

artdaq Utilities - Bug #17425

FHiCL numerical parameters truncated by DB!

08/10/2017 10:30 AM - Martin Haigh

Status:	Closed	Start date:	08/10/2017
Priority:	Immediate	Due date:	
Assignee:	Gennadiy Lukhanin	% Done:	0%
Category:	artdaq-database	Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Experiment:	DUNE	Co-Assignees:	
Description			
Following from bugs 17403 and 17416, I discovered that large numerical values (ones that won't fit in a signed integer?) are actually truncated on import to the DB. For example, when the FHiCL: test1: 0xF0000000 test2: 0xFFFFFFFF test3: 4026531840 test4: 4294967295 is imported to the DB and then re-exported, the resulting snippet is changed to the following: test1: -2147483648 test2: -2147483648 test3: -2147483648 test4: -2147483648 This was observed on the CERN test stand for protoDUNE.			
Related issues:			
Related to artdaq Utilities - Bug #17403: Undesirable conversion of +ve integ...		Closed	08/08/2017
Related to artdaq Utilities - Bug #17416: Conversion of hex values to decimal...		Closed	08/09/2017
Related to fhicl-cpp - Feature #17448: Add the raw_value member to fhicl::ext...		Feedback	08/16/2017

History

#1 - 08/14/2017 02:05 PM - Gennadiy Lukhanin

Opened a new feature request (Feature [#17448](#)) with the fhicl-cpp library developers.

#2 - 08/14/2017 02:09 PM - Gennadiy Lukhanin

As as an interim solution, all hex numbers can be stored with the "hex" prefix, so they are interpreted as string values by the database library.

e.g. 0xffff becomes hex0xffff

#3 - 08/14/2017 02:10 PM - Gennadiy Lukhanin

- Related to Bug #17403: Undesirable conversion of +ve integer to -ve in FHiCL array parameter added

#4 - 08/14/2017 02:10 PM - Gennadiy Lukhanin

- Related to Bug #17416: Conversion of hex values to decimal on database check-in added

#5 - 08/14/2017 02:10 PM - Gennadiy Lukhanin

- Related to Feature #17448: Add the raw_value member to fhicl::extended_value added

#6 - 08/14/2017 02:12 PM - Gennadiy Lukhanin

- Status changed from New to Work in progress

#7 - 07/30/2018 12:56 PM - Gennadiy Lukhanin

- Status changed from *Work in progress* to *Resolved*

#8 - 10/31/2019 02:14 PM - Gennadiy Lukhanin

- Status changed from *Resolved* to *Closed*