

Exascale Requirement Reviews Office of Science Synthesis and Path Forward Meeting

March 9-10, 2017

High Level Meeting Goals

- Communicate the high level findings from the requirements reviews to participants and then identify the findings/requirements common across all six program offices
- Solicit community feedback and buy-in on the findings/high level requirements
- Identify a set of productive areas of partnership (among any or all offices) that could accelerate the adoption or productivity of exascale HPC for research in the DOE Office of Science. What is the path forward? What is needed in the entire exascale ecosystem?

The term “HPC” encompasses the entire exascale computing and data ecosystem:

- Computing
- Data storage and analysis
- Networking (LAN & WAN)
- Services (e.g., consulting, training, software, algorithm development, code optimization, workflow implementation, allocations, user environment, accounting, security, authentication, auxiliary services like portals)

Draft ideas for collaboration for breakouts

- User Environment, Supported Application Software and Libraries, Training, Documentation
- Algorithm Development and Future Programming Models
- Application Optimization and Portability
- Authorization and Authentication
- Networking, Data Transfer, and Workflows
- Workforce
- Data Management
- Quality of service, coscheduling, availability
- Software sustainability
- Others to be added

Agenda - DRAFT

Thursday, March 9, 2017			
Time	Duration	Topic	Presenter/Lead
8:30	10	Welcome	Barbara Helland
8:40	20	Meeting Purpose and Desired Outcome	Barbara Helland (or Carolyn)
9:00	15	Meeting plan and process overview	Facilities
9:15	90	Findings and priority research areas from each office. 15-minute lightning talks.	Facilities
10:45	30	Break	
11:15	45	Draft synthesis and path forward.	Facilities
12:00	90	Lunch	
1:30	60	Breakouts by office to discuss draft synthesis. Does it capture the key needs? Are there proposed changes? Identify opportunities for cross-office partnerships and coordination.	
2:30	30	Break	
3:00	90	Report back from six breakouts. Affirm findings, suggest changes, gaps to be filled.	
4:30	30	Open discussion and set breakouts for Friday.	
Friday, March 10, 2017			
8:30	30	Facilities present refinements to synthesis report based on previous day's work.	Facilities
9:00	30	Open discussion if needed.	
9:30	60	Path forward on partnerships and areas of coordination. Next Steps. Breakouts as identified on Thursday.	
10:30	30	Break	
11:00	60	Report back from breakouts and final open	

		discussions.	
12:00		Adjourn	