

WLCG closing thoughts

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WLCG & HSF workshop

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Background

- CWP was produced last year
 - HSF, WLCG gave a charge
- Strategy document of WLCG (now)
 - WLCG prioritization and focus of (some of) the CWP ideas and directions
 - Calls out a number of challenges and R&D projects
 - Many presented and discussed this week
- How to follow up?

Strategy – outline

Themes

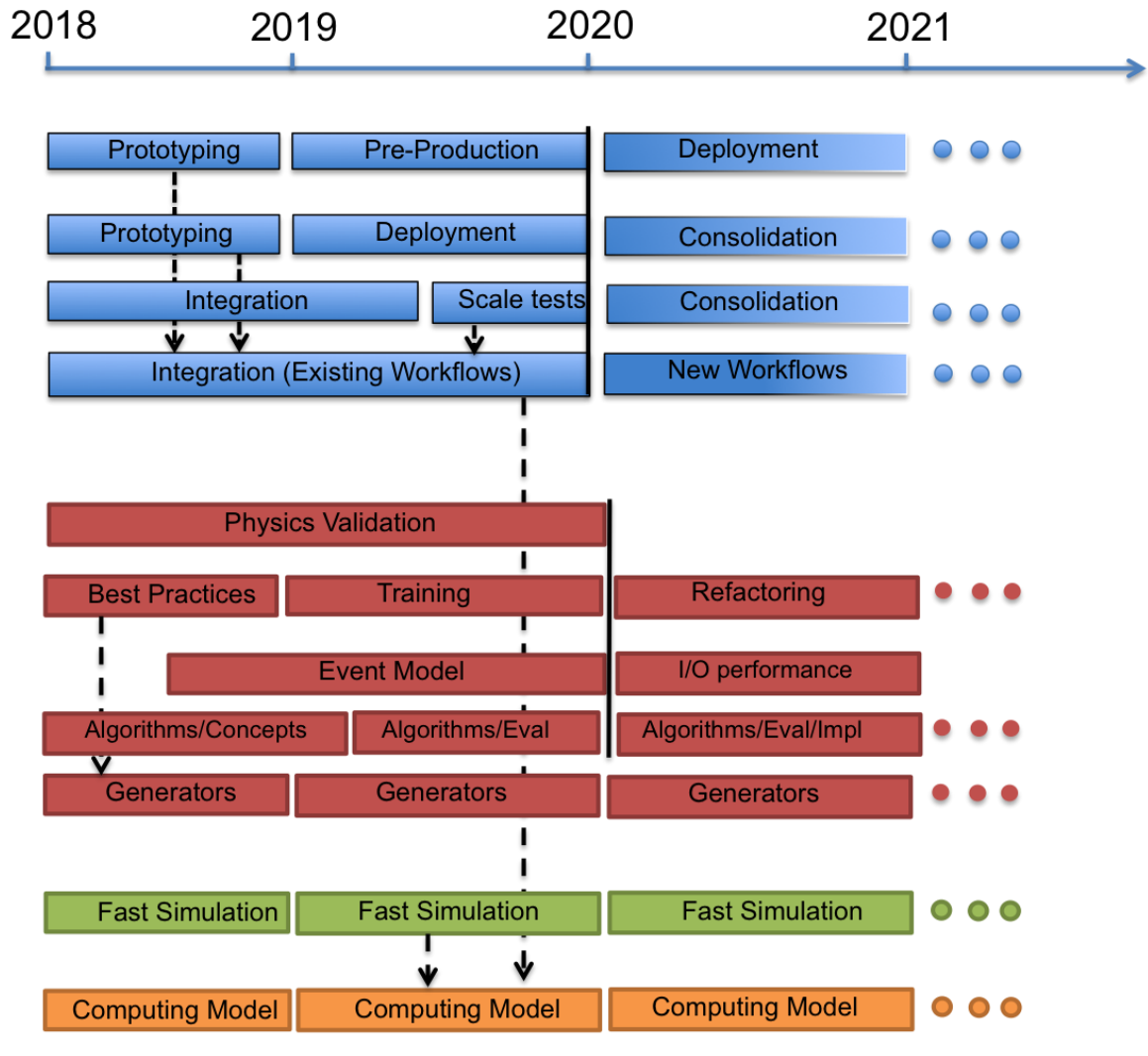
1. Software performance
2. Algorithmic improvements/changes
 - E.g. reco, fast MC, event generators
3. Reducing data volumes
4. Managing operations costs
5. Optimizing hardware costs

How do we convince FA's that we are in control of costs, while maximizing physics output?

1. Introduction
2. Computing Models
3. Experiment Software
4. System Performance & Efficiency
 - Cost Model
 - Software performance
 - I/O performance
5. Data & Compute Infrastructure
 - Storage consolidation
 - Caching
 - Storage, access, transfer protocols
 - Data Lakes
 - Network
 - Processing resources
 - Cloud analysis
6. Sustainability
 - Common solutions
 - Security infrastructure
7. Workplan
8. Appendix: technology evolution
9. Appendix: likely benefits

R&D projects

- ❑ Specific R&D projects are being proposed
 - Should have explicit timelines, goals, metrics, etc.
- ❑ Integrate with existing working groups where practical
- ❑ Use GDB slots to engage community and show progress/manage direction
- ❑ Need workshops like this one to bring them all together



Highest priorities

- ❑ Data management
 - R&D project to prototype and understand data lakes and all associated tools
 - Integrate with existing DM working group
- ❑ Software performance and efficiency
 - Can we get towards a set of recommendations, best practices for how we write/re-engineer software for performance and efficiency
 - Lots of encouraging work seen this week, how is that all brought together, and inform community?
 - Was driver for HSF in the first instance
 - Need to think about some specific outcomes