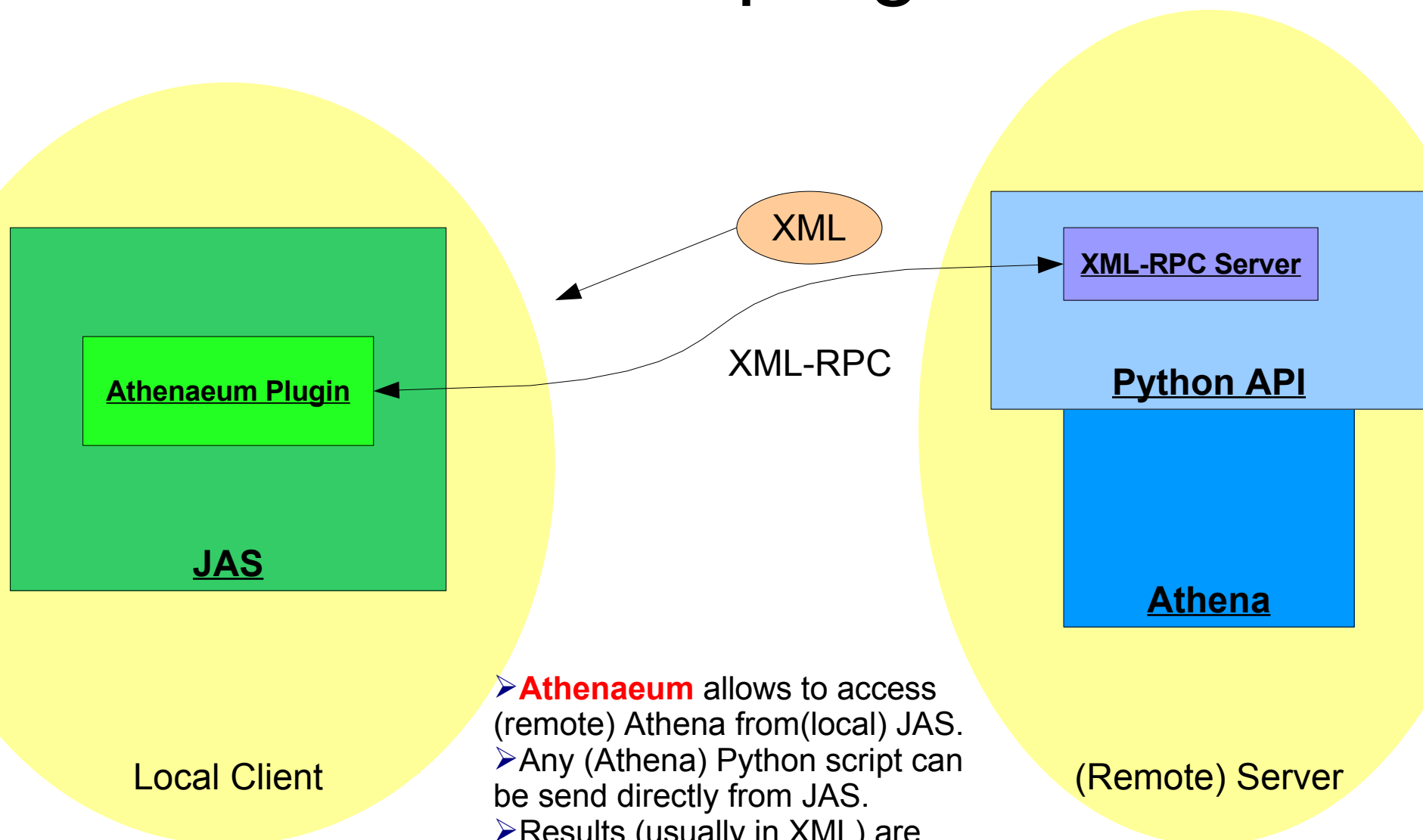




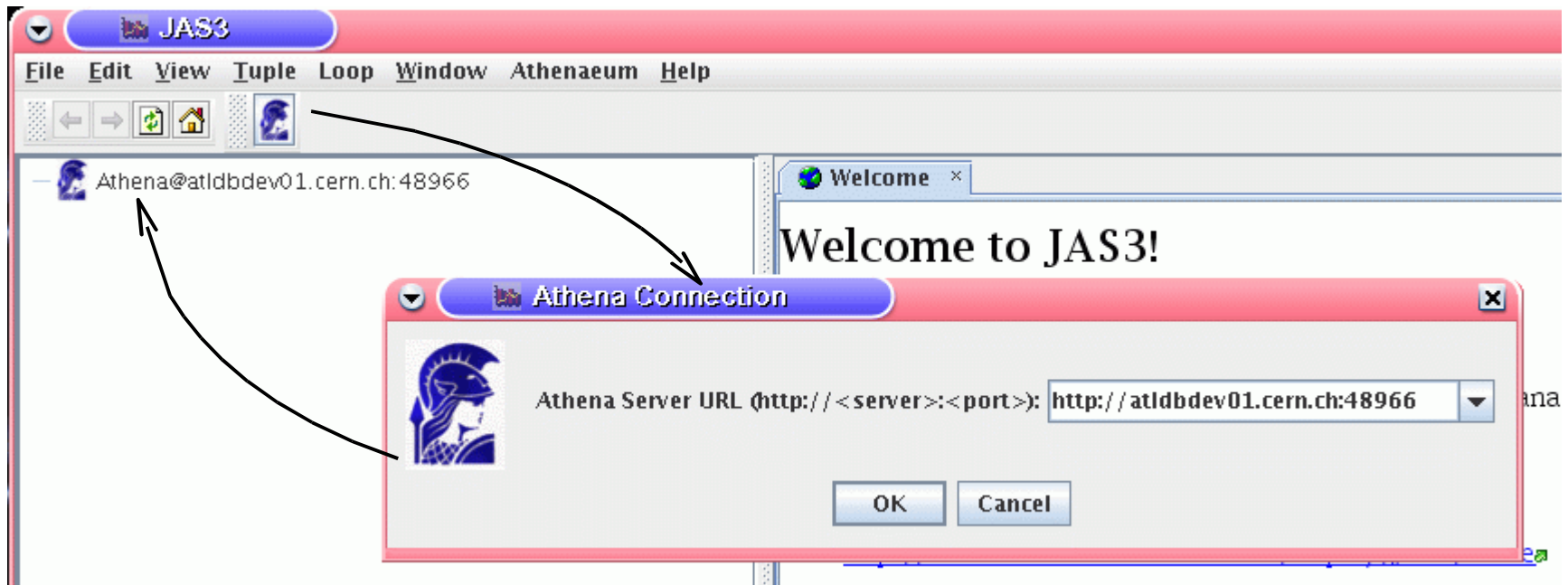
Cool Browser as **Athenaeum** plugin in JAS



- **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.



Open Connection



