

DCube integration within RTT framework

Quick Start Guide

Step 0. Preparation

HELP!!! For a complete beginning, this doesn't explain what reference file, of what the DCubeReference etc actually is. Perhaps we could have some general basic overview (or at least a link to it) for people who are not already expert.

Create your root reference file and then ask the RTT developers to create a directory for it inside `/afs/cern.ch/atlas/project/RTT/DCubeReference` volume This file should contain only histograms relevant to your RTT job. The quota for **ALL** reference files for your package (or RTT tests) is set to **100 MB**, so please remove from it all unneeded histograms, ntuples etc.

Step 1. Generate configuration file...

- checkout from Atlas CVS `offline/Tools/DCubeClient`
- source one of setup scripts inside `Tools/DCubeClient/scripts` subdirectory

```
[lxplus999] source Tools/DCubeClient/scripts/setup.[c]sh
```

- and run `dcube.py` with `-g` option:

```
[lxplus999 ] ./dcube.py -g -c CONFIGNAME.xml -r REFERENCE.root
```

For other options and tweaks, please check DCube documentation.

Step 2. Copy, install, up, up and away!

once you get space on reference volume, copy `REFERENCE.root` over there. Also add `CONFIGNAME.xml` to your package in `Test` subdirectory.

Step 3. Modify RTT configuration file...

by adding new test tags to the RTT job, you want to test with DCube. The argument names are:

DCubeCfg - a name of your DCube configuration file

DCubeMon - a name of root monitored file produced by athena job

DCubeRef - a name of your reference root file

DCubeJobId - not obligatory test or job id as set during config file creation using `--jobId` switch.

and the example XML chunk should look like this:

```
<test>
  <modulename>RttLibraryTools</modulename>
  <testname>DCubeRunner</testname>
  <arg>
    <argname>DCubeCfg</argname>
    <argvalue>Foo_dcube_cfg.xml</argvalue>
  </arg>
  <arg>
    <argname>DCubeRef</argname>
    <argvalue>Foo.root</argvalue>
  </arg>
  <arg>
    <argname>DCubeMon</argname>
    <argvalue>athena.root</argvalue>
  </arg>
</test>
```


```

<arg>
  <argname>DCubeJobId</argname>
  <argvalue>what_ever_you_want</argvalue>
</arg>

</test>

```

Remember to specify **only** file names (or relative paths starting from your reference volume downward!). Absolute paths to references or configuration files are strictly forbidden!

 The DCubeRunner module searches for a configuration files in two places:

- in your package `Test` directory
- on the package `reference` volume

and if file is found in both locations the newer (based on creation date time stamp) is chosen. Hence use `reference` volume at first. Once DCube configuration file fulfills your needs add this one to the CVS `Test` directory.

Step 3.a Position matters

Sometimes, when your RTT job creates `ntuple`, and then you want to create histograms by running `ROOT` macro, and afterward run DCube for statistics test, don't forget to add `position` attributes to the `<test>` tags! In that case your XML file will have a form:

```

<test position='1'>
  <modulename>RttLibraryTools</modulename>
  <testname>ROOTMacroRunner</testname>
  ...
</test>
<test position='2'>
  <modulename>RttLibraryTools</modulename>
  <testname>DCubeRunner</testname>
  ...
</test>

```

RTT system takes care about keeping the results from DCube, so no further changes are needed.

Step 4. Cross the fingers...

and wait for the output presented on RTT results page.

Links

- [Atlas RTT](#)
- [Wiki DCube documentation](#)

WebNotify

- [KrzysztofDanielCiba](#)
- [ManuelGallas](#)
- [PeterSherwood](#)

-- KrzysztofCiba - 09 Aug 2007 -- KrzysztofCiba - 16 Nov 2007 -- KrzysztofCiba - 30 Nov 2007

This topic: [Sandbox > RTTAndDCube](#)
 Topic revision: r37 - 2012-08-01 - [MarkSutton](#)



Copyright &© 2008-2021 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.
or Ideas, requests, problems regarding TWiki? use [Discourse](#) or [Send feedback](#)