

JANA 0.7.8

Mar. 22, 2017

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XML geometry in CCDB

```
Terminal — -tcsh — 53x25
harriet:2017.03.13.JGeometryXML>ccdb ls GEOMETRY
BarrelEMcal_HDDS.xml
BeamLine_HDDS.xml
CentralDC_HDDS.xml
CerenkovCntr_HDDS.xml
ComptonEMcal_HDDS.xml
cpp_HDDS.xml
DIRC_HDDS.xml
DIRC_HDDS_original.xml
ForwardDC_HDDS.xml
ForwardEMcal_HDDS.xml
ForwardMWPC_HDDS.xml
ForwardTOF_HDDS.xml
GapEMcal_HDDS.xml
main_HDDS.xml
Material_HDDS.xml
PairSpect_HDDS.xml
Regions_HDDS.xml
Solenoid_HDDS.xml
StartCntr_HDDS.xml
Target_HDDS.xml
UpstreamEMveto_HDDS.xml
HDDS-1_0.xsd
HDDS-1_1.xsd
harriet:2017.03.13.JGeometryXML>
```

JGeometryXML class now supports reading from CCDB.

Change JANA_GEOMETRY_URL environment variable from:

xmlfile:///\${HDDS_HOME}/main_HDDS.xml

to:

ccdb:///GEOMETRY/main_HDDS.xml

To populate, make top-level GEOMETRY directory in CCDB and use ***hdds_to_ccdb.py*** script in HDDS master

janaview plugin

The screenshot shows the JANA Viewer application window. The title bar reads "JANA Viewer". The menu bar includes "File", "Tools", and "View".

Current Event Info

Source: /cache/hald/RunPeriod-2017-01/rawdata/Run030264/hd_rawdata_030264_002.evio
Run: 30264
Event: 3612081
Next

Object Types

- DBCALHit
- DBCALIncidentParticle
- DBCALPoint
- DBCALShower
- DBCALShower:CURVATURE
- DBCALShower:IU
- DBCALShower:JLAB
- DBCALShower:KLOE
- DBCALSiPMHit
- DBCALSiPMSpectrum
- DBCALSiPMSpectrum:TRUTH
- DBCALTDCCDigiHit
- DBCALTDCHit
- DBCALTruthCell
- DBCALTruthShower
- DBCALUnifiedHit
- DBeamPhoton
- DBeamPhoton:KinFit
- DBeamPhoton:MCGEN
- DBeamPhoton:TRUTH
- DCAEN1290TDCBORConfig
- DCAEN1290TDCConfig
- DCAEN1290TDCHit
- DCCALGeometry
- DCCALHit
- DCCALHit:TRUTH

Object Details | Call Graph

DBCALHit

Objects this event:

- 0x00007f89de1f2360 DBCALHit
- 0x00007f89de1d3770 DBCALHit
- 0x00007f89de1d3850 DBCALHit
- 0x00007f89de1d3960 DBCALHit
- 0x00007f89de1d3a40 DBCALHit
- 0x00007f89de1754f0 DBCALHit
- 0x00007f89de1755a0 DBCALHit**
- 0x00007f89de175650 DBCALHit
- 0x00007f89de175730 DBCALHit
- 0x00007f89de1758a0 DBCALHit
- 0x00007f89de175980 DBCALHit
- 0x00007f89de175a60 DBCALHit
- 0x00007f89de175b40 DBCALHit
- 0x00007f89de209390 DBCALHit
- 0x00007f89de209470 DBCALHit
- 0x00007f89de209550 DBCALHit
- 0x00007f89de209630 DBCALHit
- 0x00007f89de209820 DBCALHit
- 0x00007f89de209900 DBCALHit
- 0x00007f89de2099e0 DBCALHit
- 0x00007f89de209ac0 DBCALHit
- 0x00007f89de209ba0 DBCALHit

Associated Objects:

0x00007f89de1a9180 DBCALDigiHit

0x00007f89de1755a0 : DBCALHit

module : 4
layer : 1
sector : 2
end : downstream
E (GeV) : 0.030
t (ns) : 13.36

Objects to which this is associated:
(may be incomplete)

Quit

janaview plugin

JANA Viewer

File Tools View

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- DBCALShower:JLAB
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- DBCALSIPMSpectrum
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- DBCALTDCCDigiHit
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- DBeamPhoton:KinFit
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- DBeamPhoton:TRUTH
- DCAEN1290TDCBORConfig
- DCAEN1290TDCConfig
- DCAEN1290TDCHHit
- DCCALGeometry
- DCCALHit
- DCCALHit:TRUTH
- DCCALTruthShower
- DCDCDigiHit
- DCDCHHit
- DCDCHHit:TRUTH
- DCDCTrackHit
- DCODAROCInfo
- DCODAROCInfo
- DCereHit
- DChargedTrack
- DChargedTrack:PreSelect
- DChargedTrack:Hypothesis
- DChargedTrack:Hypothesis:Combo
- DChargedTrack:Hypothesis:KinFit
- DDIRCHHit
- DDIRCTruthHit
- DDetectorMatches
- DDetectorMatches:Combo
- DDetectorMatches:WireBased
- DEPICSvalue
- DESSkimData
- DEventRFBunch
- DEventRFBunch:Calibrations

Object Details Call Graph

```
graph LR; DMCThrown --> DTTabUtilities; DF1TDCHHit --> DTTabUtilities; DCDAROCInfo --> DTTabUtilities; DBCALDigiHit --> DTTabUtilities; DTTabUtilities --> DBCALHit; DBCALHit --> JEventProcessor_janaview;
```

DMCThrown

DF1TDCHHit

DCODAROCInfo

DBCALDigiHit

DTTabUtilities

DBCALHit

JEventProcessor_janaview

Quit

janaview plugin

The screenshot displays the JANA Viewer application window. At the top, the title bar reads "JANA Viewer". Below it, the "Current Event Info" section shows the source file path, run number (30264), and event number (3612081). The main area is divided into "Object Types" on the left and "Object Details" / "Call Graph" on the right. The "Object Types" list includes various detector-related classes such as DFDCPseudo, DTrackHitSelector, and DFCALHit. The "Call Graph" shows a network of these objects, with several nodes highlighted in green (e.g., DMCTrackHit, DFDCWireDigiHit, DFCALHit) and others in purple (DFDCPseudo) and blue (DFDCSegment). The graph illustrates the relationships and data flow between these objects during the event processing.