

# MIDDLEWARE 2009

November 30 - December 4, 2009

Urbana Champaign, Illinois, USA

The ACM/IFIP/USENIX 10th International Middleware Conference

<http://middleware2009.cs.uiuc.edu>

## Organization

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(University of Illinois at Urbana-Champaign, USA)

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## Proceedings

The proceedings of Middleware 2009 will be published as a Springer-Verlag volume in the **Lecture Notes in Computer Science Series**.

Papers must not exceed 20 pages, including abstract, all figures, all tables, and references. Papers should include a short abstract and up to 6 keywords. Submitted papers should follow the formatting instructions of the Springer LNCS Style

## Important dates

**Apr 20** Papers submission  
**Jul 15** Papers notification  
**Aug 24** Camera ready

## Call for papers

The Middleware conference is a forum for the discussion of important innovations and recent advances in the design, construction and uses of middleware. Middleware is a distributed-system software that resides between applications and underlying platforms (operating systems; databases; hardware), and/or ties together distributed applications, databases or devices. Its primary role is to coordinate and enable communication between different layers or components while isolating much of the complexity of distribution into a single, well tested and well understood system abstraction.

Following the success of past conferences in this series, the 10th International Middleware Conference will be the premier event for middleware research and technology in 2009. The scope of the conference is the design, implementation, deployment, and evaluation of distributed system platforms and architectures for future computing and communication environments. Highlights of the conference will include a high quality technical program, invited speakers (including Hector Garcia-Molina of Stanford University), an industrial track, poster and demo presentations, a doctoral symposium, and workshops.

### Topics

Submissions on a diversity of topics are sought; particularly ones that identify new research directions. The topics of the conference include, but are not limited to:

#### Middleware platforms:

- Middleware for Web services and Web-service composition
- Middleware for cluster and grid computing
- Peer-to-peer middleware solutions
- Event-based, publish/subscribe, and message-oriented middleware
- Middleware for ubiquitous and mobile computing
- Middleware for embedded systems and sensor networks
- Middleware for next generation telecommunication platforms
- Semantic middleware
- Middleware supporting service-oriented architectures
- Reconfigurable, adaptable, and reflective middleware approaches
- Middleware support for multimedia
- Middleware solutions for (large scale) distributed databases
- Middleware for data intensive computing

#### Systems issues

- Reliability, fault tolerance, and quality-of-service
- Scalability of middleware
- Real-time solutions for middleware platforms
- Information assurance and security
- Dynamic configuration and self- or autonomic- management of middleware
- Novel communication protocols and architectures
- Virtualization, virtualized provisioning, and their interaction with middleware

#### Design principles and tools

- Methodologies and tools for designing, implementing, verifying, and evaluating middleware
- Novel development paradigms, APIs, and languages
- Existing paradigms revisited: object models, aspect orientation, etc.
- Evaluation techniques and empirical studies for middleware solutions

#### Industry papers

The conference also strongly encourages submission of industry-focused papers and use case studies; full papers should be submitted to the main program, where they will be reviewed using appropriate criteria (e.g. emphasizing experience and system evolution), and accepted papers will be published in the main conference proceedings. Additionally, short industry-focused papers may be submitted to a special industrial track; accepted short papers will be presented at the conference and published in the ACM Digital Library. Details on the industrial track will be available shortly. Note that submissions to the main program may indicate a willingness to be referred to the industrial track if a paper is not accepted to the main program.

#### Big ideas papers

This year, we particularly encourage "big ideas papers"; that is papers that have the potential for opening up new research directions. For such papers, the potential to motivate new research is more important than full experimental evaluation, though some preliminary evidence of the effectiveness of the approach or idea is important. Authors should indicate in the introduction that their paper is a vision of a big idea, rather than more mature work. Such papers should clearly indicate why the idea is revolutionary and not evolutionary; what the major questions still to be answered are; and possible avenues of attack for the community to pursue towards the development of the idea.