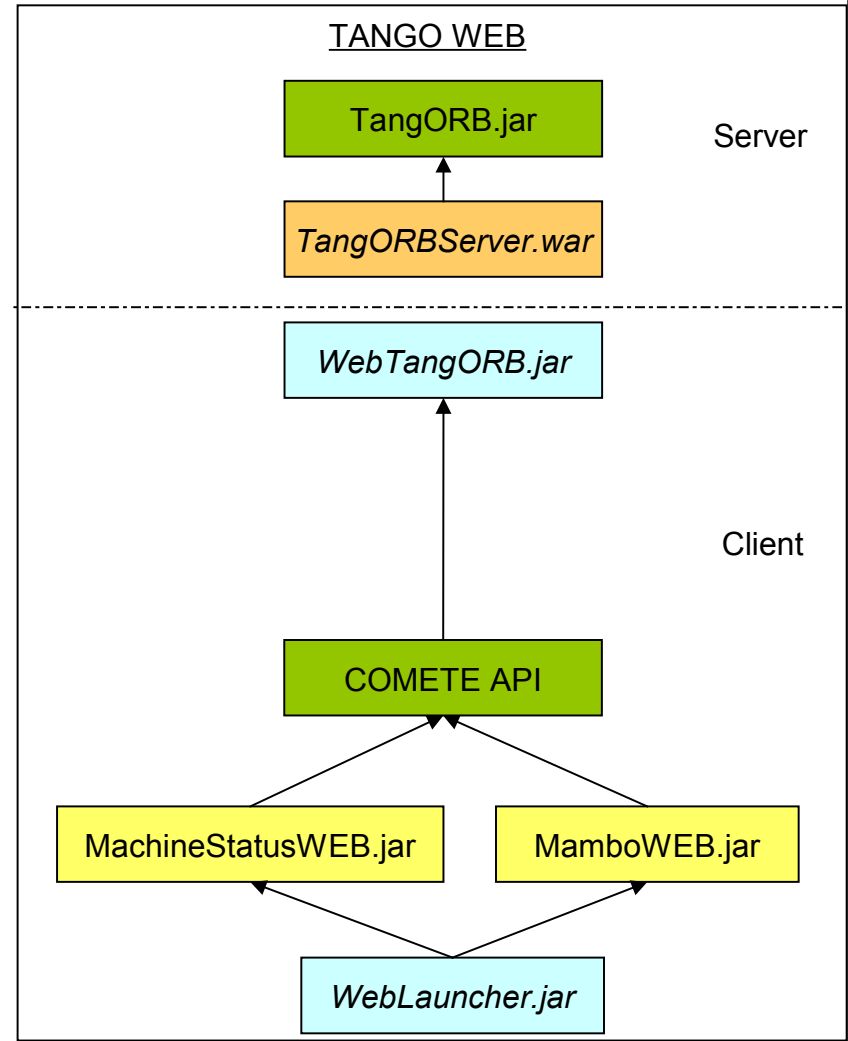
Last Evolutions

- Strong optimizations in performances
 - Less risks of freezes in Mambo
 - Less OutOfMemoryErrors
 - Users from the Accelerator now think Mambo really is usable with their data volume 😊
- Mambo and MamboWeb now use the same versions of all libraries.

