

DUNE Dashboards

An updated

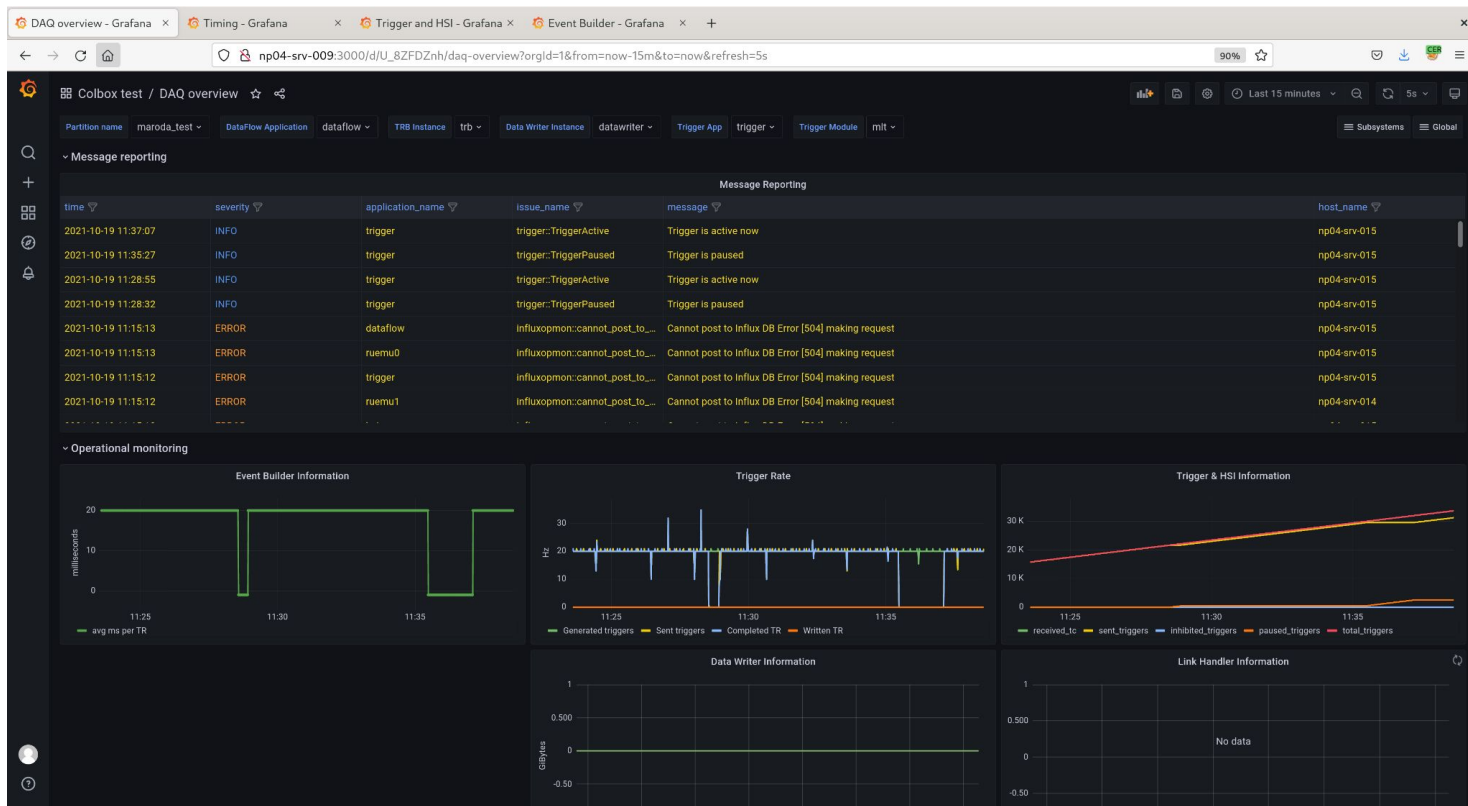
Marco Roda

Brief recap

- Started to work for the coldbox test
- Dedicated dashboards on np04-srv-009:3000
 - Also available on github - branch: “coldbox”
- New directory on the grafana server: coldbox
 - 4 dabsboards: DAQ Overview, Event Builder, Timing, Trigger and HSI
 - Sub dashboards linked via the main

