

art - Feature #2672

fhicl-cpp should wrap bad_any_cast to identify parameter and cast at issue.

04/24/2012 01:33 PM - Christopher Green

Status:	Closed	Start date:	04/24/2012
Priority:	Normal	Due date:	09/30/2013
Assignee:	Kyle Knoepfel	% Done:	100%
Category:	Infrastructure	Estimated time:	8.00 hours
Target version:	1.14.00	Spent time:	2.00 hours
Scope:	Internal	SSI Package:	fhicl-cpp
Experiment:			
Description			
Current error message during conversion says:			
<pre>terminate called after throwing an instance of 'cet::coded_exception<fhicl::error, &(fhicl::detail::translate(fhicl::error))>' what(): ---- Type mismatch BEGIN boost::bad_any_cast: failed conversion using boost::any_cast ---- Type mismatch END</pre>			
Exception from boost should be wrapped to include parameter name and type to which cast failed if possible.			

History

#1 - 08/05/2013 01:23 PM - Christopher Green

- Due date set to 09/30/2013
- Target version set to 1.09.00
- Estimated time set to 8.00 h
- Scope set to Internal
- SSI Package fhicl-cpp added

#2 - 02/17/2014 12:27 PM - Christopher Green

- Target version changed from 1.09.00 to 521

#3 - 02/18/2015 08:43 AM - Kyle Knoepfel

- Target version changed from 521 to 1.14.00

#4 - 02/24/2015 04:18 PM - Kyle Knoepfel

- Status changed from Accepted to Resolved
- Assignee set to Kyle Knoepfel
- % Done changed from 0 to 100

A boost::bad_any_cast exception is now wrapped so that for an error-prone incantation of parameterSet.get<A>("a"), the following is printed:

```
---- Type mismatch BEGIN

  Unsuccessful attempt to convert FHiCL parameter 'a' to type '(anonymous namespace)::A'.

[Specific error:]
  boost::bad_any_cast: failed conversion using boost::any_cast

---- Type mismatch END
```

where the class A has been declared in an anonymous namespace, and whose stringified type is determined based on a call to

`cet::demangle_symbol(typeid(instance_of_A).name())`.

Implemented with commit [fhicl-cpp:dbc4f12a2092b643fd2c6e9879eebb75a82dc481](https://github.com/edwardclack/fhicl-cpp/commit/dbc4f12a2092b643fd2c6e9879eebb75a82dc481).

#5 - 05/04/2015 11:52 AM - Kyle Knoepfel

- Status changed from Resolved to Closed