```
$ athena.py -i -s jobOptions.py
```

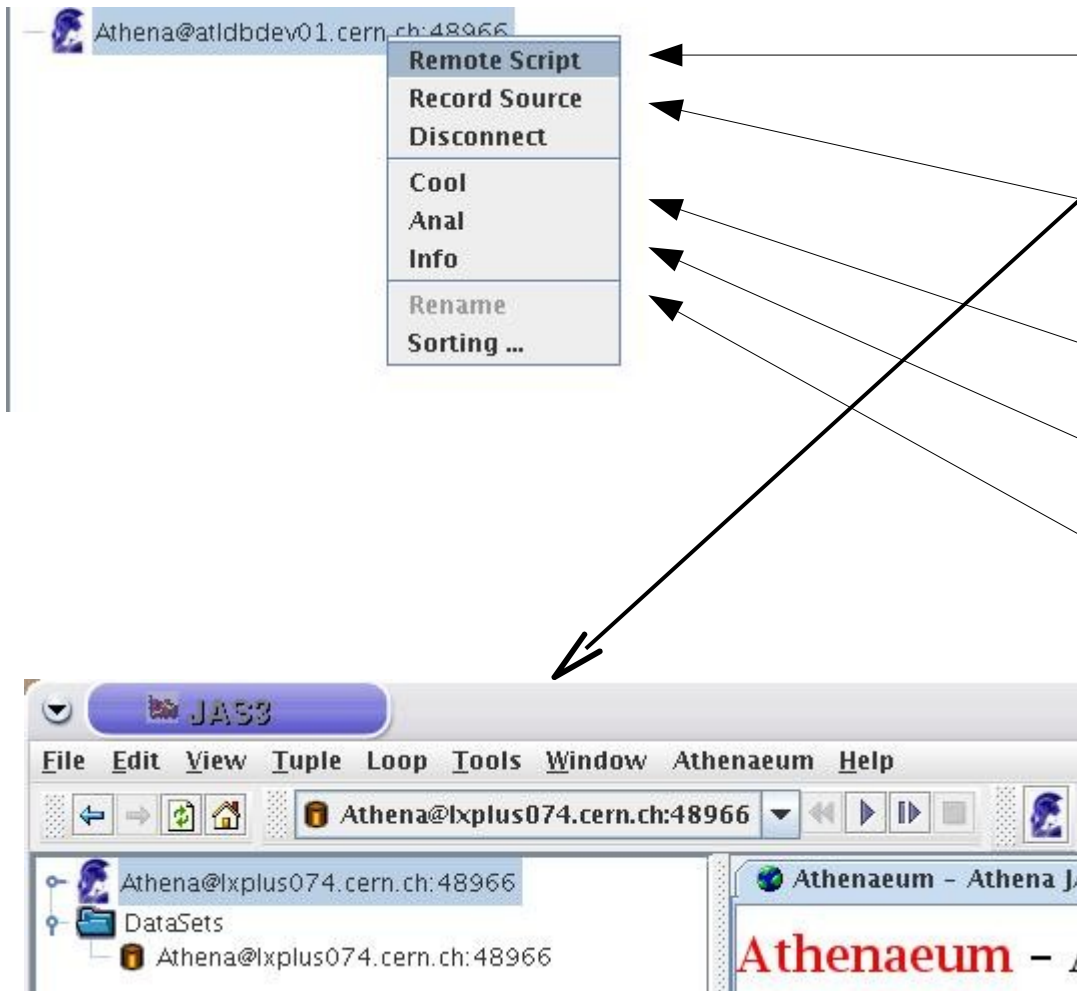
```
.....  
XML-RPC server 'atldbdev01.cern.ch:48966' created  
method 'process()' registered  
Waiting for requests...
```

