



Grid-Interop 2009 Call for Papers and Presentations

The GridWise® Architecture Council ([GWAC](#)) in collaboration with the National Institute of Standards and Technology ([NIST](#)) issues this Call for Papers and Presentations and invites you to contribute to the third annual Grid-Interop Forum to be held in Denver, CO, November 17 – 19, 2009.

Submission Summary

Please submit a 250-300 word abstract proposing a presentation that can be accompanied by a meeting paper by July 27, 2009. Please follow the links from the main page of the [Grid-Interop website](#) to upload your abstract to the event management system. Online abstracts submissions will be accepted between June 8 - July 27, 2009. If earlier submission is preferred, email abstracts to gridwiseac.coordinator@pnl.gov. In a departure from prior year's practices, it is Grid-Interop's strong preference for professional quality papers and not simply presentations. Abstracts should be submitted with this in mind.

If your abstract is accepted please plan to submit your presentation to the event management system according to the schedule below. Authors of accepted abstracts are also strongly encouraged to submit an accompanying paper. All accepted papers will be published on-line in the event proceedings. Selected papers will be recommended to appropriate journals and other technical publications where applicable.

Important dates to remember:

Abstract Submission Deadline: July 27, 2009

Notification of Acceptance: August 21, 2009

Paper Submission Deadline: September 30, 2009

Paper Acceptance and Comments: October 23, 2009

Final Paper and Presentations Deadline: November 6, 2009

More information on the Call for Papers, including templates, due dates, and meeting preparations will be maintained at the [Grid-Interop website](#).

Motivation and Background – Implementing the Interoperability Roadmap

GridWise envisions the nation's electric system - from central generation to customer appliances and equipment to the information systems that help manage the various businesses - as a collaborative network of intelligent systems and devices filled with information and abundant market-based opportunities. This vision weaves together the most productive elements of our traditional infrastructure with new technologies that integrate easily and safely into a cohesive system. Using advanced telecommunications and information technology, we can create a "society" of devices that functions as an integrated, transactive system, while achieving ease of use by all customers.

Attaining this vision requires coordination within and across implementation independent methods that are applicable in the heterogeneous infrastructure supporting automated systems that will advance support our electric power and economic processes. An interoperability framework and roadmap are

being developed to address the interface issues of transforming from the existing situation to smart grid enabling solutions of the future while encouraging competition and innovation.

This third annual Grid-Interop Forum builds on the success of the past two events Grid-Interop 2007 and Grid-Interop 2008 (see the event proceedings for [2007](#) and [2008](#)) by helping to enhance interoperability activities in pursuit of the smart grid. The Energy Independence and Security Act of 2007 directed NIST to coordinate the development of a framework to achieve interoperability of smart grid devices and systems. This legislation heightened the need for stakeholders to engage in addressing interoperability concerns. At last year's Grid-Interop forum, NIST convened working group sessions to gather input for a roadmap for creating such an interoperability framework. Since then, NIST has been coordinating with a wide range of stakeholders and is currently working on the Interim Interoperability Roadmap, due for release this summer. The theme for this year's Grid-Interop forum is the implementation of this roadmap.

Abstracts should address ideas and proposals to advance interoperability of the smart grid and to implement NIST's Interoperability Roadmap. More than ever, Grid-Interop offers the opportunity to discuss new and innovative ways improve smart grid interactions, and the opportunity to participate in actions that shape the future of interoperability.

Call for Paper Topic Areas

In addition to system integration technologists and architects, Grid-Interop will include business developers and policy-makers. It will also address organizational, informational, and technical challenges that we face today. The perspective for discussion is described in the GWAC [Interoperability Context-setting Framework](#) document. We are particularly interested in the interoperability frameworks developed for and applied to other sectors (telecom, industrial automation, etc) with discussion of their potential application to the electric grid, lessons learned, and so forth.

Abstract submissions should address how we can close the "distance to integrate" as we migrate existing systems and integrate new solutions. Interoperability topics include:

- Present work underway to standardize or facilitate interoperation between automation systems.
- Describe a challenge that faces the improvement of interoperability. Propose actions to confront the challenge.
- Describe challenges in achieving security and interoperability. Propose approaches to meeting such challenges
- Describe a gap that significantly hinders system integration. Propose actions to fill the gap.
- Present case studies of implementation approaches that advance interoperability.
- Describe existing or propose future steps to test and validate interoperability.
- Propose metrics for measuring progress that advances interoperability.

The abstracts for forum papers and presentations will be selected to support a balance between the multiple facets related to interoperability in the electric system. As a part of their abstract proposal, submitters should identify one or more of the aspects outlined below that their paper or presentation will address:

Interface Domain	Interoperability Category	Audience
Industrial to Grid Building to Grid Home to Grid Vehicle to Grid Bulk Generation Transmission Infrastructure Distribution Infrastructure End-to-End Grid Operations Markets Service Providers	Organizational: Economic/Regulatory Policy, Business Objectives, and Procedures Informational: Business Context, Semantic Understanding Technical: Syntactic and Network Interoperability, Basic Connectivity Cross-cutting: Shared Meaning of Context, Time Synchronization and Sequencing, Security, Discovery and Configuration, System Evolution and Scalability	Business, markets, and policy making: service providers, suppliers, regulators, economists Technology: systems integration, information exchange and networking, standards making Architecture: methodology and tools

List of referenced URLs:

Reference	URL
GWAC	http://www.gridwiseac.org
NIST	http://www.nist.gov/smartgrid/
Grid-Interop Website	http://www.gridinterop.com
Grid-Interop 2007 Proceedings	http://www.gridwiseac.org/historical/gridinterop2007/default.aspx
Grid-Interop 2008 Proceedings	http://www.gridwiseac.org/historical/gridinterop2008/default.aspx
Link to draft NIST roadmap	http://www.nist.gov/smartgrid/
Interoperability Context Setting Framework	http://www.gridwiseac.org/pdfs/interopframework_v1_1.pdf