2nd International Conference on the Quality of Software Architectures QoSA 2006

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QoSA 2006

June 27-29, 2006
Mälardalen University, Västerås near Stockholm, Sweden
http://www.idt.mdh.se/CBSE/

Although the quality of a system's software architecture is one of the critical factors in its overall quality, the architecture is simply a means to an end, the end being the implemented system. Thus the ultimate measure of the quality of the software architecture lies in the implemented system, in how well it satisfies the requirements and constraints of the project and whether it can be maintained and evolved successfully. But in order to treat design as science rather than an art, we need the ability to address the quality of the software architecture directly, not simply as it is reflected in the implemented system.

This is the goal of QoSA: to address software architecture quality directly by addressing the problems of:

- designing software architectures of good quality,
- defining, measuring, evaluating architecture quality, and
- managing architecture quality, tying it upstream to requirements and downstream to implementation, and preserving architecture quality throughout the lifetime of the system.

Cross-cutting these problems is the question of the nature of software architecture. Software architecture organizes a system, partitioning it into elements and defining relationships among the elements. For this we often use multiple views, each with a different organizing principle.

But software architecture must also support properties that are emergent, that cannot be ascribed to particular elements. For this we often use the language of quality attributes.

Quality attributes cover both internal properties, exhibited only in the development process (e.g. maintainability, portability, testability, etc.), and external properties, exhibited in the executing system (e.g. performance, resource consumption, availability, etc.). Quality attributes cover properties that are emergent, that have a pervasive impact, that are difficult to reverse, and that interact, thereby precluding or constraining other properties.

Thus QoSA also aims to investigate quality attributes in the context of the problems of the design, evaluation, and management of software architecture. Topics of interest include, but are not limited to:

Architecture Design:
- Design decisions and their influence on the quality of software architecture
- Organizational issues and processes that influence architecture quality
- Architectural patterns and their quality impacts
- Architectural standards and reference architectures
- Integration of COTS components

Architecture evaluation
- Lessons learned and empirical validation of theories and frameworks on architecture quality
- Empirical validation of testing, prototyping, simulation for assessing architecture quality
- Models and specification techniques to evaluate the quality attributes of software architectures
- Processes for evaluating architecture quality
- Evaluation of COTS components

Architecture management
- Coordination of business architecture, business processes, and software architecture
- Documentation of software architecture, including design rationale
- Assessment and enforcement of architectural conformance
- Traceability of software architecture to requirements and implementation
- Assessment of COTS components
- Integration of heterogeneous software architectures

QoSA welcomes both long and short papers. Long papers are up to 16 pages LNCS style, and can describe both research contributions and experience reports. Short papers are up to 8 pages LNCS style, and can describe experience, ongoing work, and new ideas.

We plan to publish the conference proceedings within the **Springer Lecture Notes in Computer Science** series. All Papers must be written in English and should be prepared using Springer's LNCS style. LNCS style guidelines can be found at: http://www.springer.de/comp/lncs/authors.html

Important Dates:

April 1, 2006	Papers due
May 8, 2006	Notification of acceptance
June 5, 2006	Camera-ready papers due
June 27-29, 2006	QoSA
June 29-July 1, 2006	CBSE (co-located with QoSA)

Conference and Venue:

Please see the QoSA 2006 website for further details about the conference
http://www.qosa.informatik.uni-oldenburg.de
Detailed information about the venue can be found at
http://www.idt.mdh.se/CBSE/

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