



# 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	SUCCEDED
LOAD_DATA4	03,06	16/05/2013 12:11:46	SUCCEDED
LOAD_DATA5	03,05	16/05/2013 12:23:46	SUCCEDED
LOAD_DATA6	03,22	16/05/2013 12:35:46	SUCCEDED
LOAD_DATA7	03,18	16/05/2013 12:47:46	SUCCEDED
LOAD_DATA8	03,14	16/05/2013 12:59:46	SUCCEDED
LOAD_DATA9	04,55	16/05/2013 13:11:46	SUCCEDED
LOAD_DATA0	03,58	16/05/2013 13:23:45	SUCCEDED
LOAD_DATA1	03,19	16/05/2013 13:35:45	SUCCEDED
LOAD_DATA2	02,33	16/05/2013 13:47:45	SUCCEDED

### 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

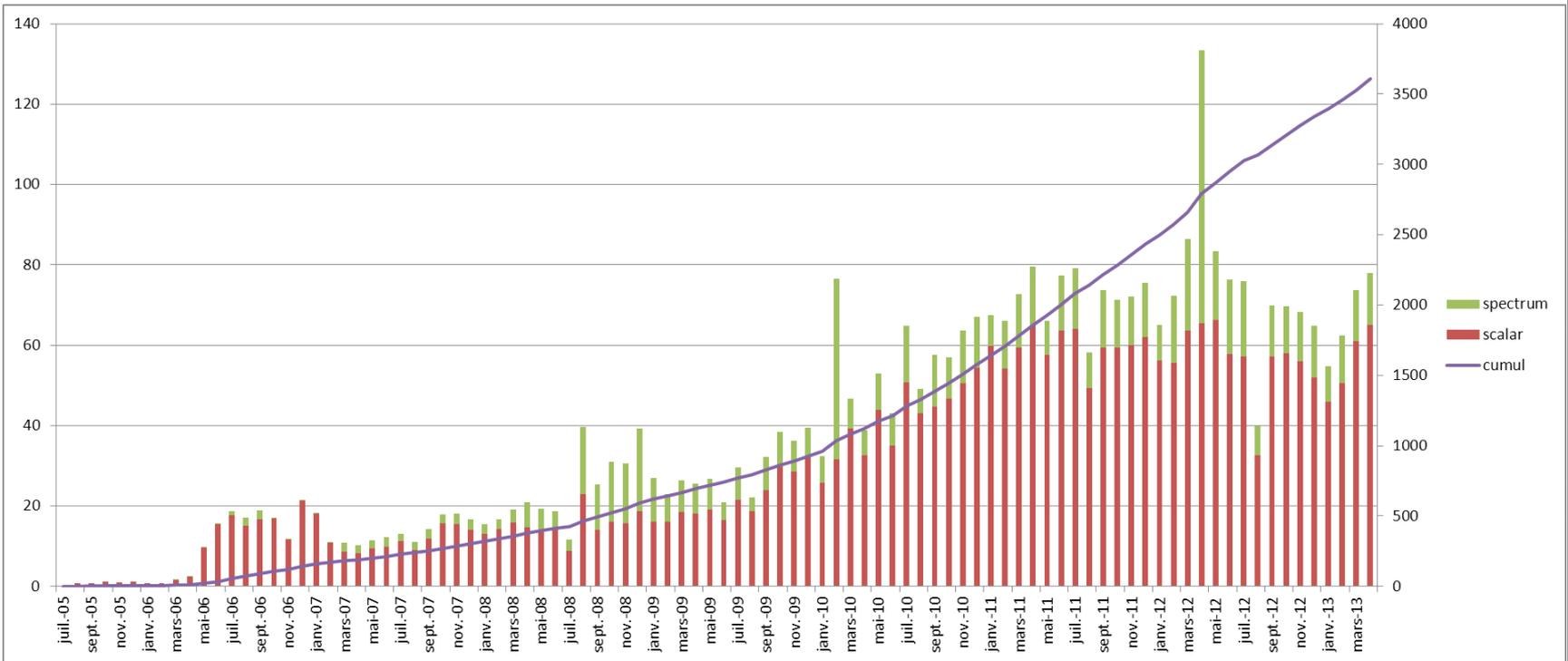
BACKUP : 50%  
CALLIOPE : 57%  
EUTERPE : 58%  
TDBARCHIVER: 58%  
THALIE : 55%

