

Production status

ALICE Offline week

7/11/2013

Production cycles MC

- 93 production cycles from beginning of the calendar year
 - For comparison – 123 cycles in 2012; 639,597,409 events
 - Until end December – equal number of cycles projected
- 767,433,329 events
 - All types – p+p, p+A, A+A
 - Anchored to all data-taking years – from 2010 to 2013
- No backlog on requests
 - With a caveat – see next

MC backlog

- No general MC productions (with exception of p-A) on 2012 p-p data
 - Nominally, this should be 100% of RAW data statistics, or 1,536,219,111 events
 - Same for 2011 and 2010 RAW data reprocessing (still in the pipeline)
 - Not requested – the MC requests are analysis-related

MC as service tasks

- Production operations is an agreed service task
- Three types of productions – MC, RAW, AOD re-filtering
 - We start with the simple case - MC
- Potentially 3+ service task persons
- Offline is preparing a 'Data production handbook'

Production handbook



Production Handbook v.0.1

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This document describes the ALICE organized production activities: rules and regulations as well as methods and tools used throughout the production process. The document is intended for the individuals and groups in charge of running the organised production activities in ALICE.

[Update history](#)

Contents - partial

I. General terminology

Types of organized production activities:

1. **MonteCarlo** - typically a simulation + tracking + digitization + reconstruction workflow with various physics content, event generators and collision systems. The MC productions are “anchored” to a set of RAW data runs. “Anchored” in this context means that the MC uses the same set of conditions data as the RAW data reconstruction;
2. **RAW data productions** - automatically started following the data taking process or subsequent passes over the data after calibration and/or software updates;
3. **AOD re-filtering** - production of new AODs from ESDs, typically with new AliRoot revision and new AOD filtering tasks.

Production organisation and workflow:

1. **Production request** - the request is entered by a Physics Working Group (PWG) as a task in AliRoot Savannah or JIRA tracker. The task remains open until the production is completed and verified by the requestor

Strategy

- The handbook is in its final edition cycle
 - Ready by end November
- Ship to all PWGs for information
- Request assignment of Service Task people
 - Can already start now
- Organize training next ALICE mini-week (January)
- Hand over the MC production itself, continue running the production infrastructure

RAW data processing

- All RAW data collected in 2012-2013 is processed at least in Pass1 (some periods have Pass2)
 - ALICE has no 'parked' data
- All data has passed CPass0/CPass1 => ready for physics analysis
- Space-saving procedure – replicas for pass-1 are reduced to 1 copy automatically

RAW processing plans

- Re-processing of LHC11 p-p data (all periods)
 - With Cpasso/Cpass1
 - On standby, waiting for code updates
 - Delayed for >4 months
- Re-processing of 2010 p-p data (selected periods)
 - To follow-up the 2011 periods reconstruction
 - Perhaps also with Cpass0/Cpass1

AOD re-filtering

- 46 cycles
 - From MC and RAW, from 2010 to 2013
 - Some still done with tenders
- In general, the procedure is smooth with the following exceptions:
 - For complex re-filtering (ex. LHC11h RAW) tasks, organization time is long, while the filtering is needed 'now'
 - For the above, the post-processing QA is long, preventing space recuperation
 - These being addressed by adding 'analysis level QA'

Summary

- Production in 2013 – OK on all levels
- Sufficient resources to fulfill all requests
- Some backlog exists on the level of old RAW data reconstruction and associated MC
- MC productions – soon a ‘service task’