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XSEDE
Community Engagement
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SURA
XSEDE
Extreme Science and Engineering
Discovery Environment
XSEDE Community Engagement

• Training
  – Quality content to address user needs to expand scope,
  – Delivered synchronously and asynchronously to expand scale, and
• Education
  – Curriculum development workshops,
  – Working with institutions to offer CS&E Programs.
• Outreach
  – Immersing students in training, internships, and mentoring programs,
  – Engaging new and under-represented communities, and
  – Supporting Campus Champions to assist local users.
• Campus Bridging
  – Facilitating data exchange among campuses and XSEDE
Outreach Services

GOAL: Recruit a large and diverse scientific, academic, and industrial workforce capable of advancing scientific discovery using XSEDE services.

• **Student Engagement**
  – Provide meaningful experiences for undergraduate and graduate students to become engaged in Extreme Digital environments

• **Underrepresented Engagement**
  – Bring XSEDE to new faculty, and students, providing dedicated training and support

• **Campus Champions**
  – Build broader and deeper programs based on TeraGrid foundation

• **Speakers’ Bureau**
  – Raise awareness of Extreme Digital environments among new communities of potential users
Underrepresented Engagement

Minority Institutions

SURAX
- Identify established and emerging programs and researchers
- Expand awareness of XSEDE via campus visits, professional conferences
- MRC - Build a community promoting collaboration and peer support
  - Monthly Calls
  - Travel Support for Training & Conferences
  - listserv
- Targeted deep engagement that connect researchers with XSEDE expertise

Minority Students at Research Institutions

Rice University/Empowering Leadership Alliance (ELA)
- Increase awareness and knowledge among underrepresented communities
- Identify and recruit minority students and mentors, leveraging ELA
- Provide education and professional development to participants
- Create support community, paring students with mentors
- Establish XSEDE Faculty Council for ongoing state-of-the-practice focus
XSEDE and Campuses

• Campus Bridging
  – Pilot

• Campus Champions: expansion on TeraGrid Campus Champions Program
  – campus representatives as a local source of knowledge
  – source of information regarding XSEDE resources and services that will benefit research and education
  – source of start-up accounts to quickly get researchers and educators using XSEDE resources
  – conduit for the campus needs, requirements and challenges, with direct access to XSEDE staff
  – over 100 campuses participating today

• Campus Champions Fellowship Program
  – fellowship/internship program for campus champions
  – provides stipend and support for spending dedicated time with XSEDE AUSS staff on a project as a learning experience
Campus Champions Program

- Over 100 campuses are members – no cost to join
- Champions receive monthly training and updates
- Champions provided with start-up accounts
- Champions are members of User Services team
- Forum for sharing and interactions
- Access to information on usage by local users
- Registrations for annual XSEDE12 Conference waived
- Community building across campuses
Campus Champions Role

• Raise awareness locally
• Provide training
• Get users started with access quickly
• Represent needs of local community
• Provide feedback to improve services
• Attend annual XSEDE12 conference
• Share their training and education materials
• Build community among all Champions
Current Campus Champion Institutions (unclassified) – 50
Current Campus Champion Institutions (EPSCoR states) 34
Current Campus Champion Institutions (Minority Serving Institutions) -- 7
Current Campus Champion Institutions (both EPSCoR and MSI) – 5
Campus Champions Fellows Program

• Champions apply to work with XSEDE’s ECSS team for a year to advance their knowledge

• Projects selected to match Champions’ interests
  – Funding for time and travel
  – Campus site visits, remote work, wrap up visit
  – Share experiences with other Fellows

• Fellows return to home to spread their expertise
  – Continuing interaction and support through the Champions program
From survey of researchers funded as PIs by NSF 2005-2009
• 10% never have enough CI resources; 70% have at least insufficient resources on occasion

Campus bridging should be one mechanism by which we help bridge this resource gap – making optimal use of aggregate US (open) cyberinfrastructure

Campus Bridging Goal

• Consult with campus personnel to make the CI resources you have access to – from campus to national to international – seem like a peripheral to your laptop.

• Enable seamless integrated use among a scientist or engineer’s personal CI; CI on the scientist’s campus; CI at other campuses; and CI at regional, national, and international levels; as if they were proximate to the scientist.
Campus Bridging Objectives

- **Training for usability** - Making it easier to create quality, reusable training, for campus users to use XSEDE resources

- **InCommon-based authentication** - Simplifying the authentication process via InCommon-based authentication and SAML certificates

- **Long term remote interactive graphic session** - Users want to open and maintain an interactive graphical session (e.g., an NX remote desktop or X-Windows session) on a remote resource - perhaps for a long period of time.

- **Use of data resources from campus on XSEDE, or from XSEDE at a campus** - Support analysis of data integrated across campus-based and XSEDE-based resources

- **Support for distributed workflows spanning XSEDE and campus-based data, computational, visualization resources**
XSEDE Campus Bridging Activities

• Currently implementing file movement with Global Federated File System (GFFS) and distributed workflow tools in consultation with four pilot campuses

• If you are interested in campus bridging, see:
  – Background info and reports on campus bridging: http://pti.iu.edu/campusbridging
  – XSEDE campus bridging: https://www.xsede.org/campus-bridging

• Questions: send email to campusbridging@xsede.org
XSEDE Student Engagement Opportunities

• XSEDE Scholar’s Program
  – 2012/2013 closed; recorded sessions available

• XSEDE Student Program – internships
  – Spring applications for summer 2013

• Sign up for the XSEDE Student Mailing List for opportunities

• XSEDE13, July 2013, San Diego
XSEDE Faculty Engagement Opportunities

• Allocations
• Training Classes – In-person & webinars
• Campus Champions
• Minority Research Community
• XSEDE13, July 2013, San Diego
XSEDE Campus Engagement Opportunities

• Campus Champions
• Campus Bridging
• Summer Institutes
Our reach will forever exceed our grasp, but, in stretching our horizon, we forever improve our world.