Some details

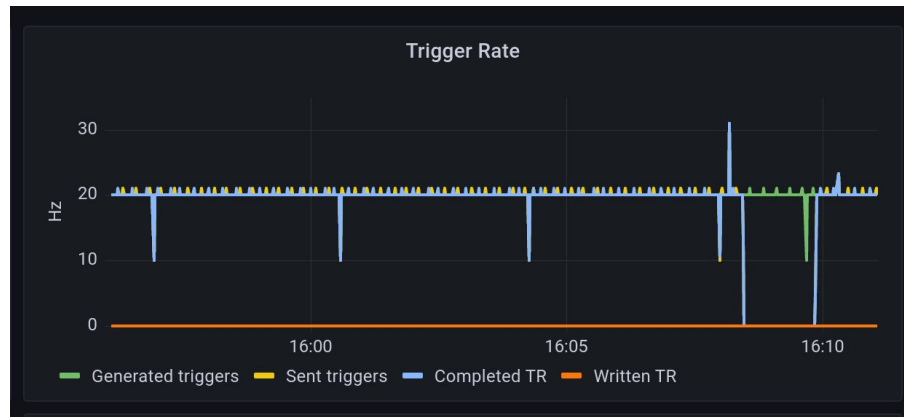
The main



- Simplified version of the initial main
- All queries controlled by the variables on the top
- Links at the top
 - Subsystem (includes all)
 - Global (only timing)

The main - a few more details

- Trigger rate box is a bit upgraded
 - ideally we should be able to the degradations in case something happens along the data stream
 - From generated triggers to written TR
- I left the absolute counters as well
- I'm not using readout metrics
 - Do we want something? What exactly?
- We expect to add a general run table
 - Run number
 - Current number of trigger
 - This will require to setup dedicated databases



A few questions

The screenshot shows a dashboard for 'Colbox test / DAQ overview'. At the top, there are several tabs: 'Partition name' (maroda_test), 'DataFlow Application' (dataflow), 'TRB Instance' (trb), 'Data Writer Instance' (datawriter), 'Trigger App' (trigger), and 'Trigger Module' (mli). Below the tabs, there are four status boxes: 'Current Status' (RUNNING), 'App Fwk Error State' (OK), 'Run number' (RUNNING), and 'Processing trigger number' (RUNNING). Below the status boxes, there is a 'Message reporting' section with a table of logs.

time	severity	application_name	issue_name	message	host_name
2021-10-20 12:21:09	INFO	trigger	trigger::TriggerActive	Trigger is active now	np04-srv-015
2021-10-20 12:21:09	INFO	trigger	trigger::TriggerStartOfRun	Start of run 0	np04-srv-015
2021-10-20 12:20:16	INFO	trigger	trigger::TriggerEndOfRun	End of run 0	np04-srv-015
2021-10-20 12:20:14	INFO	hai	timinglib::ProgressLpd...	: Exiting the generate_hsiEvents() method, generated 15894 HSIEvent messages and successfully sent 15894 copies. DAQModule: fhsiag	np04-srv-015

- I put some place holders
 - Already a function of the variables
- I can easily add run number and trigger number from any of the application
 - which one? Opinions?
 - triggers modules are more reasonable for trigger number
 - It has the drawback that if we change trigger algorithm we need to add that metric everywhere
 - A more stable module might reduce the workload
 - Data writer is probably the best for the run number
 - Many other modules are using the run number anyway and they all receive it
- Status and errors are more tricky
 - at the moment it's broadcasting the status of an application (trigger or df)
 - This does not scale well with a dynamic number of applications
 - I would say it's nanorc that should broadcast this, but maybe it is too much of a hack
- There is space for one more box
 - Suggestions?

Other subsystems

- TRB - complete dashboard
- Trigger and HSI - it's just a placeholder
- No dashboard for readout
 - Do we need something?
 - Shall I just add another placeholder?
- Timing
 - at the moment added as a link to both Subsystem and Global
 - not working as we don't have the timing at the moment

Timing