# 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

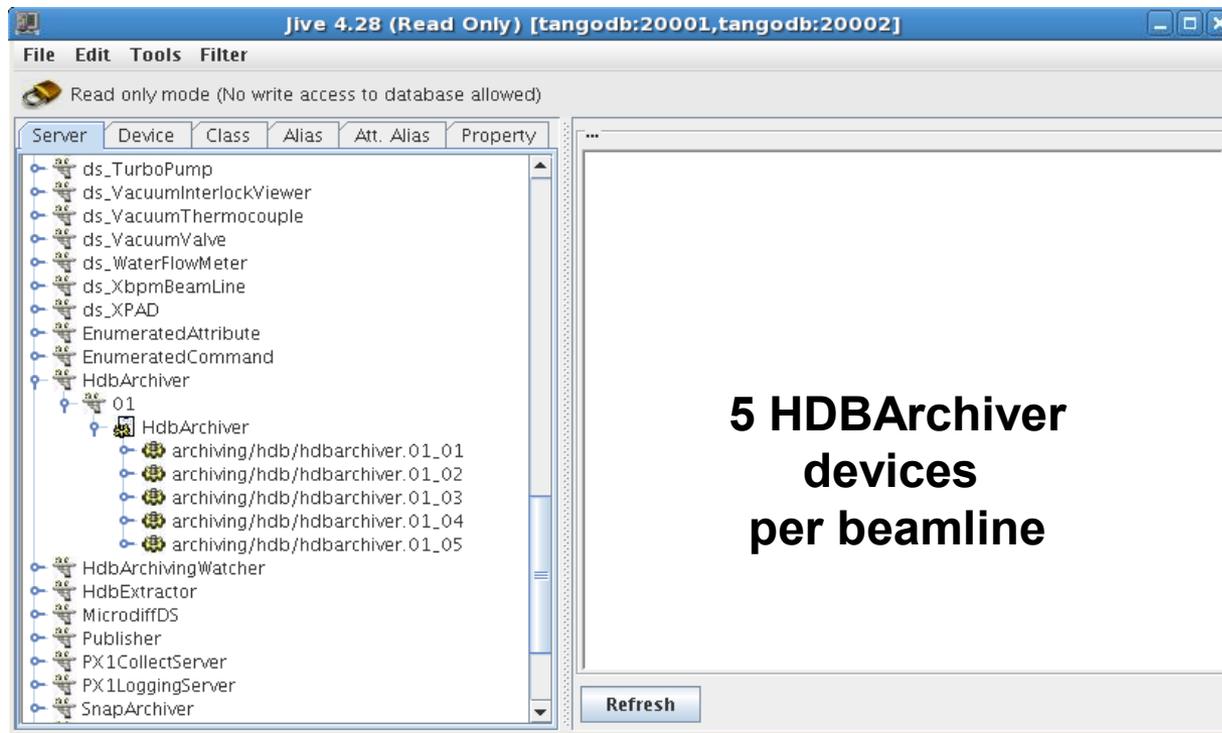
**21 Controlled Servers on joy**

- 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 a software interface titled "Jive 4.28 (Read Only) [tangodb:20001,tangodb:20002]". The interface is in "Read only mode (No write access to database allowed)". It features a tree view on the left with columns for "Server", "Device", "Class", "Alias", "Att. Alias", and "Property". The tree view lists several devices, including "ds\_TurboPump", "ds\_VacuumInterlockViewer", "ds\_VacuumThermocouple", "ds\_VacuumValve", "ds\_WaterFlowMeter", "ds\_XbpmBeamLine", "ds\_XPAD", "EnumeratedAttribute", "EnumeratedCommand", "HdbArchiver", "HdbArchiver.01", "HdbArchiver.archiving/hdb/hdbarchiver.01\_01", "HdbArchiver.archiving/hdb/hdbarchiver.01\_02", "HdbArchiver.archiving/hdb/hdbarchiver.01\_03", "HdbArchiver.archiving/hdb/hdbarchiver.01\_04", "HdbArchiver.archiving/hdb/hdbarchiver.01\_05", "HdbArchivingWatcher", "HdbExtractor", "MicrodiffDS", "Publisher", "PX1CollectServer", "PX1LoggingServer", and "SnapArchiver". A "Refresh" button is located at the bottom right of the interface.

**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' pane shows a tree view for 'calypso:20001' with a sub-tree for 'tango' containing 'tangotest' and '1'. The 'View configuration' pane on the right shows 'HDB global test : 2013-05-16 14:01:50.363'. Below this, a 'Number and Boolean Scalars' section contains a chart. The chart displays data for various series: 'tango/tangotest/1/ampli/write (Y1)', 'tango/tangotest/1/boolean\_scalar/read (Y1)', 'tango/tangotest/1/boolean\_scalar/write (Y1)', and 'tango/tangotest/1/double\_scalar\_w/write (Y1)'. A red dashed box highlights a warning message: 'Warning: too many points in views. Sampling used'. The chart's time range is from 2013-04-16 15:56:29.795 to 2013-05-16 15:56:29.795. The chart shows a dense series of vertical bars, indicating a high frequency of data points.

