XAB 2018 Oct Webinar

Wed, 10/10 – 12-4pm ET | 11am-3pm CT | 10am-2pm MT | 9am-1pm PT

Executive Summary of Meeting

Attendees:

NAME	PRESENT ✅/❌
XAB Members	
Karin Remington	✅
Randy Bryant	✅
Thomas Cheatham	❌
Toni Collis	✅
Rama Govindaraju	❌
Cliff Jacobs	✅
Albert Lazzarini	✅
Phil Maechling	❌
Shaowen Wang	❌
Theresa Windus	❌
Service Provider Forum	
Shawn Strande	✅
Jonathon Anderson	❌
Dana Brunson	✅
User Advisory Committee	
Emre Brookes	✅
XSEDE Leadership	
John W. Towns	✅
Kelly Gaither	❌
Philip Blood	❌
Robert Sinkovits	✅
David Lifka	❌
Gregory Peterson	❌

David Hart	✅
Ron Payne	✅
Scott Wells	✅
Leslie Froeschl	✅
Jennifer Houchins	❌
Victor Hazlewood	✅
Sergiu Sanielevici	✅
Craig Stewart	❌
Lizanne DeStefano	✅
Kristin Williamson	❌
Hannah Remmert	✅
Lorna Rivera	✅

Agenda

Time	Duration	Item w/ Notes (presentation materials linked)	Lead
11:00 AM	10 mins	Welcome - Introductions	Karin Remington

11:10 AM	30 mins	Project Level Topics
		
		- Thank you to XAB members for attending and for your input. Appreciation for engagement of members.
		- NSF has forward funded XSEDE 2.0 through ~Feb 2021
		  - project end date Aug 2021
		  - require spending authorization annually
		  - based on strong reviews, reports we've provided
		- Interactions with Program Director are good.
		  - not required to have a mid-year review this year
		  - use of KPIs has been an effective way to communicate status/progress of project
		- Strategic planning session held Oct. 2
		  - assess alignment of our stakeholders (stakeholders defined broadly as user community, partners (SPs), staff, funding agencies, etc.) with strategic goals
		  - identify stakeholder priorities, priority areas for draft transition plan, priorities beyond XSEDE 2.0
		  - Stakeholder priorities (must haves):
		    - Access to research computing
		    - Infrastructure services supporting the ecosystem
		    - Workforce development
		    - Campus champions and campus engagement
		    - Advanced user support
		  - How to define role of XSEDE in addressing gaps/ how XSEDE is involved
		    - Providing leadership role
		    - Collaborating with larger community
		    - When you think about how to address gaps, think in strategic terms.
		- Beyond XSEDE 2.0 scenarios
		  - Fund single awardee for similar services at ~$75M/5 years (labor cost)
		    - What are most critical services we provide. Consider what could be eliminated
		  - Fund multiple awardees
		    - Expanded scope for each component: i.e., RAS might be expanded to provide support for other allocations processes.
		    - As resources are retired, could impact whether there would be anything like XSEDE at that point.
		  - Albert: Asking us to define vision for future?
		    - JT: This will point out key things that need to be continued, we don't know what NSF will do with that. Timing is odd. Decisions will come in next 4-6 mos. Our transition plan wouldn't get to them until later. Should we deliver earlier?
		  - Albert: initiatives under 5-10 new ideas initiative. Multi messenger astronomy. Exploring computing resources to support this.
		    - JT: Participating in workshop next week that will address this. Not sure what XSEDE's role might be. Also a timing issue. Services XSEDE provides could be leveraged, but challenges in how we put together partnership
		- NSF Discussions: Conversation with Manish Parashar re. where NSF is going, how we can provide input to the process
		  - Would like John to come to NSF to brainstorm with him and others at NSF about what should happen next. Encouraged that they're willing to hear John's input, what he sees as priorities, what's working & what's not... Expect to see community workshops to get community input as well. Manish should be at NSF through discussion phase and award phase.
		  - John is planning what he'll take to that meeting, topics.
			John Towns