Reminder on MamboWEB architecture

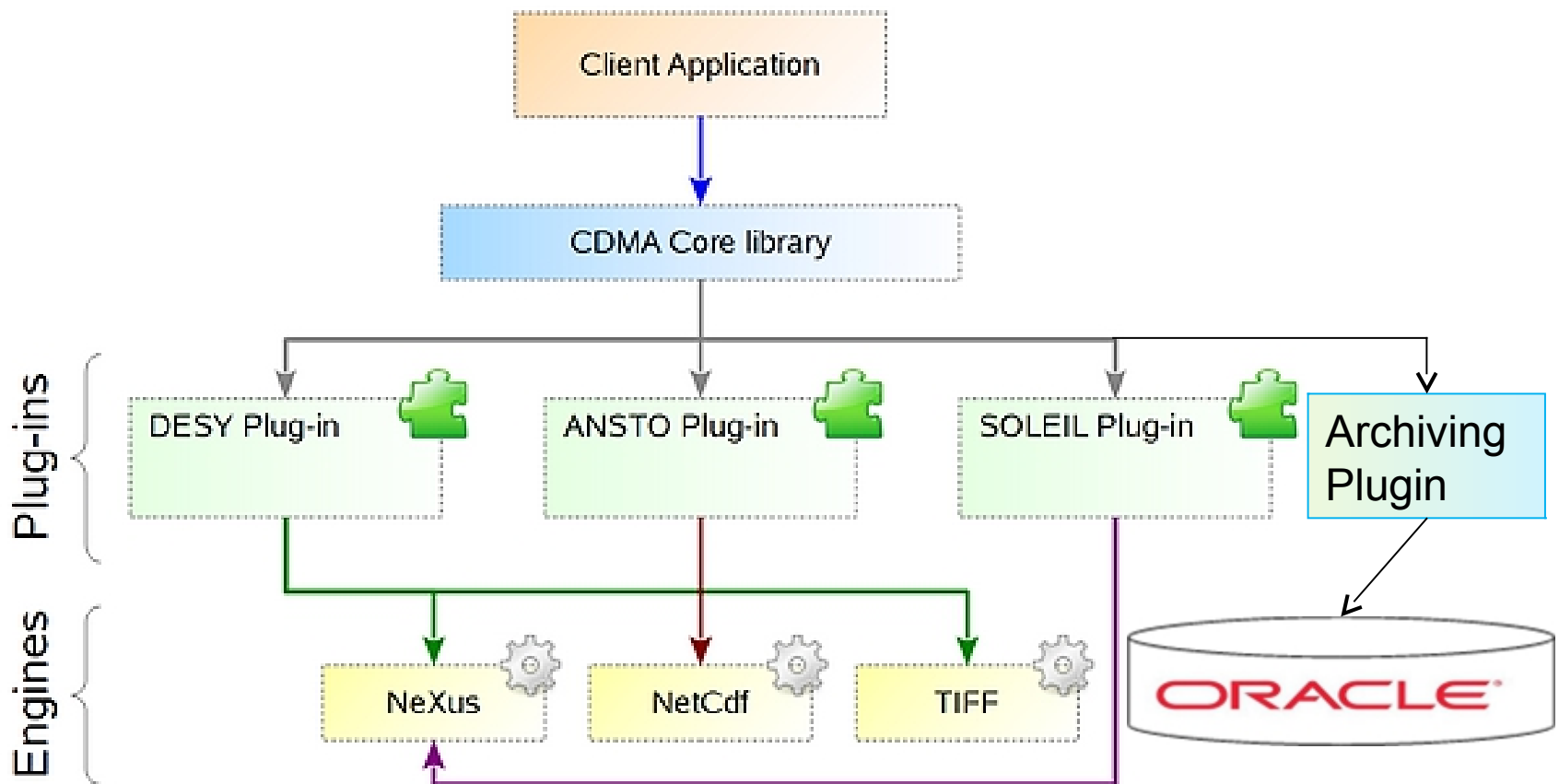
The applications reach TANGO via Internet thanks to 3 jars:

- WebTangORB** : Module to get data
 - WebLauncher** : starts application on client side
 - TangORBServer** : Tango Web Server.
- PROS**
- No modification are to be done on the application side to make it available through the WEB
- CONS**
- Rely on the availability of a JVM on the client side



