

New ERECO Status

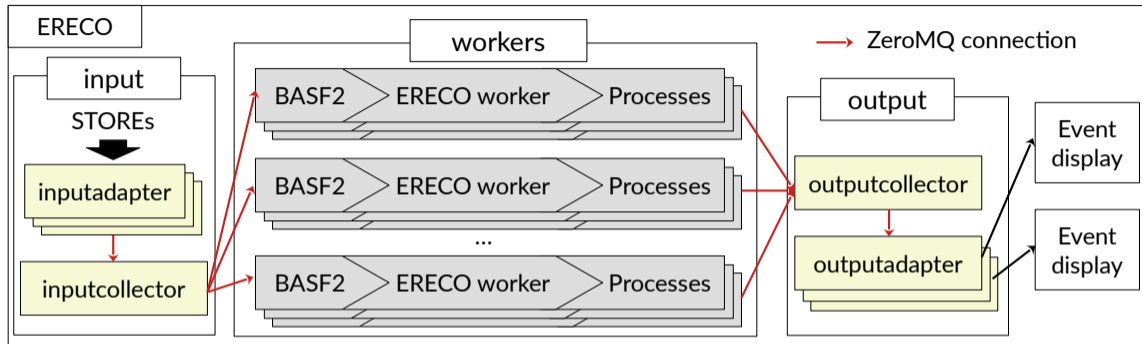
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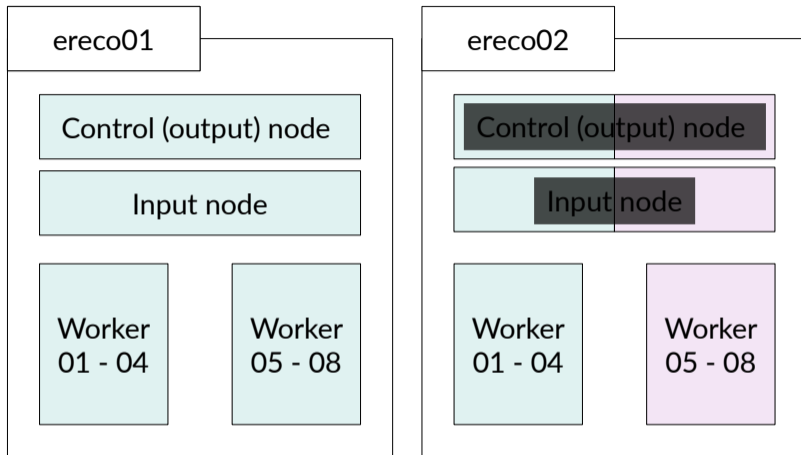
Introduction



■ Two goals of new ERECO

- ▶ More stable operation with ZeroMQ
- ▶ With an additional ERECO, keep more DQM statistics of physics-flagged events
 - The events are selected by the TriggerSkim module in STORE

Introduction



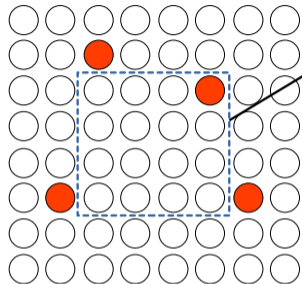
Random sampling
ERECO

Physics sampling
ERECO

* The number of
worker nodes will be
determined after the
performance test.

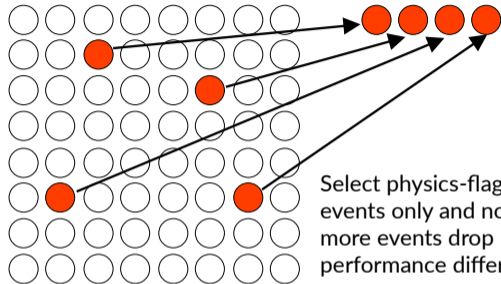
Introduction

< Random sampling >



Select events without any consideration, events drop by the performance difference

< Physics sampling >



Select physics-flagged events only and no more events drop by the performance difference

- **Except the distributor and finalcollector, there is no difference between HLT and ERECO**
- **Remaining issues**
 - ▶ Storage inclusion / exclusion need to be tested → after setting up the STORE01-05
 - ▶ rcstate goes to ERROR when event display is disconnected / connected
 - I need to check the rcstate condition in outputadapterd
 - ▶ The number of worker nodes for the physics ERECO
 - Trigger line selection study is ongoing by Daniel
 - ▶ Restart script preparation

Partial SALS and non-stop DAQ

- **Both HLT and ERECO has a problem for applying partial SALS**
 - ▶ As similar to the STORE, the DQM file name is fixed while LOADING
 - ▶ I need to review histoserver programs (including proxyhistoserver)
- **With long runs (non-stop DAQ), delta DQM feature is necessary**

Expected problem

- In the HLT, we suffer due to the too many open files
 - ▶ This could be appear in the new ERECO too
 - ▶ Itoh-san develop new ring buffer implementation for HLT
 - ▶ This will reduce the number of ZMQ connection, so the too many open files message also could be reduced
 - ▶ Faulty event treatment is not necessary, but I'm thinking to implement it

To do list

1. Prepare restart script including physics ERECO
 2. (After STORE01-05 setup) test STORE inclusion / exclusion
 3. Remove ERROR of outputadapterd related with event display
 - ▶ Temporary solution: use old method for event display connection
- In parallel, review histoserver and prepare partial SALS