| 11:40 AM | 20 mins | **Evaluation Update**

• Staff climate study (inward looking study of what XSEDE is like as a workplace)
    • Trend of increasing scores from 2013 baseline scores
    • Highest gains in wiki & website, communication tools, decision making
    • Leadership/management training was a common request
    • Cliff: You have learned elements of what helps a virtual org be successful. Important to share this with NSF and the community in general. Value of study of how you can improve organization through climate studies.
        • Lizanne: NSF invited us to speak at large facilities workshop about this.
        • John: Don't see NSF recognizing contributions we're making. How do we incorporate this information into NSF planning processes? Particularly when they're thinking about what the next thing looks like. Don't want them to get lost in discrete services needed and forget that they have to be offered in concert.
• User survey (annual survey about how users feels about XSEDE; how aware they are; how satisfied they are)
    • Awareness slightly down from 2017. 25% of users are new to XSEDE every year, so this is common.
        • Always need to work to get word out about our services
        • Awareness highest among center non-research staff, center research staff, high school users, HPC centers, MIS, EPSCOR state institutions.
    • Satisfaction remains high (4.28 on 5-point scale)
        • Highest among high school, government lab, faculty/PI users, minority-serving and teaching focused institutions.
        • Survey continually evolving
    • Importance of XSEDE resources to your research remains high
    • Recommendations: More and faster.
    • Randy: Numbers are extraordinary, esp since XSEDE doesn't have control over resources themselves.
    • John: Many in community don't understand difference between XSEDE & SPs
    • Cliff: Can XSEDE make argument that by existence of XSEDE they've enabled long term challenges to be more effectively addressed?
        • Lizanne: Large % of people who use XSEDE training materials don't have an allocation. SPs don't have to provide training for these things. | Lizanne Destefano |
| 12:00 PM | 20 mins | **Program Office Topics**

• Discover More marketing campaign
    • Find well to tell story more consistency, what is unique
    • Show XSEDE as an approachable project no matter who you are a researcher. Everyone can discover more with XSEDE
    • 2 phases: launching at SC18 along with digital implementation. More human elements of XSEDE.
• SC18 plans
    • Updated booth graphics to match discover more campaign
    • 2 in-booth events: Tuesday morning Breakfast of champions to highlight campus champions; Wednesday discover more reception.
    • Will begin sending communications on these soon.
    • Also promoted SPs
• Cliff: Remind everyone of strategic objective that these activities are trying to address. Doing this within that context.
• Karen: Tracking SC participation over years? Indication of how presentation materials are doing over time?
    • Hannah: Track booth leads (who comes by), how many of them have conversation & pick up materials.
• Marketing analysis
    • 10 students assessing market for XRAS & SSO hub services
    • Difficult to bring them up to speed on what these products are; steep learning curve.
    • Midpoint presentation Oct. 22. SMT will be invited to join that. | Ron Payne |

