



Preliminary Call for Papers The 17th ACM/IFIP/USENIX Middleware Conference December 12 – 16 2016, Trento, Italy

The annual ACM/IFIP/USENIX Middleware conference is a major forum for the discussion of innovations and recent advances in the design, construction and use of middleware systems. The scope of the conference is the design, implementation, deployment, and evaluation of distributed system platforms and architectures for computing, storage, and communication environments. Highlights of the conference will include a high quality single-track technical program, invited speakers, an industrial track, panel discussions involving academic and industry leaders, poster and demonstration presentations, a doctoral symposium, and workshops.

Topics: The topics of the conference include, but are not limited to:

Platforms and Usage Models of Middleware for:

- Emerging cloud computing platforms, 5G, NFV
- Data-intensive computing (Big Data) and data analytics
- IoT, Cyber Physical Systems, Smart Cities
- Mobile devices and services
- Ubiquitous and pervasive computing
- Internet applications and multimedia

Systems Issues for Middleware

- Reliability and fault tolerance
- Consistency, availability, and replication
- Energy- and power-aware techniques
- Security and privacy
- Virtualization, auto-scaling, provisioning, and scheduling
- Real-time solutions and quality of service
- Scalability and performance

Design Principles and Programming Support

- Event-based, pub/sub, and P2P solutions
- Reconfigurable, adaptable, and reflective approaches
- Novel programming abstractions and paradigms for middleware
- Methodologies and tools for middleware design, implementation, verification, and evaluation
- Retrospective reviews of middleware paradigms, e.g., object models, aspect orientation, etc.

Original research papers of three types are sought on the above topics.

a) Research Papers, b) Experimentation and Deployment Papers, and c) Big-Ideas Papers.

The Middleware 2015 conference proceedings will be published in the ACM Digital Library. Accepted submissions will be available on the ACM digital library at least one week before the conference. Papers should not exceed 12 pages in length, including the abstract, all figures, tables, and references. Submitted papers should adhere to the formatting instructions of the ACM Style (<http://www.acm.org/sigs/publications/proceedings-templates>), and should clearly indicate their type on their first page. Please note that submissions are single-blind: authors' names should appear. (Note that the process for publication in the Middleware companion proceedings will be explained in the relevant, specific CFPs (e.g., Industry short papers, Doctoral workshop, etc.)).

Important dates

Abstract Submission	May 13 (Friday)
Paper Submission	May 20 (Friday)
Author rebuttal	June 27 - June 29 (Monday-Wednesday)
Notification Due	Aug 15 (Monday)
Final Version Due	Sep 7, 2015 (To be confirmed)

Organizers:

General Chair:

Gian-Pietro Picco, University of Trento, Italy

Program Co-chairs:

* Sonia Ben Mokhtar, LIRIS-DRIM, Lyon, France

* Dejan Mijolicic, Hewlett Packard Labs, Palo Alto, CA