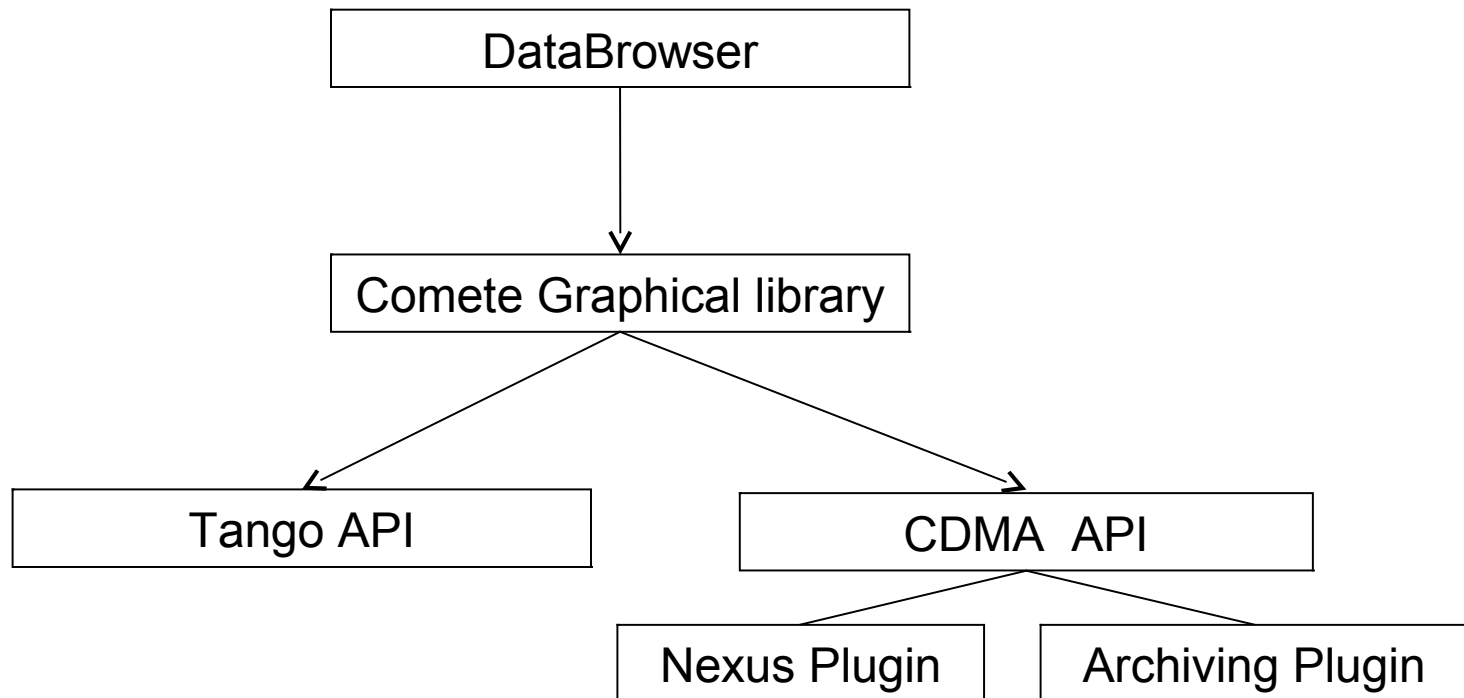
Side Developments

Archiving plugin for CommonDataModelAccess (CDMA)



