

PR Summary

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How many output streams?

Don't write **skims**.

Collections: 4 Streams ?

- AllEvents,
- BrecoStream, do we still need this if we have deep copy skimming? **No**.
- TriggerStream,
- BackgroundStream - need to write raw for this stream to make it useful.

Decided 3 streams and make raw writing work for background stream.

How to recover from failures?

Not Discussed

1. Some elves **crash during processing an event**.
Are the data files ok?
2. Some elves **crash during writing**. Some trees are updated others not.
Can we repair the data files up to the last write, or make all files have same number of events?
3. Problems with **writing** but **no crash**.
How can we check for this?
4. **Node** becomes **unresponsive** (hardware/network).
If data files written locally they are lost.

Easiest solution - abort or redo run, not elegant.

New concerns for PR. Currently Objy handles these issues.

Becomes an issue of added monitoring by CS.

What sort of RFI is needed?

Details not discussed much, definitions

RFI = Root File Integrity, QA = physics QA

- 2 x 3 streams x n elves files are 1st output.
Merge files into 2 x 3 streams = 6 files /run.
- Merge can do first order RFI; checks integrity of files from elves, check N events individual files = N events in merged file. checksum at end - written to oracle
- Then run separate RFI job on merged file?
Check that file can be read, check same N events in micro+tag and mini files for each stream, others?
- If a run does not pass RFI should be redone. How can this be automated? Too long for CS to wait for merge and RFI before continuing with next run.

Padova - Data Distribution - Bookkeeping

Needs more concrete discussion this Friday in Padova with PD developers and Wilko.

- Work through new-evs **data distribution** (Padova to SLAC or other TierA) steps and policies. Tools used in Run3 for Objy data export will be modified.
- **Internal export bookkeeping** should be integrated with internal PR bookkeeping. (Also integrate QA and lumi and sweeping bookkeeping).
- Synch of internal bookkeeping (Padova/SLAC) very important in this model.
- Should there be a **local skimming step** in Padova?
working decision - need to plan

How to make the data available with minimum latency?

- **Conditions (RC)** loaded to MASTER, then swept to Analysis (30min locked)
- Processed data continuously exported Padova to slac.
- What is equivalent of 'data sweep'?
import tools do archive to HPSS, copy micro to analysis disk, 'locate' collections
- How do users know about the new data?
see 3 step 'publishing' - Tim.

other things

- mass storage, tar small files?
- tests of SRB in parallel for export
- collection/file names proposal:
/R14/PR/;stream;/000/0000/'procspec'/run'runNumber'-
1.root
- how physically manage micro,mini files separately
when file names do not specify contents? also can be
an issue for system management. can this be done by
passing info to xrootd?
- names: new eventstore = new Kanga and then get rid
of new... ?