Golden Rule: Under no circumstances should you restart the PVSS project. If you need to restart it, call Kazu.

To aquire Data with beam

you will need to use 3 PVSS panels the one called partition ODIN v202, the Single CB panel, and the ACDC3Tell1Control. if you seem not to have them try to follow the instructions to recover the system.

you need the ACDC3Tell1Control to reset, configure tell1s. Just click always on the highest level to change the states from not ready to ready using configure.

you should try to find the panel called Partition odin v202. if you dont know what recipe is loaded click on set recipe,

select ACDC3_lat133_extTriggers, select that one and then on the top level, the coulored button should go to not ready. go to it and click, do configure. the recipe will be loaded to the board. it will take 20 seconds or so. check if the green lights indicating that the auxiliary trigger, destination assignments, odin frontend, and trigger type broadcast are ticked, and the indicator shows green. If not tick the little boxes and do a get ready.

open a putty session to daq @ lbh8lx02.cern.ch the magic word you'll need is lhcbdaq. do source setupdaq and use the script takedata to take data.

execute like: takedata <string tag> , the string tag goes to the data file and will be followed by a time stamp.

this will run the event builder... there should come up a little window... this window has the buffer management... the last process running, mdf writer, will show you how many events you wrote to a file...

case things are weird go to recover system list of most common weird thinguies.

From here down on, these informations are obsolete

Instructions to Acquire data:

1 TELL1 - old Event Builder:

Under no circumstances should you restart the PVSS project. If you need to restart it, call Kazu.

Look for the PVSS panel called Partition Odinv202. make sure TFC server is on OK (blue) state.

Click on Select Recipe Button. look for the recipe VeloTest09 in cache.

click on notready button close to partition. do configure.

go to a putty session or a terminal on linux.

ssh to the pc lbh8lx02. (as lhcbvelo)

do sudo su -

go to /DAQ/oldEB/writeEventsToBinary

to change tell1 you should do: on the /DAQ/oldEB/writeEventsToBinary/ directory you should edit the ebuild.cfg file and uncomment the tell1 you will use and comment back the tell1 you just used. dont change the board 0x0000000 it's the readout supervisor. commented lines are marked with #

login to lbh8lxco01 as lhcbvelo, go insige tbDaqScripts, and run ./resetTell1s This will stop the data acquisition on all of them. (the event builder gets confused if there are more sources than it's declared on the configuration file)

go to the ACDCTell1Control panel. (dont ever close it!)

click on the tell1 you want. (on the colored state button)

click reset if it shows READY.

and then click on NOT READY to go to configure state.

To power the beetles: go to the master control on SingleCB.

The on Control board @ #board click Get Ready One of the channels should be highlighted in green. Click main button LV on. Check in happy pion what sensor type is connected to the Tell1 board and set the type on the highlighted channel. (If you are taking data with the dummy module you should always use R config) Click ON on button below highlighted channel.

Master control on Single CB window. Control Board -> Get Ready -> LV on, then Beetle On (dummy module is R type)

go back to the terminal session on lbh8lx02

type source setpaths

do ./writeEventsToBinary <outputFile.bin> <numberofEvents> (try to put the file on /misc/tesbeamdata)

I suggest to type:

./writeEventsToBinary /misc/testbeamdata/TELL1NN_C#_D1#_D2#N_D3#N_D4#_RptN.bin 5000

where NN should be replaced by tell1 number D1,D2,D3,D4 means the connector to the tell1 counting from the top. # cable number RptN should be replaced by the repeater number.

-- if you get an error with writeEventsToBinary, try resetTell1s in terminal, then reset in GUI, then configure correct Tell1 in GUI. Also check that the correct one is uncommented in ebuild.cfg

go back to the partition panel. start run.

If you want to configure the module, it's another business. search the SingleCB panel open somewhere. go to the master control tab. click on NotReady or LVOFF button make a get ready. see if any cable shows life signs. if not try to read the LV instructions.

then put LV on then look foryour cable on position. put it on. the dummy module is a R (rho) type.

currently on the controlboard. txt (located on the desktop/BeetleConfig) does not enable test pulses.

-- KazuyoshiAkiba - 03 Nov 2006

How to operate all the tell1s and the new event builder. log in lbh8lx02 as daq password lhcbdaq so source setupDAQ

load the recipe in the partition panel for the ODIN. use the recipe VeloTest09. follow the instructions above

for it in case you think you are lost.

go for the ACDCTell1Control panel. click on the top level to configure/rest all of them...

before you start the event builder give a sensible name to the file

in the directory

/home/daq/cmtuser/Online/OnlineTasks/job

edit

../options/MDFWriterLite.opts

change the file which has the location

file:///misc/testbeamdata /velo....

start the event builder by executing the script hltrx.sh

do like this go to OnlineTasks /job

do . hltrx.sh

should run an wait for triggers.

then start run on the tfc. stop the run whenever it suits you better.

press ctrl+C to get away of the event builder. if that doesnt work type killall Gaudi.exe

datafiles with time stamps should appear on /misc/testbeamdata/ with veloacdc3 prefix.

This topic: LHCb > DAQ(oneOrManyTELL1s)
Topic revision: r10 - 2006-11-10 - KazuyoshiAkiba