# artdaq - Bug #24303

## Standard error messages should refer to the correct FHiCL parameter names

04/10/2020 10:39 AM - John Freeman

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| **Status:** | Closed | | **Start date:** | 04/10/2020 |
| **Priority:** | Normal | | **Due date:** | |
| **Assignee:** | | | **% Done:** | 0% |
| **Category:** | | | **Estimated time:** | 0.00 hour |
| **Target version:** | artdaq v3_09_00 | | | |
| **Experiment:** | - | | **Co-Assignees:** | |

**Description**

Working with Bill Badgett to get his Icarus setup running, we bumped into the following error message in a boardreader:

```
Error in CommandableFragmentGenerator: use_data_thread must be true when request_mode is not "Igno
red"!
```

However, when he set "use_data_thread: true" in the boardreader's FHiCL, the problem persisted. This is because the FHiCL parameter he needed to set to true was in fact "separate_data_thread". From CommandableFragmentGenerator.cc:

```
useDataThread_(ps.get<bool>("separate_data_thread", false))
```

We should fix this message, and any other messages, which don't refer to the correct FHiCL parameter name.

## Associated revisions

**Revision fffadcd6 - 05/04/2020 12:24 PM - Eric Flumerfelt**

First-order fix for Issue #24303 by changing the variable name in the message.

## History

**#1 - 04/10/2020 10:47 AM - Eric Flumerfelt**

Should we define the parameter names as const statics or macros to ensure that they're correct everywhere they appear? (I'm thinking parameter structs, Doxygen, constructor/config methods, and messages)

**#2 - 04/10/2020 11:03 AM - John Freeman**

Good idea, though I think it's fair to say we want to get away from macros as much as possible. One way to structure this is to have a mapping between what a parameter's name in the code is, and what its FHiCL name is. E.g., something like:

```
ParameterMapping["useDataThread_"] = "separate_data_thread"
```

so then you could have an error message like the following:

```
if (!useDataThread_) {
 latest_exception_report_ = "Error in CommandableFragmentGenerator: " + ParameterMapping["useDataThread_"] + "
 must be true when request_mode is not \"Ignored\"!";
```

**#3 - 04/10/2020 02:14 PM - John Freeman**

...although thinking about it a little bit more, in the approach I suggested it would be harder for someone reading the code to figure out what error message to look for in the logfiles since the "user-facing" variable name would get obscured in the code. Just something to factor in.

**#4 - 05/04/2020 01:36 PM - Eric Flumerfelt**

First-order solution (fixing variable name in the message) implemented on artdaq:bugfix/24303_FixErrorMessages

**#5 - 07/24/2020 02:13 PM - Eric Flumerfelt**

- *Target version set to artdaq v3_09_00*

- *Status changed from New to Closed*