

HISTORY DATABASE and ARCHIVE EVENTS

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1. The former version

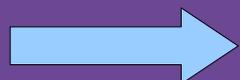
Issues:

- Did not compile with java 1.5
- Did not work with the latest libraries of ATK-Core and ATK-Widget
 - Did not support the Tango Archive Events

2. Building HDB with java 1.5.

It was quite simple to port the Archiving software to the latest java environment:

- Corrected some variable names which had become keywords in java 1.5;
- Added some type parametrization to the Hashtables and Maps to avoid warnings;
 - Added a *static final long serialVersionUID* to the classes which implement the *Serializable* interface.

 **Eclipse!**

3. Making HDB work with the latest libraries.

The calls to the ``extractXXX()`` or ``extractXXXArray()`` made inside `NumberScalar_XX.java` sources did not work and also there were problems in updating the latest values of the attributes inside the database.

4. Adding the support for the Tango Archive Events.

- The java classes implementing *InumberScalarListener*, *IspectrumListener*... implement also *ItangoArchiveListener*;
- In the *archive()* method one gets the attribute and stores it into the database.
- First one tries to add the attribute to the archive listener and, if it fails, the attribute is polled as usual inside ATK lists.

5. Archive events subscription: an example:

```
try{
    /* Get the attrib. from the AttributeFactory */
    /* add to the archive listener */
    addTangoArchiveListener();
}
catch(DevFailed e){
    /* Add to the ATK attribute polled list */
    addNumberScalarListener();
}
```

- Each attribute to be subscribed to the archive events is configured with jive!
- We need Tango 5.5!

7. TODO.

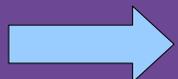
- Remove the remaining warnings due to unchecked types added to maps and lists;
- Remove the warnings related to the inheritance from the Serializable interface (i.e. Add a private static final serialVersionUID to the classes implementing Serializable);
- Port the corrections and changes to the TDB;
- Why do the calls to *event.getNumberSource().getAttribute().extractXXXArray()* fail?
- *Testing!!!*

8. Looking at the future of the HDB. (I)

- Tango Archive events are managed outside ATK.
Periodic and Change events are managed inside ATK.
Is it satisfactory or should we take Change and Periodic events outside ATK?
- Are we really interested in archiving change events or are the Archive Events enough and well suited for archiving?
- Is it good to configure the Archive events inside jive or would it be better to have a unique interface (i. e. Integration with Mambo)?

9. Looking at the future of the HDB. (II)

- Would it be useful to configure the archive events *both* with jive (server side) *and* in Mambo interface?
- Would it be useful to be able to bypass the event subscription and force the polling of an attribute albeit it is configured to emit archive events?



Compromise between flexibility and simplicity.