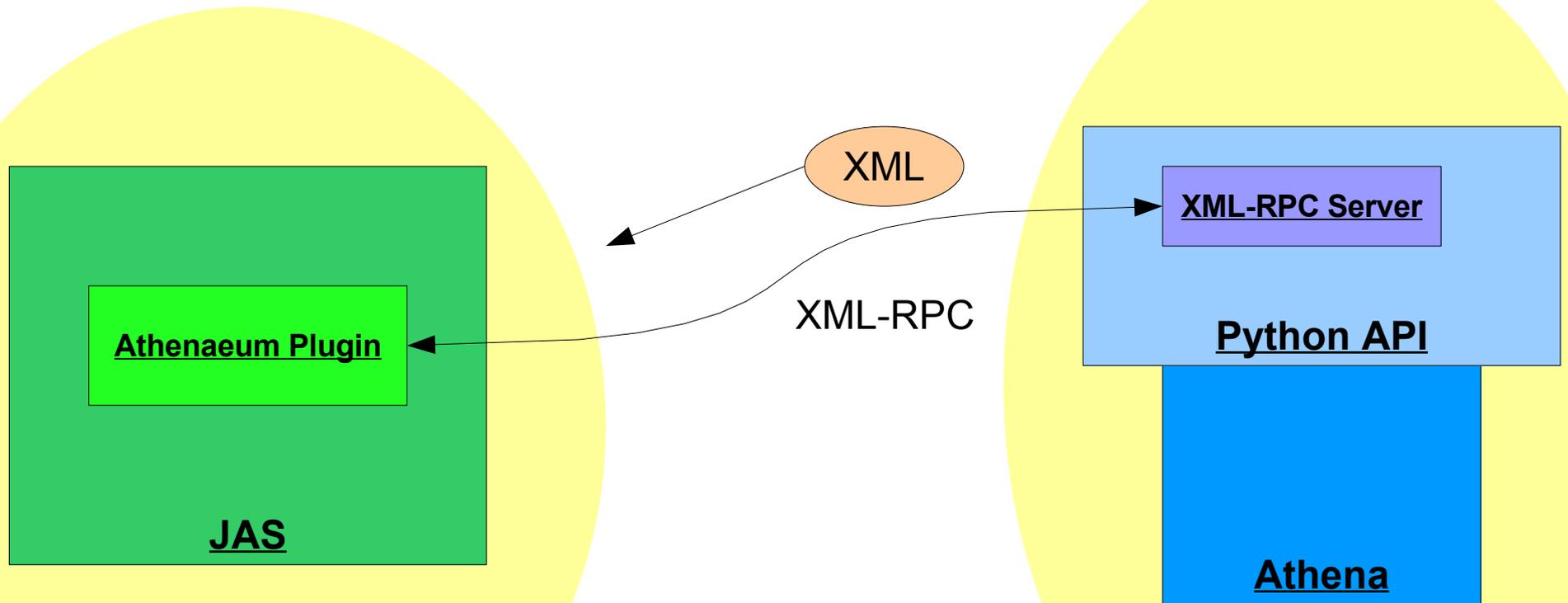




Cool Browser as **Athenaeum** plugin in JAS



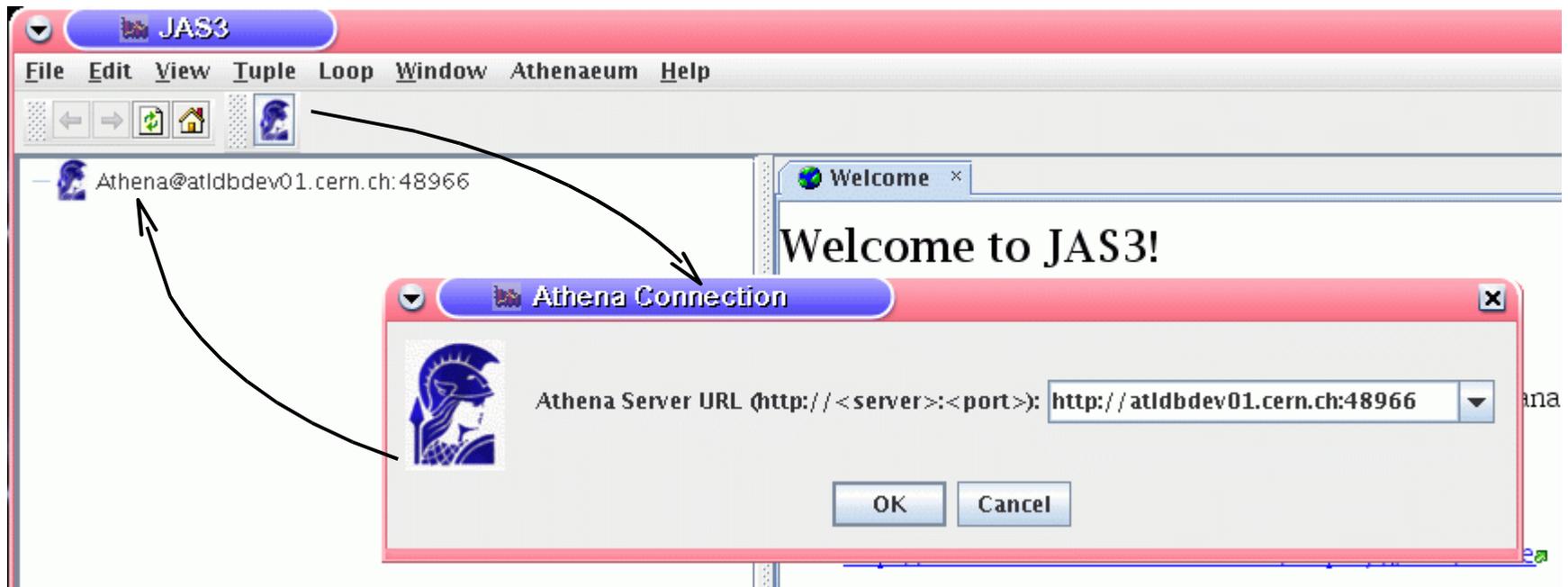
Local Client

- **Athenaeum** allows to access (remote) Athena from (local) JAS.
- Any (Athena) Python script can be send directly from JAS.
- Results (usually in XML) are send back and can be processed within JAS.

