

artdaq - Feature #24082

Separate Fragment Type <-> Name facility from SharedMemoryReader

02/21/2020 03:41 PM - Eric Flumerfelt

Status:	Closed	Start date:	02/21/2020
Priority:	Normal	Due date:	
Assignee:	Eric Flumerfelt	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:	artdaq v3_08_00	Co-Assignees:	
Experiment:	-		
Description			
<p>While working on a new implementation for HDF5 Read/Write from art, I have encountered a need to access Fragment-type-to-string conversions. Currently, this is done completely within SharedMemoryReader by the FTT template parameter along with the getDefaultTypes template parameter. I propose moving this functionality into a service, ArtdaqFragmentNamingService, which will then enable access to the functionality from anywhere in the art executable, with behavior based on fhicl configuration.</p> <p>A side effect of my initial implementation is that instead of defining a demo-specific input source, I had to define a demo-specific FragmentNamingService. This change will also require another configuration epoch.</p>			

History

#1 - 02/21/2020 03:49 PM - Eric Flumerfelt

Initial implementations in artdaq and artdaq-demo, feature/24082_ArtdaqFragmentNamingService.

#2 - 03/05/2020 01:18 PM - Ron Rechenmacher

- Status changed from New to Resolved

I installed the demo, which used the tag 3_07_02 for artdaq. artdaq v3_07_02 got installed in the local products dir. Also, the artdaq src ups/product_deps file had "parent artdaq v3_07_02". The combination of these, plus:

```
if [[ "x${ARTDAQ_MPICH_PLUGIN_DIR:-}" == "x" ]]; then
  for plugin_version in `ups list -aK+ artdaq_mpich_plugin -q e17:s85:eth:prof|awk '{print $2}'|sed 's/\`//g'\`
;do
  if [ `ups depend artdaq_mpich_plugin $plugin_version -q e17:s85:eth:prof 2>/dev/null|grep -c "artdaq $ARTD
AQ_VERSION" -gt 0 ]; then
    setup artdaq_mpich_plugin $plugin_version -q e17:s85:eth:prof
    break;
  fi
done
fi
```

in the setupARTDAQDEMO file (which comes from artdaq_demo/tools/quick-mrb-start.sh) caused the artdaq from \$MRB_TOP/products/ to be setup *before* and *in addition to* the development artdaq. To get just the development artdaq, we had to remove (or move out of the way) the artdaq installed in \$MRB_TOP/products. The following shows the value of CET_PLUGIN_PATH before and after:

```
CET_PLUGIN_PATH=\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_mpich_plugin/v1_00_12/slf7.x86_64.e17.eth.s85.prof/lib:
\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq/v3_07_02/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/build_slf7.x86_64/artdaq_demo/lib:\
/home/ron/work/artdaqPrj/demol-develop/build_slf7.x86_64/artdaq/lib:\
/home/ron/work/artdaqPrj/demol-develop/build_slf7.x86_64/artdaq_core_demo/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_core/v3_05_10/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_ganglia_plugin/v1_02_18/slf7.x86_64.e17.s85.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/art/v2_13_00/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/canvas_root_io/v1_01_11/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/canvas/v3_06_01/slf7.x86_64.e17.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_pcp_mmv_plugin/v1_00_03/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_mfextensions/v1_04_00/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_epics_plugin/v1_02_11/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_utilities/v1_05_04/slf7.x86_64.e17.s85.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/messagefacility/v2_02_06/slf7.x86_64.e17.prof/lib:\
```

```
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/hep_concurrency/v1_00_04/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/fhiclcpp/v4_06_10/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/cetlib/v3_06_01/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/cetlib_except/v1_02_03/slf7.x86_64.e17.prof/lib
```

CET_PLUGIN_PATH=\

```
/home/ron/work/artdaqPrj/demol-develop/build_slf7.x86_64/artdaq_demo/lib:\
/home/ron/work/artdaqPrj/demol-develop/build_slf7.x86_64/artdaq/lib:\
/home/ron/work/artdaqPrj/demol-develop/build_slf7.x86_64/artdaq_core_demo/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_core/v3_05_10/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_ganglia_plugin/v1_02_18/slf7.x86_64.e17.s85.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/art/v2_13_00/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/canvas_root_io/v1_01_11/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/canvas/v3_06_01/slf7.x86_64.e17.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_pcp_mmv_plugin/v1_00_03/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_mfextensions/v1_04_00/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_epics_plugin/v1_02_11/slf7.x86_64.e17.s85.prof/lib:\
/home/ron/work/artdaqPrj/demol-develop/products/artdaq_utilities/v1_05_04/slf7.x86_64.e17.s85.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/messagefacility/v2_02_06/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/hep_concurrency/v1_00_04/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/fhiclcpp/v4_06_10/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/cetlib/v3_06_01/slf7.x86_64.e17.prof/lib:\
/cvmfs/fermilab.opensciencegrid.org/products/artdaq/cetlib_except/v1_02_03/slf7.x86_64.e17.prof/lib
```

#3 - 03/05/2020 02:41 PM - Ron Rechenmacher

- Status changed from Resolved to Reviewed

tested with quick-mrb-start.sh --develop

#4 - 03/24/2020 09:02 AM - Eric Flumerfelt

- Target version set to artdaq v3_08_00

- Status changed from Reviewed to Closed