12:20 PM	30 mins	**RAS Topics**
		
		- Team met in September
		  - Valuable to look at 12month window, goals
		  - Improve administrative aspects of XRAS
		  - Revisit accounting/updating with modern technology
		  - Reviewed tasks completed & accomplishments
		  - Using XRAS to help allocate aircraft at UCAR/NCAR
		  - Huge demand vs. available resources; Declining success for research requests (down to about 65% success rate)
		- Emre: Concerning about declining success rate. Data to support why?
		  - Dave: Because of huge demand/requests (225 at each quarterly; 250 not uncommon), this is inevitable. Can't sustain all of them. Over time the panel approach has evolved to understand constraints that are out there & look for ways to simplify their workload. XRAC reviewer manual is continually referred to, including guidance for rejection. Targeting XRAC process, policies. The less we reject means everyone has to take less.
		  - Emre: why people are being rejected
		    - Dave: 3 major reasons: some sort of technicality (failed to do something so can easily take them out)
		    - poorly justified requests: Better for user to reject than to give them something so small they can't get anything done. 12 months to use award & not supposed to come back before that 12 months. If we reject you can come back in 3 months.
		    - Every time you reject there is a chance the user goes away and never comes back. Don't want that.
		    - Emre: statistics about what categories of rejection are, numbers over time to understand what's happening.
		    - Dave: large number handled by ECSS staff have higher success rate. Plenary & parallel session levels rejections are higher. More likely if you're a new user you'll be rejected than a renewal.
		    - Emre: More bad science or process has gotten harder?
		    - Dave: Both. Went from 100+ to 200+ requests. Desire has morphed.
		  - Karen: Across the board cuts used to happen all the time at NIH. Difficult for program to manage. Any program officer probably doesn't know their constraints.
		  - Cliff: Have you analyzed who gets rejected by discipline, institution?
		    - Dave: 2016 Chart of who gets rejected at what percent: Adaptive; Bioscience; Material Sciences; Physics/Engineering /Astronomy; Plenary. What happens after rejection chart: 20% never submit again, 20% get rejected again, 60% later get a research or startup allocation. Always trying to improve this. Informs outreach/education program. No simple solution.
		  - Shawn: Panel has become slightly less tolerant of proposals not well written/documented? Over time tendency to be tougher than in the past (partially due to their knowledge of limited resources)
		    - Dave: Some dynamic. Practice has evolved more than policies. Many reviewers looking at 10+ requests/ quarter (volunteer work). Continue to push to rotate out reviewers to bring in new members, which has helped. As new reviewers come in they tend to be more willing to consider requests.
		  - Albert: Rejection rate reflection of demographics? Make an effort to ensure various communities are equitably represented?
		    - Dave: Do not make an effort to ensure a % goes to each field. Look at merit of requests regardless of field. Perceived competition between biologists & physicists. Materials research has increased dramatically; huge volume of requests.
		    - Shawn: Connection to funding of PI.
		      - Dave: Once panel makes recommendation, the reconciliation process factors in the source & amount of funding. NSF gets highest. Formulaic process that brings recommendations in line with available resources.
		  - Toni: Tracing gender or other demographics?
		    - Dave: RAS doesn't track this. Evaluation team looks at gender. Can look at institutional criteria/MSI/EPSCOR. Allocations tend to follow funding from agencies.
		    - Toni: Good to have this data and be ready to tell your story.
			Dave Hart

12:50 PM	10 mins	Break	
1:00 PM	30 mins	XCI Topics - No update.	Dave Lifka
1:30 PM	30 mins	CEE Topics - No update.	Kelly Gaither

2:00 PM	30 mins	**ECSS Topics**
		
		- Phil picking up Ralph's duties; Bob picking up Nancy's duties.
		- Over 700 cumulative requests since 2010. Break down by NIP, science gateways, ECSS
		- Service has been very successful. 4.47 satisfaction rating; 4.03 impact rating.
		- Adaptive reviews: internal reviews by ECSS staff to reduce number of proposals that have to be reviewed at quarterly allocations review meetings.
		- PY8 goals:
		  - improve project pipeline
		  - prioritize staff training
		  - science gateway user counting
		  - shared experiences with others providing ECSS-like services
		  - lightweight consulting
		  - modernization of training collaboration
		- Questions
		- Randy: Fraction of users that get this service?
		  - Can provide this information. It's a small number. Maybe about 15%.
		  - Sergiu: Each XRAC meeting we get 7-10 projects recommended to us. Also fair number of start-ups get ECSS services.
		  - Randy: Lighter/medium weight consulting would be helpful. Not everything needs a year.
		  - Bob: If work is completed early we wrap it up early
		  - Sergiu: NIP area is not confined to doing projects with project plans. Also do as needed mentoring engagements, especially in data-centric applications. Only have about 5 FTEs.
		- Cliff: You have defined new complimentary way of knowledge transfer that compliments activities at universities. Have done in a way that is more agile than universities can do. Take credit for that. Speaks to NSF strategic plan.
		  - Bob: Knowledge transfer is a real goal of ECSS. Work closely with PI & team to make sure knowledge is transferred so they become more self-sufficient & apply learning in the future.
		  - Sergiu: Cases where people use XSEDE platforms to gain knowledge that they use on their campus. If they learn something their campus can use, we count that as a success.
		  - Cliff: Kind of complimentary activities universities need
		- Karin: Have seen HPC & CS & data science as intertwined. Wonder if you can communicate better what you mean since they are so intertwined. Useful to define this since the boundary is blurry.
		  - Bob: Often do talk about computation science to the solving of science problems.
		  - Karin: DOE funding. Distinction between HPC & other efforts. Look at definitions & make them what you want them to be.
		  - John: CS is curiosity driven/publish papers. Computation science application of that to research problems. HPC can be involved in both.
		  - Karin: Saying what you mean by these things can set the standard. Be more proactive about defining.
		  - John: If nothing else, there is merit in us having our own definition of these things.
		- Emre: Careful use of jargon. Glossary might be expanded to project glossary that includes jargon used in presentations/ reports. Make sure such jargon is in the glossary if using it to ensure everyone is on the same page with definitions.
		  - John: Tend to do a better job of this in our reviews. Good reminder.
		  - John: Add to glossary definition of above terms (CS/HPC etc)
			Phil Blood &
			