**Warning: too many points in views. Sampling used**

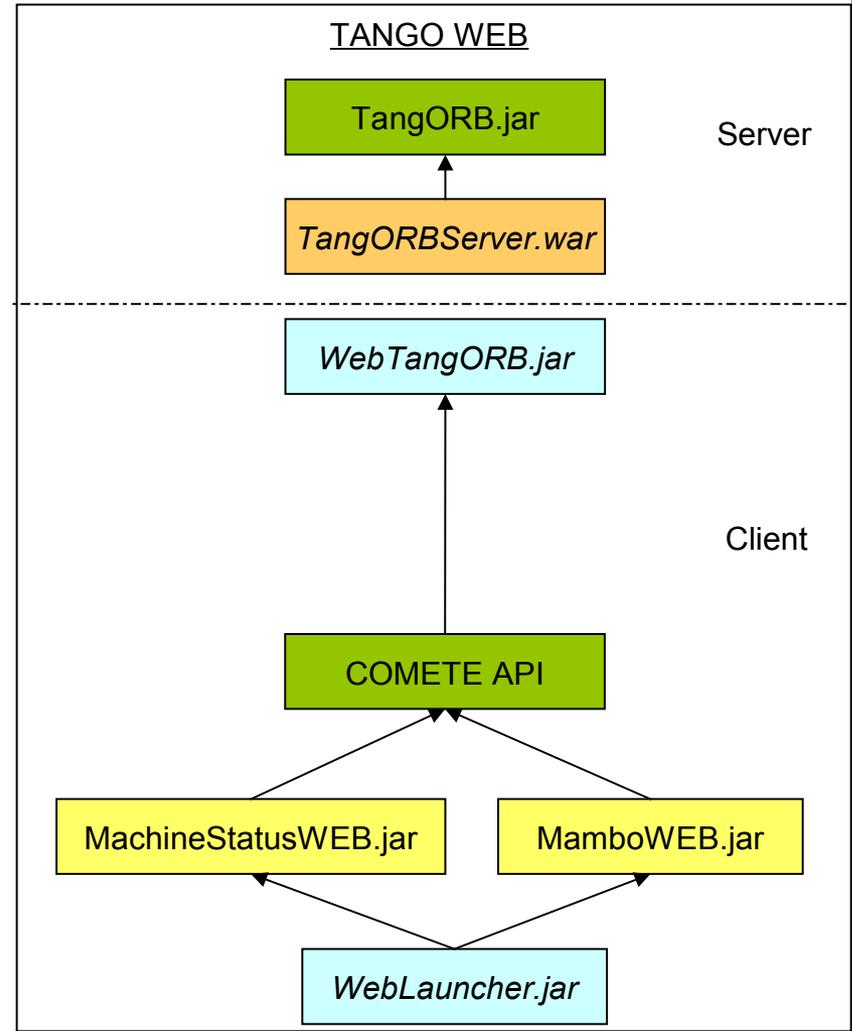
# Last Evolutions

- 