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

*Server script originally written
by Atlantis team*



Interact with Athena



The screenshot shows the JAS3 interface with a context menu open for a remote script. The menu options are:

- Remote Script
- Record Source
- Disconnect
- Cool
- Anal
- Info
- Rename
- Sorting ...

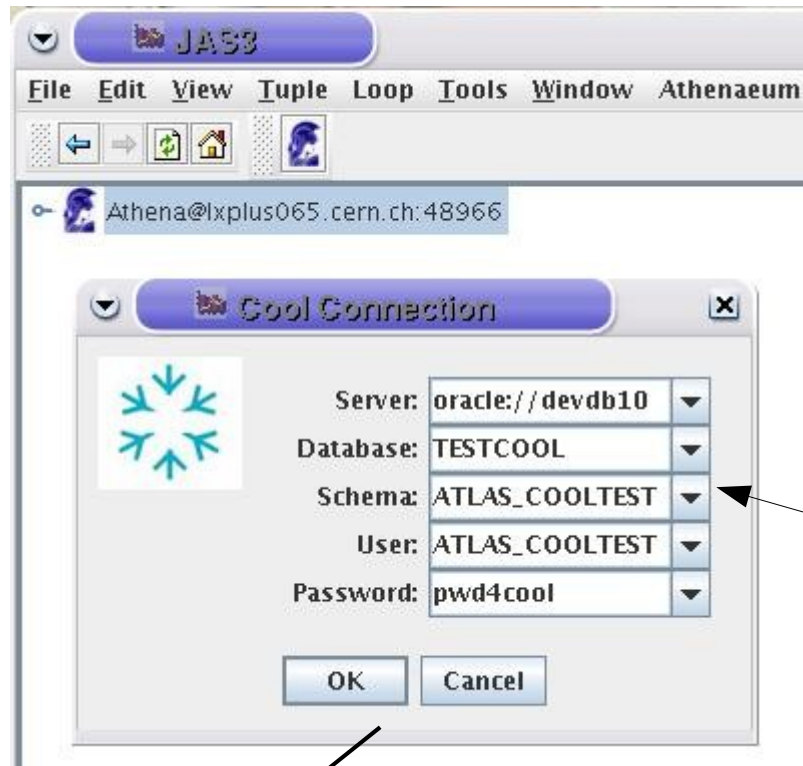
Arrows point from the following list of actions to the corresponding menu items:

- Execute a Python script on Athena Server, get results back (points to Remote Script)
- Steer Athena Event Loop from JAS (points to Record Source)
- Access Cool data (points to Cool)
- Access Particle data (points to Anal)
- Get Information about Athena Server (loaded dictionaries,...) (points to Info)

The JAS3 interface also shows a toolbar with navigation buttons and a status bar with the connection string: Athena@lxplus074.cern.ch:48966. The bottom panel displays the Athena server connection and the Athena logo.