			Bob Sinkovits

2:30 PM	30 mins	Ops Topics
		
		Operations-XAB-presentation
		
		- PY8:
		  - Develop transition plan for post XSEDE 2.0
		  - Continue excellent help desk ticket resolution
		- Trends
		  - Tickets
		    - 4200 average tickets per quarter. 25% are addressed by Ops center and closed.
		  - SSO
		    - Log in with XSEDE credential & behind scenes issued certificate so you don't need password for each XSEDE resource. 7,000 range from about 600-700 people (so most people open ~10 windows). 3rd most heavily used resource XSEDE provides.
		  - Duo usage
		    - Started in Oct. 2016 as optional but then made it required. Currently connected to SSO for authentication. Also being used on enterprise services internally. Steady increase in number of users.
		- Feedback/questions
		  - Karin: Proportions of clouds. Where are most of the resources? More explanation about hybrid cloud would be helpful in presentation materials.
		  - Karin: Ticket numbers (slide 9): Helpful to show this slide with number of active users compared to number of tickets.
		  - Cliff: This is a complimentary technical side of the virtual community. Connections should be made there.
			Victor Hazlewood

		Discussion	
		Cliff: All presentations today have great information about project's success. Hoping John will start with more far-looking presentation when he goes to NSF. You have developed an implementation of vision of original proposal. Found a way to help navigate that challenge. Know how hard to integrate centers in a way they still have competition but not to a point that it is detrimental to science.	
		- JT: creates periodic opportunity for chaos/confusion/uncertainty at transition of XSEDE-like programs. This still occurs at integrating function. - Cliff: XSEDE has worked with that given to make the transition as easy as possible for community. - JT: Plan to talk more about needs of community than how to continue XSEDE. Whether it's something that looks like XSEDE or not is NSF's call. If provided an opportunity to influence things, most important is what the community needs are.	
		Shawn: Fundmental question about services & need to support operations of those. To what extent XSEDE follow-on will support that set of resources. 2nd role that XSEDE plays to educate community & onboard to using HPC. 3rd level: a lot of stuff XSEDE does to benefit community that don't involve using systems. Clean buckets that could be discussed. How much $ in those buckets.	
		- JT: What is balance of investment? NSF will have a limited budget. Look at context of XSEDE partners. Is balance of investment between XSEDE & Service Providers the right one? - Shawn: Fair amount of investment into XSEDE that directly benefits SPs. Operational budgets for SPs are lean, so they lean on XSEDE. That math needs to be done. - JT: Have captured much of that in work of Craig Stewart's ROI work. What would the investment have to be locally for each SP without XSEDE? You would spend a lot more $ than what is being spent today. - Cliff: XSEDE allows NSF investment to multiply - JT: Need to continue to make this point. Have to constantly remind NSF of this.	
3:00 PM		Adjourn	