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

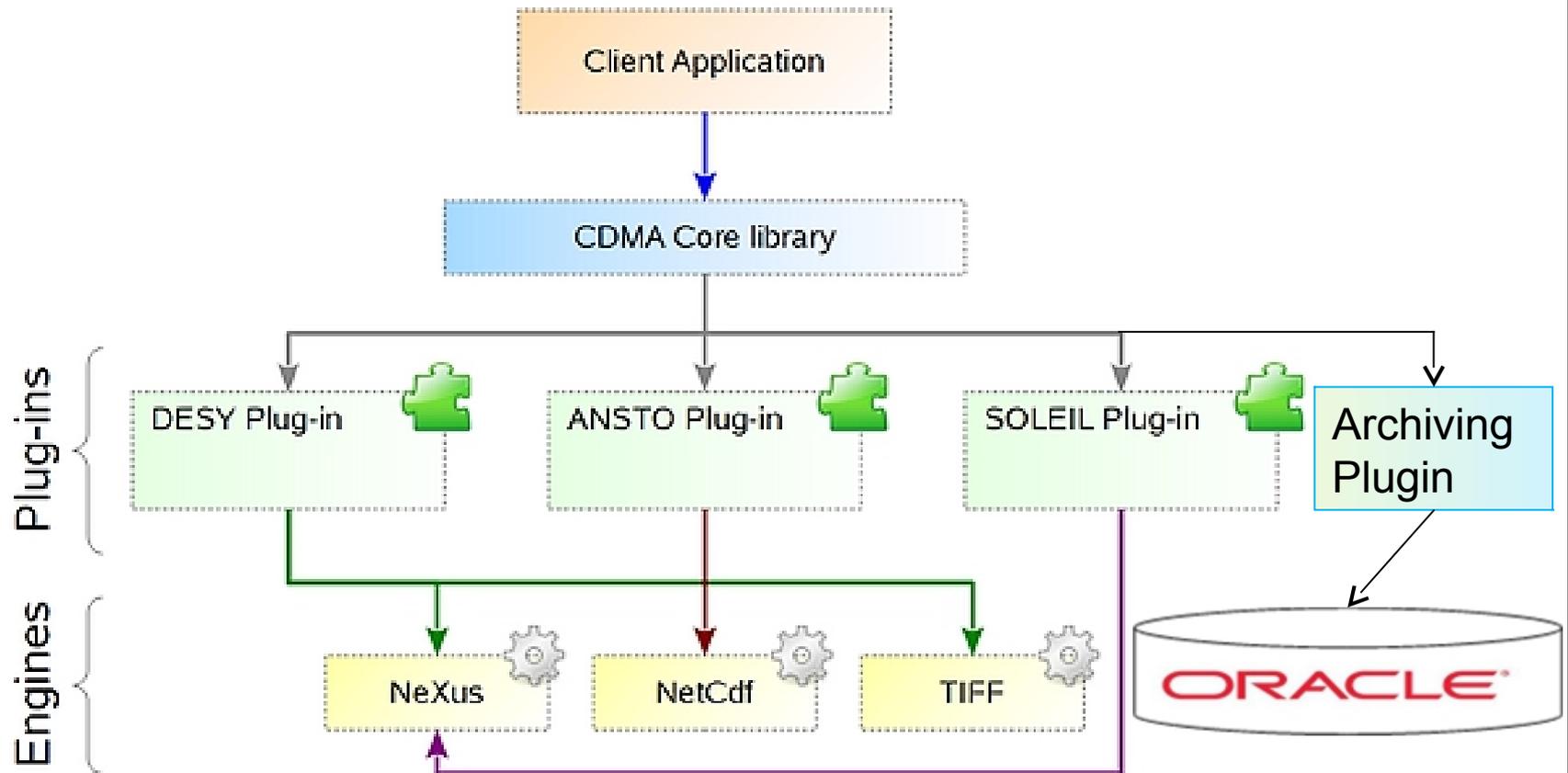
The applications reach TANGO via Internet thanks to 3 jars:

- 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



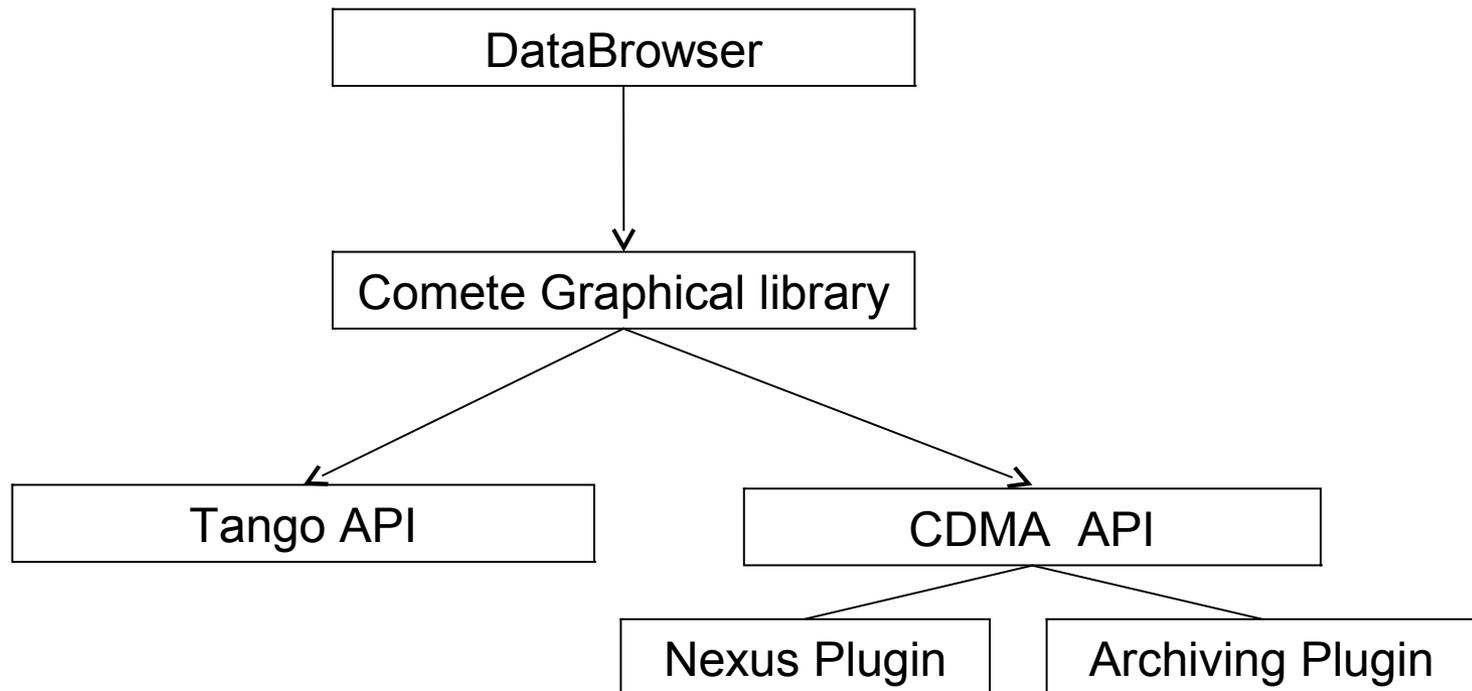
# Side Developments

Archiving plugin for CommonDataModelAccess (CDMA)



