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**2nd INTERNATIONAL WORKSHOP ON  
AGENTS FOR AUTONOMIC COMPUTING  
(AAC 2009)**  
**to be held in conjunction with  
the 6th International Conference on  
Autonomic Computing  
(ICAC 2009)**  
**June 19, Barcelona**

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**Deadline extended to March 2**

Self-management of complex systems is core to both the Autonomic Computing and the Software Agent communities. In both paradigms, individual autonomous entities manage their own behaviour and their interactions with the environment and other autonomous entities in accordance with their individual goals based on their local perception of state. These entities may negotiate with one another, and monitor and manage the resulting agreements. They may form dynamic virtual organizations that manage their collective behaviour in interaction with other such organizations. They may avail themselves of integration, repair and other services provided by directories, brokers and sentries, which themselves may be autonomous.

Over the course of many years, the software agents community has developed and explored architectures, technologies and standards that support these aspects of agent behaviour, and have demonstrated in multiple contexts agents and multi-agent systems that exhibit autonomy, goal-directed adaptive behaviour, proactivity, reactivity, situated-ness, and an ability to learn and plan. The relatively younger field of autonomic computing seeks to build computing systems that exhibit these same properties and capabilities, but with few exceptions has failed to tap into the rich body of knowledge developed by the agents community. Some authors have suggested that autonomic computing may be the long-sought "killer app" for agents.

The first AAC held during ICAC in 2008 in Chicago, made clear that the Agents and Autonomic Computing communities have much to gain from a closer association with one another.

## **The aim of the second workshop is to further:**

1. explore the potential of the agent paradigm, architectures, models and technology for autonomic computing;
2. identify the specific challenges of autonomic computing that would require extensions to the agent paradigm and current agent technologies;

We invite the submission of papers that describe the potential and/or limitations of applying traditional or new concepts in agent architecture or technology to self-managing computing systems, and vice versa applying techniques developed within autonomic computing to multi-agent systems. Papers describing and evaluating a working prototype are particularly welcome.

## **Topics of interest include, but are not limited to:**

- › (Meta-)Architectures for agents and multi-agent systems
- › Planning and scheduling
- › Multi-agent coordination
- › Learning algorithms
- › Adaptivity, situatedness
- › Emergent behaviour, emergent configurations
- › Service agreements
- › Negotiation
- › Large scale simulations/emulations
- › Mobility
- › Legal implications of self-management/autonomy in networked systems
- › Accountability, verification and validation
- › Reliability, Integrity and Security
- › Life cycle management

## **ORGANISING COMMITTEE**

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## **PROGRAMME COMMITTEE (provisional)**

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Kees Nieuwenhuis, Thales Research

## **IMPORTANT DATES**

Submission deadline: ~~February 16~~ March 2, 2009

Acceptance notification: March 9, 2009

Submission final version: April 6, 2009

## **WORKSHOP FORMAT**

This one-day workshop will include invited talks, paper presentations, a forum/panel discussion and time for discussion.

## **PAPERS**

Papers are to be 6 pages in length in the standard IEEE two-column conference proceedings format ([style files](#))

Papers submission [instructions](#).

All workshop papers will be published in the conference proceedings by the IEEE Computer Society or ACM. The proceedings will be distributed during the ICAC conference.

## **WORKSHOP ATTENDANCE**

Please note that at least one author of each accepted paper must attend the workshop. All workshop participants must register for both the workshop and the conference.

## **CALL FOR PAPERS**

The call for papers can also be downloaded from [here](#).