(Remote) Server



Open Connection



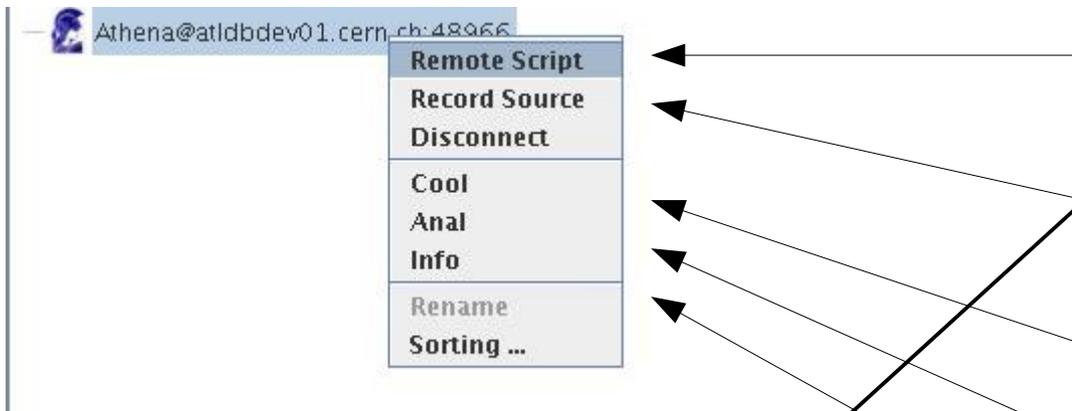
```
$ athena.py -i -s jobOptions.py
.....
XML-RPC server 'atldbdev01.cern.ch:48966' created
method 'process()' registered
Waiting for requests...
```

```
.....
execfile ("InteractiveServer.py")
server = InteractiveServer
server.start()
```

