

Planning Workshop Preparation

DAQ CT, 22.04.24

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Science and
Technology
Facilities Council

Planning Workshop Goals

- Confirm / update the list of critical activities, their importance, and people involved
 - Identify overlaps and clashes
 - Establish priorities
 - Define a work plan
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- Proposed dates : 2-3 1/2 days, between May 13th and May 17th
 - ▶ Optimal dates from doodle poll: Tue, Wed, Thu



Main areas of work

- **Operations for NP04 (+NP02)**
 - ▶ Remaining “missing features” for NP04
 - ▶ Remaining integration work in prep of NP02
- **Transition to OKS-based configuration (v5.x)**
- **PRR preparation**
 - ▶ timing, readout network and daq servers
- **Other critical path developments planned for ‘24**



Operations and Integration

- NP04
 - ▶ Confirm the list of missing features
 - ▶ Identify who is going to work on them, on what time frames
- NP02
 - ▶ Confirm what missing for detector integration (assuming v4 as baseline)
 - ▶ Confirm what is required for transitioning to v5 (see OKS slide)
 - ▶ Identify who is going to work on them, on what time frames
- Reference person: Wes



Transition to OKS

- Detailed understanding of work required to deploy OKS-based system as DAQ-default still missing
- Key question that need answering before the workshop
 - ▶ Are the subsystems configuration representation sufficient?
 - ▶ Are the interfaces to the Run Control sufficient?
 - ▶ Are the interfaces to Conditions / Historical databases sufficient? (is there a plan..?)
 - ▶ Are the integration tests ready to support the transition?
 - ▶ Is the configuration management/generation ready for detector operations?



Transition to OKS

- Preliminary answers need to be collected, digested and summarised before the workshop
 - ▶ Workshop in 3 weeks, initial feedback needed by next week
- This requires investing time in the next 1-2 weeks to familiarise ourselves with OKS and the system model
 - ▶ Are the configuration representation sufficient (to operate NP02)?
 - **Readout - Roland/Alessandro, Trigger - Artur/Josh, Dataflow - Kurt/Eric, Timing - Stoyan/Diana (?)**
 - ▶ Are the interfaces to the Run Control sufficient?
 - **CCM - Pierre/Alex**
 - ▶ Are the interfaces to Conditions / Historical databases sufficient? (is there a plan for..?)
 - **CCM (?) - Alex/Pierre/?**
 - ▶ Are the integration tests/regression tests ready to support the transition?
 - **Release Coordination - Kurt**
 - ▶ Is the configuration management/generation ready for detector operations?
 - **Run Coordination - Wes**
- Can we do it?
- Giovanna agreed to collect and summarise these inputs for the workshop



PRRs

- Detailed understanding of work required to prepare the PRRs still missing
- 2 main aspects
 - ▶ Clarifying the procurement process details across the consortium
 - ▶ Technical specifications preparation ← Focus of the workshop
- Inputs to the planning workshop
 - ▶ Timing : preliminary list of documents, hardware testing status and work plan leading up to the review
 - **Stoyan, David**
 - ▶ Readout Network : preliminary list of documents, testing status and plan leading up to the review
 - **Adam + Roland/Alessandro**
 - ▶ Servers (see next slide)



DAQ Servers PRR

- Inputs to the Planning Workshop
 - ▶ preliminary list of documents, testing status and plan leading up to the review
- Baseline goal for the PRR: review of procurement of all DAQ servers: readout, general infrastructure, dataflow/storage, ccm, dqm, trigger and data filter
- What is going to run on each class of servers? and how do we estimate its footprint to inform technical specifications? What measurements are required?
 - ▶ Understanding of readout server requirements fairly advanced: focus on performance measurement work
 - ▶ Missing crucial input for other server groups: **general infrastructure, dataflow/storage, ccm, dqm, trigger and data filter**
 - What do we need to do and how do we get there?
- Reference person: Roland



Other critical path items

- K8S rollout at EHN1 : report on status and close out
 - ▶ Alex/Pierre/Tiago
- Network requirements document
 - ▶ Adam/Roland: Missing inputs to FNAL networking and what measurements are required
- Application framework review implementation
 - ▶ Eric : Workplan update - **probably requires a dedicated session**
- Timing SW/FW completion
 - ▶ Stoyan/David: Activities not covered by Timing PRR prep (e.g. timing as service?)
- DAQ deployment model
 - ▶ Already covered by general infrastructure servers specs for server PRR.



Summary

- **Preparing the Planning Workshop requires a significant effort from all of us**
 - ▶ Can we devote the required effort in the next couple of weeks?
- **What can we fruitfully discuss in the workshop?**
 - ▶ And what will we have to postpone?
- **What are our priorities?**

