

art - Feature #4187

Reading in metadata from input files

06/20/2013 05:16 PM - Adam Aurisano

Status:	Accepted	Start date:	
Priority:	Normal	Due date:	09/30/2013
Assignee:		% Done:	0%
Category:	Infrastructure	Estimated time:	32.00 hours
Target version:		Spent time:	0.00 hour
Scope:	Internal	SSI Package:	art
Experiment:	NOvA		
Description			
Currently, the metadata facilities only exist to add or get metadata produced within a job. When running a job which takes in input files, there needs to be a way to access any metadata associated with that file. Then, experiments could write a module/service which makes the appropriate decision of whether or not to carry that metadata over into the output file.			

History

#1 - 06/25/2013 10:16 AM - Marc Paterno

- Status changed from New to Feedback

I'm not sure to what extent, if at all, this may meet your needs, but have you looked at the "provenance" information available through the art::Handle (or art::ValidHandle)? Each can provide access to an object of type art::Provenance, which provides access to the metadata for the object associated with the Handle. You can find the header for Provenance at <https://cdcv.s.fnal.gov/redmine/projects/art/repository/revisions/develop/entry/art/Framework/Principal/Provenance.h>. If you have not already done so, please take a look and let us know to what extent that meets your needs.

#2 - 06/26/2013 08:24 AM - Rob Kutschke

You can also look at some mu2e code to see how to access provenance information:

For the parameter sets in the provenance of a given data product:

http://cdcv.s.fnal.gov/cgi-bin/public-cvs/cvsweb-public.cgi/mu2e/Offline/Analyses/src/ViewProvenance_module.cc?rev=1.3&content-type=text/x-cvsweb-markup

<http://cdcv.s.fnal.gov/cgi-bin/public-cvs/cvsweb-public.cgi/mu2e/Offline/Analyses/test/viewProvenance.fcl?rev=1.2&content-type=text/x-cvsweb-markup>

To see all parameter sets stored in the metadata:

http://cdcv.s.fnal.gov/cgi-bin/public-cvs/cvsweb-public.cgi/mu2e/Offline/Analyses/src/ViewAllProvenances_module.cc?rev=1.1&content-type=text/x-cvsweb-markup

<http://cdcv.s.fnal.gov/cgi-bin/public-cvs/cvsweb-public.cgi/mu2e/Offline/Analyses/test/viewAllProvenances.fcl?rev=1.1&content-type=text/x-cvsweb-markup>

#3 - 06/26/2013 03:16 PM - Adam Aurisano

I see that it is possible to get the parameter set used to configure the module which created a given data product; however, I'm trying to get metadata associated with the job as a whole. This metadata was injected into the art file using the FileCatalogMetadata service. There was a metadata module (analyzer) whose job was to extract metadata from a parameter set in the FHiCL file and insert it use the FileCatalogMetadata service, but there was not data product added to the event by the metadata module. Would it be possible to recover the parameter set of the metadata module even though it did not add any data products to the event?

#4 - 08/14/2013 04:08 PM - Christopher Green

- Scope set to Internal

- Due date set to 09/30/2013

- Category set to Infrastructure

- Status changed from Feedback to Accepted

- Target version set to 1.09.00

- Start date deleted (06/20/2013)

- Estimated time set to 32.00 h

- *Experiment NOVA added*
- *SSI Package art added*

We believe we can provide read-only access to the SQLite database from the currently open input file for as long as that file is open. Some finer design questions remain, but I think they can be resolved fairly quickly.

#5 - 02/17/2014 12:27 PM - Christopher Green

- *Target version changed from 1.09.00 to 521*

#6 - 10/23/2017 12:12 PM - Kyle Knoepfel

- *Target version deleted (521)*