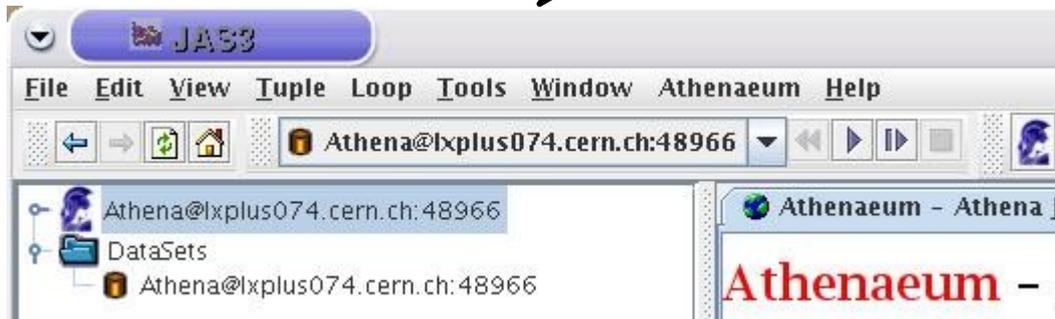
*Server script originally written
by Atlantis team*



Interact with Athena

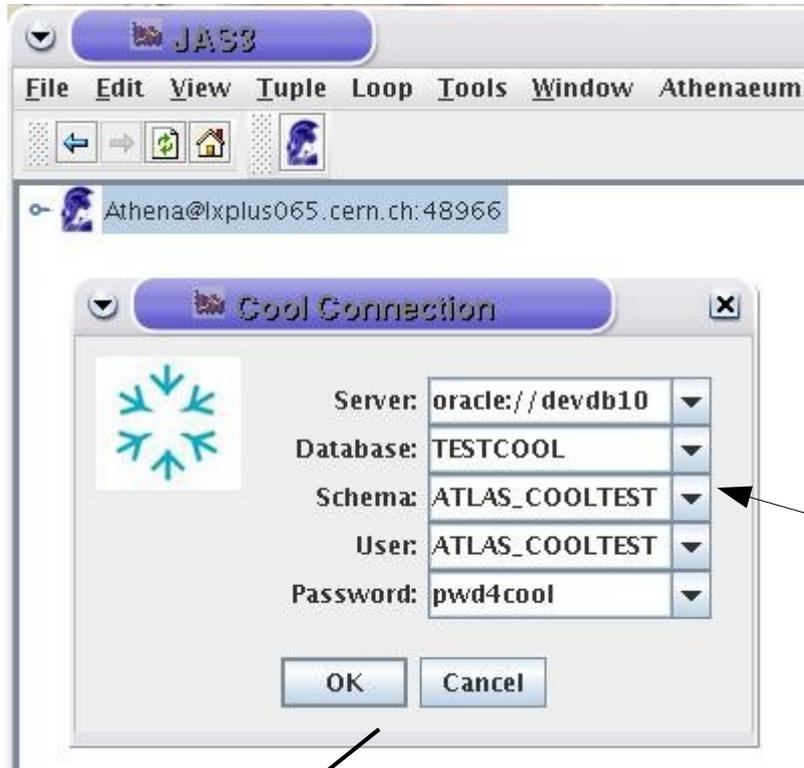


- Execute a Python script on Athena Server, get results back
- Steer Athena Event Loop from JAS
- Access Cool data
- Access Particle data
- Get Information about Athena Server (loaded dictionaries,...)





