Science Gateway Institute Workshop at IEEE Cluster 2013 Conference



Computer society

Sciencegateway.org organised a Science Gateway Institute workshop co-located with IEEE Cluster 2013 conference held in September 27, 2013 in Indianapolis, IN, USA.

Papers will be co-publishing in a special issue of Concurrency and Computation, Practice and Experience (<u>http://www.cc-pe.net/journalinfo/</u>) together with selected papers presented at the International Workshop on Science Gateways 2013 (<u>http://www.amiando.com/iwsg2013.html</u>).

Concurrency and Computation Practice and Experience

Science Gateways



A Science Gateway is a community-developed set of tools, applications, and data collections that are integrated through a web portal or a suite of applications. Gateways can provide access to many things ? a highly-tuned parallel application running on a supercomputer, a remote instrument like a telescope or electron microscope, a curated data collection, tools to create workflows and visualizations linking these different resources and collaborative venues to discuss results, share curricula and presentations and more. Gateways enable not only researchers with a common scientific goal but also students and members of the community more generally by providing access to top-tier resources.

As cyberinfrastructure becomes increasingly complex and the most difficult scientific problems depend on advanced digital resources, researchers are turning to gateways to improve their efficiency. Gateway developers typically have few venues for exchanging experiences. While there is much that is common in gateway development across domains, often work is done in many

different vacuums, where one group does not benefit from developments in another.