

## artdaq - Feature #24541

### Generate requests in EventBuilders in child subsystems

06/17/2020 10:25 AM - Eric Flumerfelt

<b>Status:</b>	Closed	<b>Start date:</b>	06/17/2020
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Eric Flumerfelt	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Co-Assignees:</b>	
<b>Experiment:</b>	-		
<b>Description</b>			
Mu2e needs the ability to create a request based on a DataFragment coming from a parent subsystem:  TRK+CAL BRs -> Filter EVB -> Final EVB -> DL CRV BRs - (pull mode) -> Final EVB  Using the RawEventHeader, it should be possible to propagate the necessary timestamp information through art and have the DataFragment generated in RootNetOutput have its header fields set so that SharedMemoryEventManager generates correct request messages in the "Final EVB".  This functionality should be tested via a DAQInterface simple_test_config.			
<b>Related issues:</b>			
Blocked by artdaq - Idea #20815: Include RawEventHeader as art product		<b>Closed</b>	<b>09/12/2018</b>

### History

#### #1 - 06/17/2020 12:58 PM - Eric Flumerfelt

- Blocked by Idea #20815: Include RawEventHeader as art product added

#### #2 - 06/17/2020 03:40 PM - Eric Flumerfelt

- Status changed from New to Resolved

I have implemented a mu2e\_sample\_system simple\_test\_config, which uses functionality in artdaq:feature/SharedMemoryReader\_RawEventHeaderInArtEvent and artdaq\_core:feature/RawEvent\_HeaderInArtDictionary

#### #3 - 06/19/2020 10:26 AM - Ron Rechenmacher

I was able to run the mu2e\_sample\_system simple test config via:

```
/home/ron/work/artdaqPrj/demo8-e19-s96
ron@mu2edaq13 :^) srcs/artdaq_demo/tools/run_integration_tests.sh --config mu2e_sample_system
...
```

Using the mu2e\_sample\_system simple test config, daq interface generates the EventBuilder1.fcl which has

```
...
daq: {
  event_builder: {
    buffer_count: 20
max_event_size_bytes: 1025128
    expected_fragments_per_event: 3
    init_fragment_count: 2
    max_incomplete_events: 75
    print_event_store_stats: true
    request_address: "227.128.4.130"
    request_port: 3001
    routing_token_config: {
      use_routing_master: false
    }
  }
...

```

Eric says the expected\_fragments\_per\_event should be 2 not 3.

**#4 - 06/19/2020 10:31 AM - Ron Rechenmacher**

- *Status changed from Resolved to Reviewed*

**#5 - 11/30/2020 12:33 PM - Eric Flumerfelt**

- *Status changed from Reviewed to Closed*