

art - Bug #24427

Message of exception ProductNotFound lacking information

05/17/2020 12:43 AM - Gianluca Petrillo

Status:	Closed	Start date:	05/16/2020
Priority:	Normal	Due date:	
Assignee:	Kyle Knoepfel	% Done:	100%
Category:	Infrastructure	Estimated time:	4.00 hours
Target version:	3.06.00	Spent time:	4.00 hours
Occurs In:		Experiment:	-
Scope:	Internal	SSI Package:	

Description

I recall the message for a missing data product from `art::Event::getByLabel()` and `art::Event::getValid()` being more descriptive than what I seem to get now:

```
---- ProductNotFound BEGIN
  getBySelector: Found zero products matching all criteria
  Looking for type: std::vector<simb::MCParticle>
  The above exception was thrown while processing module DumpMCParticles/dumpmcparticles run
: 1 subRun: 0 event: 1
---- ProductNotFound END
```

considering that the query was given a `art::InputTag`.

Is it possible to have an error message including all the constraints of the query, including the input tag?

To reproduce it, with LArSoft:

```
source /cvmfs/larsoft.opensciencegrid.org/products/setup
setup larsoft v08_52_00 -q e19:prof
lar -c empty_events.fcl -o Empty.root -n 1
lar -c dump_mcparticles.fcl -s Empty.root
```

which shows me:

```
16-May-2020 19:23:40 CDT Initiating request to open input file "Empty.root"
16-May-2020 19:23:41 CDT Opened input file "Empty.root"
16-May-2020 19:23:41 CDT Closed input file "Empty.root"
```

```
TrigReport ----- Event Summary -----
TrigReport Events total = 1 passed = 1 failed = 0
```

```
TrigReport ----- Modules in End-Path: end_path -----
TrigReport Trig Bit#      Run      Success      Error Name
TrigReport      0      0          1          0          1 dumpmcparticles
```

```
TimeReport ----- Time Summary ---[sec]----
TimeReport CPU = 0.004033 Real = 0.004351
```

```
MemReport ----- Memory Summary ---[base-10 MB]----
MemReport VmPeak = 513.806 VmHWM = 120.775
```

```
%MSG-s ArtException: PostEndJob 16-May-2020 19:23:41 CDT ModuleEndJob
---- EventProcessorFailure BEGIN
  EventProcessor: an exception occurred during current event processing
---- EventProcessorFailure BEGIN
  EndPathExecutor: an exception occurred during current event processing
---- ScheduleExecutionFailure BEGIN
  Path: ProcessingStopped.
---- ProductNotFound BEGIN
  getBySelector: Found zero products matching all criteria
```

```
Looking for type: std::vector<simb::MCParticle>
The above exception was thrown while processing module DumpMCParticles/dumpmcparticles run
: 1 subRun: 0 event: 1
---- ProductNotFound END
Exception going through path end_path
---- ScheduleExecutionFailure END
---- EventProcessorFailure END
---- EventProcessorFailure END
%MSG
Art has completed and will exit with status 1.
```

(the configured input tag in the example is the always fashionable largeant).

History

#1 - 05/18/2020 10:24 AM - Kyle Knoepfel

- Estimated time set to 4.00 h
- Status changed from New to Assigned

We'll take a look.

#2 - 05/18/2020 10:24 AM - Kyle Knoepfel

- Assignee set to Kyle Knoepfel

#3 - 06/01/2020 08:14 AM - Kyle Knoepfel

The problem is understood. It appears that during some cleanup, the extra diagnostic information was removed. We will restore it.

#4 - 06/02/2020 08:45 AM - Kyle Knoepfel

- % Done changed from 0 to 100
- Target version set to 3.06.00
- Status changed from Assigned to Resolved
- Category set to Infrastructure

Fixed with commits:

- [art:060e656](#)
- [art:6d6dbc8](#)

The fix does require a change in the interface of art::SelectorBase, so this is technically a breaking change, and will be documented on the breaking-changes page for art 3.06.

#5 - 07/10/2020 01:58 PM - Kyle Knoepfel

- Status changed from Resolved to Closed