artdaq - Feature #5958

Add the ability to flag various conditions in a RawEvent

04/18/2014 09:15 AM - Kurt Biery

Status:	Closed		**Start date:**	12/18/2012
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	0%
Category:	Needed Enhancements		**Estimated time:**	40.00 hours
Target version:				
Experiment:			**Co-Assignees:**	

Description

When an event times out in the event store, has duplicate fragment IDs, or has some other exceptional condition, we should be able to flag it, and possibly route it to a different disk file (stream).

This issue requests the addition of functionality in RawEvent (and whatever other classes may need to be changed) to support the indication of exceptional conditions.

We should also provide a sample art module (or whatever the correct mechanism is) to demonstrate the routing of events with issues to different disk files.

Related issues:

Related to artdaq - Feature #3186: Add fragment ID checking to some combinati...	**Resolved**	**12/18/2012**
Related to artdaq - Idea #20815: Include RawEventHeader as art product	**Closed**	**09/12/2018**
Related to artdaq - Feature #23131: Add reporting of fragment IDs for missing...	**Assigned**	**08/15/2019**

History

#1 - 04/18/2014 09:17 AM - Kurt Biery

This is related to Issues #3186 and #3187.

#2 - 05/04/2015 01:05 PM - Kurt Biery

- Target version changed from 576 to v1_12_10

#3 - 06/02/2015 05:47 AM - Kurt Biery

- Target version changed from v1_12_10 to v1_12_11

#4 - 07/30/2015 03:16 PM - Kurt Biery

- Target version changed from v1_12_11 to v1_12_13

#5 - 09/14/2015 09:11 PM - Kurt Biery

- Target version changed from v1_12_13 to 576

#6 - 01/13/2017 04:30 PM - Eric Flumerfelt

- Category set to Needed Enhancements

- Target version deleted (576)

This could be interesting, especially where it interacts with the Dispatcher and Online Monitor modules.

#7 - 01/27/2018 12:23 PM - Eric Flumerfelt

artdaq v3 requires RawEvent to be fixed-size, so this must be a consideration in adding error flags.

#8 - 10/18/2019 02:50 PM - Eric Flumerfelt

- Status changed from New to Closed

This functionality is mostly already present. RawEventHeader includes the "is_complete" flag (though RawEventHeader is not currently stored in art events, see #20815). MissingDataCheck_module fulfills the rest of the requirements, though "has duplicate fragment IDs" would have to be handled in feature/3186_SMEM_FragmentIDChecking.

#9 - 10/18/2019 02:50 PM - Eric Flumerfelt

- Related to Feature #3186: Add fragment ID checking to some combination of RawEvent, EventStore, and builder.cc. added

#10 - 10/18/2019 02:50 PM - Eric Flumerfelt

- Related to Idea #20815: Include RawEventHeader as art product added

#11 - 10/18/2019 02:51 PM - Eric Flumerfelt

- Related to Feature #23131: Add reporting of fragment IDs for missing fragments to the FragmentWatcher module added

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