

XSEDE12 Panel: Security for Science Gateways and Campus Bridging

[Extended Abstract]

Jim Basney
University of Illinois
jbasney@illinois.edu

Randy Butler
University of Illinois
r-butler@illinois.edu

Dan Fraser
Argonne National Lab
fraser@anl.gov

Suresh Marru
Indiana University
smarru@iu.edu

Craig Stewart
Indiana University
stewart@iu.edu

ABSTRACT

The XSEDE science gateway and campus bridging programs share a mission to expand access to cyberinfrastructure, for scientific communities and campus researchers. Since the TeraGrid science gateway program began in 2003, science gateways have served researchers in a wide range of scientific disciplines, from astronomy to seismology. In its 2011 report, the NSF ACCI Task Force on Campus Bridging identified the critical need for seamless integration of cyberinfrastructure from the scientist's desktop to the local campus, to other campuses, and to regional, national, and international cyberinfrastructure.

To effectively expand access to cyberinfrastructure across communities and campuses, XSEDE must address security challenges in areas such as identity/access management, accounting, risk assessment, and incident response. Interoperable authentication, as provided by the InCommon federation, enables researchers to conveniently sign on to access cyberinfrastructure across campus and across the region/nation/world. Coordinated operational protection and response, as provided by REN-ISAC, maintains the availability and integrity of highly connected cyberinfrastructure. Serving large communities of researchers across many campuses requires security mechanisms, processes, and policies to scale to new levels.

This panel will discuss the security challenges introduced by science gateways and campus bridging, potential approaches for addressing these challenges (for example, leveraging InCommon and REN-ISAC), and plans for the future. Panelists will solicit requirements and recommendations from attendees as input to future work.

Categories and Subject Descriptors

K.6.5 [Management of Computing and Information Systems]: Security and Protection

General Terms

Security

Keywords

Science Gateways, Campus Bridging

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