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

hour

minute

second

xPosition

id

name

IOVDbTestMDTEleMap

IOVDbTestMDTEleMapColl

Indet

Align

TRT_DF_B0

TRT_DF_B1

TRT_DF_B2

Calib

Cool Proxy for Athenaem x Cool Result x IOVDbTestAttrList x

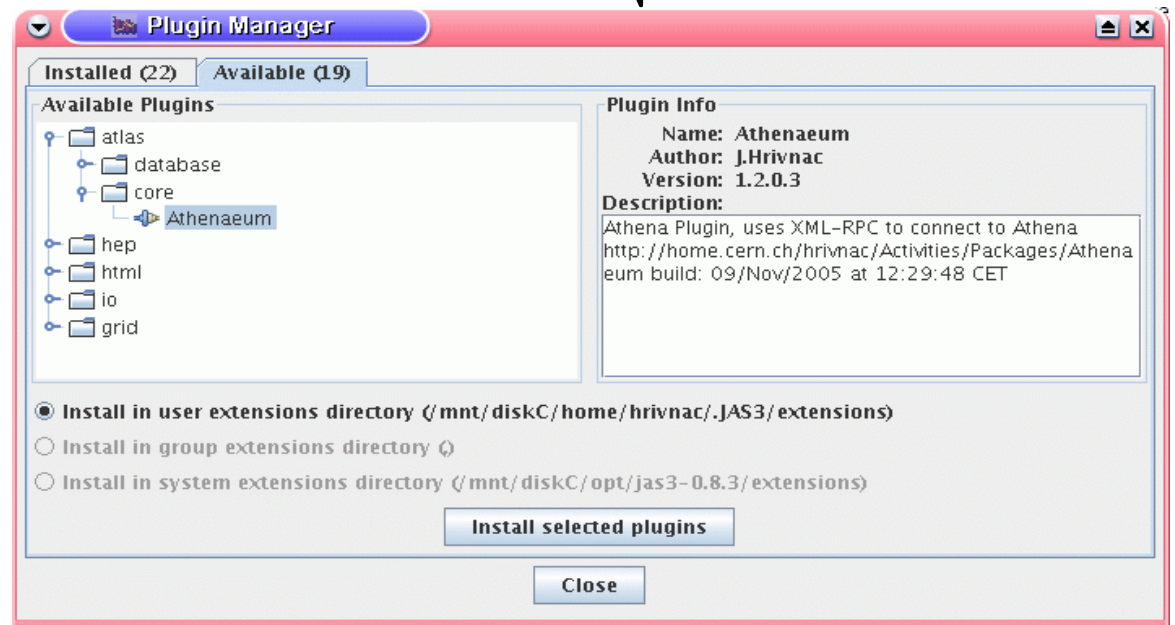
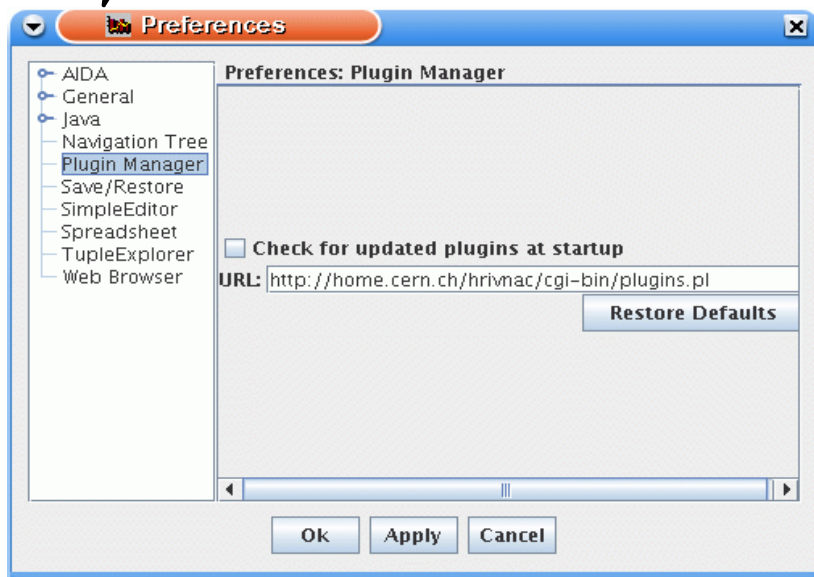
since	until	obj...	cha...	day	month	year	hour	minute	second	xPosition	id	name
run:0 e...	run:3 e...	8	0	31	9	20...	18	46	28	25.0	7	TestAttrList
run:3 e...	run:4 e...	14	0	31	9	20...	18	46	51	25.0	7	TestAttrList
run:4 e...	run:21...	13	0	31	9	20...	18	46	51	25.0	7	TestAttrList

- 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)