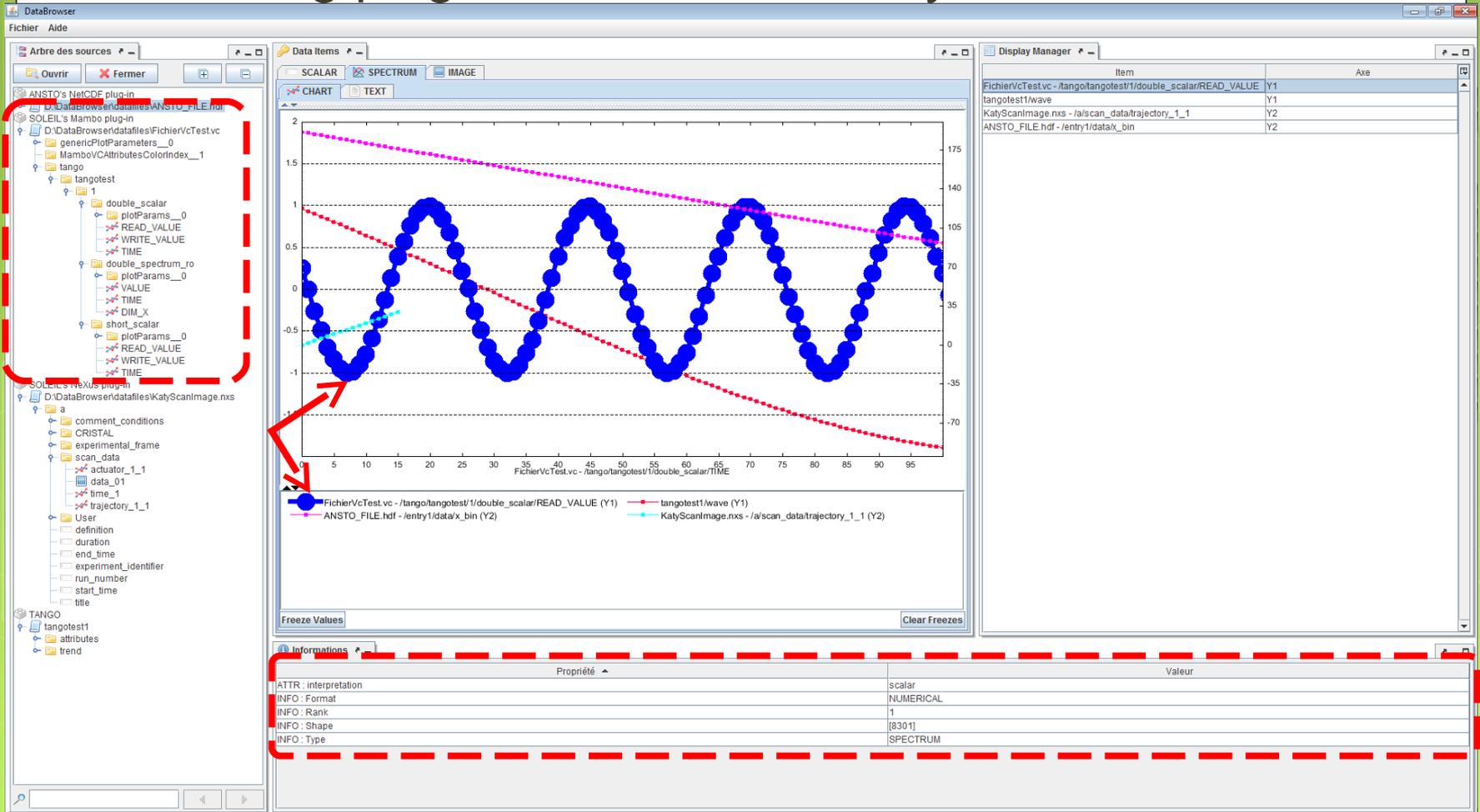
# Side Developments

- 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](mailto: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 ?