Interact with Cool



- Open connection to Cool DB
- Interpret data (as Ntuples)
- Show data as HTML
- Show data as XML
- Show Python script used to get data



Work with Cool

Athena@lxplus065.cern.ch:48966

Cool

tree-0

Cool@oracle:devdb10[TESTCOOL, ATLAS_COOLTEST]

IOVDbTest

- IOVDbTestAMDBCorrection
- IOVDbTestAttrList
 - since
 - until
 - object
 - channel
 - day
 - month
 - year
 - hourl
 - minute
 - second
 - xPosition
 - id
 - name
- IOVDbTestMDTEleMap
- IOVDbTestMDTEleMapColl

Indet

- Align
 - TRT_DF_B0
 - TRT_DF_B1
 - TRT_DF_B2
- Calib

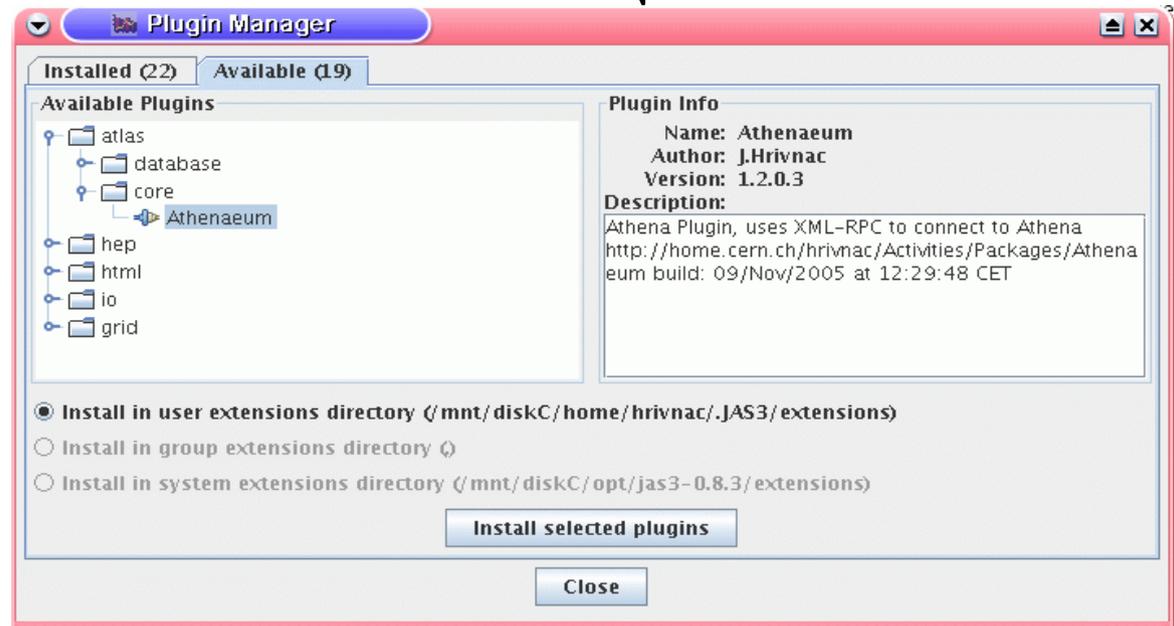
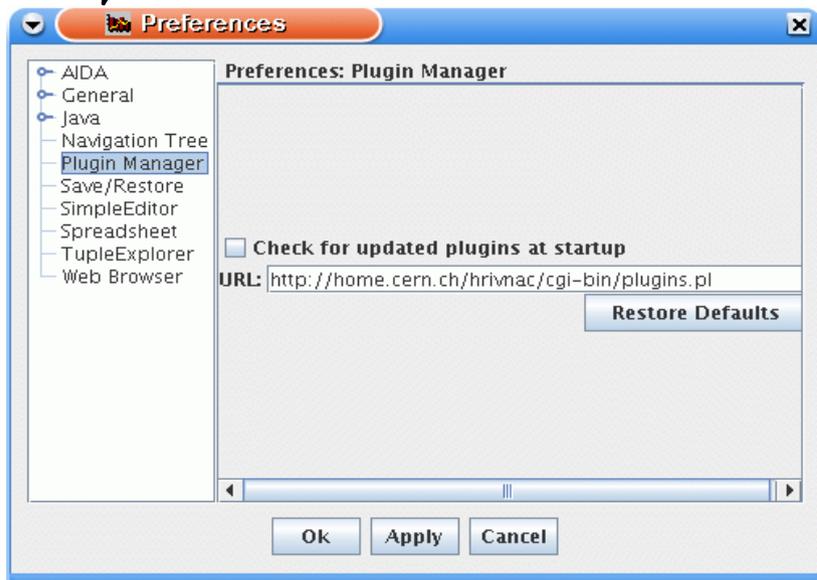
since	until	obj...	cha...	day	month	year	hourl	minute	second	xPosition	id	name
run:0 e...	run:3 e...	8	0	31	9	20...	18	46	28	25.0	7	TestAttrList
run:3 e...	run:4 e...	14	0	31	9	20...	18	46	51	25.0	7	TestAttrList
run:4 e...	run:21...	13	0	31	9	20...	18	46	51	25.0	7	TestAttrList