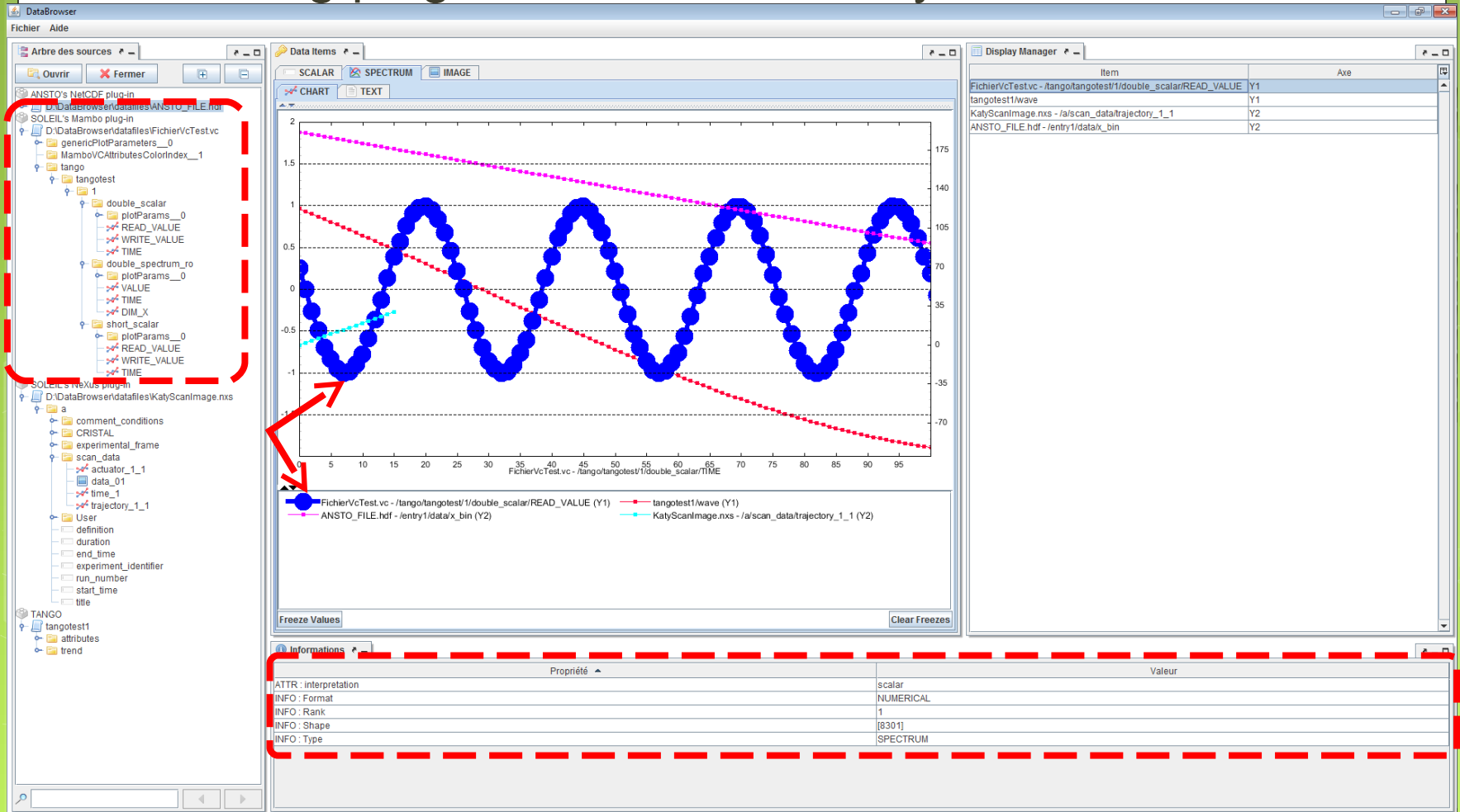
Side Developments

- Now we can view 3 different data sources (Tango, NeXus and HDB) in the DataBrowser application



Side Developments

- Archiving plugin for CDMA used by DataBrowser



Upcoming developments

- Watcher enhancements
- Even more performances optimization for data visualization
- Mambo enhancements:
 - New data visualization modes
- Bensikin enhancements
 - Optimized Snap comparison with current Tango device state
- Automation of equipment reconfiguration after a power outage thanks to Snapshots and HDB data

Conclusion

- SOLEIL contact
 - raphael.girardot@synchrotron-soleil.fr
- Reminder : Last Archiving packages are available on SOLEIL external MAVEN repository:
<http://www-controle.synchrotron-soleil.fr:8001/maven2/soleil/fr/soleil/packaging/ArchivingRoot/>
(last release = 13.3.2)
 - Soon on Tango pink site
- Features requests or bug tracking
 - Please use the SourceForge tracker
- Questions ?