- Data can be represented as
 - XML
 - Objects
 - NTuples
 - HTML
- and accessed
 - via GUI
 - using scripting interface (Java, Python, Pnuts)
 - using API (Java, Python)



How To Start

- Within CERN AFS:
 - `./afs/cern.ch/sw/java/share/bin/setjdk sun 1.5.0_02`
 - `/afs/cern.ch/atlas/offline/external/JAS/jas3/jas3`
- Elsewhere (any platform):
 - Get JAS from <http://jas.freehep.org/jas3>
 - Set Plugin Server (View - Preferences...)
 - Get Plugin (View – Plugin Manager...)





Help

- <http://home.cern.ch/hrivnac/Activities/Packages/Athenaeum>
- <https://uimon.cern.ch/twiki/bin/view/Atlas/HowToUseJAS>
- JAS integrated Help (with executable examples)

The screenshot shows a window titled "JAS3" with a menu bar (File, Edit, View, Tuple, Loop, Window, Athenaeum, Help) and a toolbar. The main content area is titled "Athenaeum - Athena JAS3 Plugin" and features the Athenaeum logo. It contains a list of links for help topics, a section titled "How to Use JAS" with introductory text, a section titled "How To Start Athena Python Server" with instructions and a code block, and a section titled "How To Connect to Athena Python Server".

Athenaeum - Athena JAS3 Plugin

- [How to Use JAS](#)
- [How To Start Athena Python Server](#)
- [How To Connect to Athena Python Server](#)
- [How to Work with Local Scripts](#)
- [How to Work with Remote Scripts](#)
- [How to Loop over Events](#)
- [How to Work with Proxies of Athena Objects](#)
- [How to Write Proxies of Athena Objects](#) (for experts)
- Existing Proxies:
 - [Info](#) (example proxy)
 - [Analysis](#)
 - [Cool](#)
- [How to Use in a Standalone Environment](#)
- [Where to Find More](#)

How to Use JAS

The JAS3 documentation is [available](#). JAS3 also contains its integrated help system with executable examples.

How To Start Athena Python Server

Athena XML-RPC Server can be started using simple [Python Script](#) (this script has been developed by the [Atlas](#) team):

- Place the script into you run directory.
- Put following lines at the end of your joboptions.py script:

```
# initialise Athena and go the first Event
# (following two commands can be omitted here
# and called remotely once the Server is started)
theApp.initialize()
theApp.nextEvent()
# load the Server
execfile ("InteractiveServer.py")
# instantiate the Server
server = InteractiveServer()
# start the Server
server.start()
```
- Call Athena using following command:

```
athena.py -i joboptions.py -s
```
- The message with the Server URL will be printed out. It should be used for the connection from JAS.

How To Connect to Athena Python Server

5.26 / 8.56 MB