

Call for papers

1st International Workshop on Policy-Based Autonomic Computing- PBAC 2007

<http://cms1.gre.ac.uk/conferences/pbac2007>

Sponsors: IEEE and ACM

A one-day workshop to be held at:

The 4th IEEE International Conference on Autonomic Computing
(ICAC 2007 - <http://www.acis.ufl.edu/~icac2007/index.shtml>)
June 11-15, 2007, Jacksonville, Florida, USA

The theme and scope of the workshop

Policy-based computing is one of many techniques used to implement autonomic computer systems. The business function is expressed in terms of workflow (logic + actions) or behavioural rules to be performed in response to certain situations, which is decoupled from the implementation mechanism. The mechanisms are fixed at design time, but the actual run-time behaviour is decided by the policy. This facilitates contextual awareness as the policy may take account of various environmental inputs from sensors and external software systems. Policy-based mechanisms are also very useful in specifying system behaviour – such as when specifying Service Level Agreements, and subsequently monitoring whether these agreements have been adhered to.

Policy-based configuration is highly versatile and generally applicable across a very wide application space. When compared with other autonomic techniques, policies represent one of the lowest risk and lowest cost solutions; because there is relatively low complexity.

The workshop intends to discuss all aspects of using policies in the context of autonomic computing. We invite papers reporting novel contributions to policy-based computing within an autonomic context. Submissions must describe original work that has not been published, accepted or submitted for publication elsewhere.

Indicative keywords and themes

Policy languages and tools

- Policy languages and semantics.
- Policy frameworks for autonomic computing.
- Platforms and tools to aid the development of policies and policy-based systems.
- Visualisation tools - for policy configuration and also for policy execution traces.

Policy-autonomics concepts

- Multiple-policy systems.
- Combining policy-based computing with other autonomic techniques.
- Dynamic adaptation / evolution of policy configuration.
- Automated evaluation of policies.
- Models of policy negotiation and collaboration.

Policy-based applications

- Development and verification of policy-based applications.
- Autonomic applications of policy-based computing.
- Feasibility and requirements for the deployment of policy-based solutions.
- Policy-based virtualisation tools.

Context and environmental awareness in policy systems

- Context-aware privacy policies.
- Policies for dealing with trust and risk in autonomic systems.
- Policy conflict management.

Please note that the keywords and themes are **indicative** and we welcome submissions in other relevant areas. However, it is intended that the workshop will have an empirical / experiential emphasis, and thus preference will be given to papers that are supported by an implementation, prototypes and/or simulations. Also of interest are theoretical approaches to the study of policy languages and semantics with a view towards exploitation in an autonomic context.

Target audience

Policy-based computing in autonomics is equally relevant and important to industry, research and academia. The workshop will be of great interest to a practitioner audience although no particular level of expertise is expected and we welcome multi-disciplinary contributions.

We intend that the workshop will provide a forum for focussed discussion of policy-based computing as a technique for implementing autonomic systems, and hope that delegates will be able to exchange ideas concerning ways in which policies can be developed and deployed.

The workshop is expected to have the effect of promoting the use of policies and encouraging further research in this area.

Submissions

Full papers of up to 10 pages should be formatted in the standard IEEE two-column conference proceedings format. Shorter work-in-progress papers (up to 4 pages) will also be considered based on individual merit. Actual submission will be via on-line upload to the website.

Publication

The workshop proceedings will be published in the Whitestein Series on Software Agent Technologies and Autonomic Computing.

In addition, authors of selected papers from the workshop will be invited to submit expanded versions of their papers for inclusion in a forthcoming ACM Transactions on Autonomous and Adaptive Systems (TAAS) special issue on Policy-based Autonomic Computing.

Programme committee

Richard Anthony, University of Greenwich, UK.

Duncan Johnston-Watt, Enigmatec Corporation, UK.

Omer Rana, University of Cardiff, UK.

Mazin Yousif, Intel, USA.

Torsten Eymann, University of Bayreuth, Germany.

Julie McCann, Imperial College, UK.

Mohamed Ibrahim, University of Greenwich, UK.

Noria Foukia, University of Otago, New Zealand.

John Wilkes, HP, USA.

Monique Calisti, Whitestein Technologies AG, Switzerland

Jeff Bradshaw, University of West Florida, USA.

Toshi Nakata, NEC Research, Japan.

Ken Moody, Cambridge University, UK.

Alex Heneveld, Enigmatec Corporation, UK.

Richard Connor, Strathclyde University, UK.

Alan Dearle, University of St Andrews, UK.

John Strassner, Motorola, USA.

Jean-Marc Seigneur, University of Geneva, Switzerland.

Luc Moreau, University of Southampton, UK.

Alun Butler, Morgan Stanley, UK.

Asit Dan, IBM, USA.

Key dates

The following timetable shall apply to the workshop submissions:

Full paper submissions: March 31st, 2007

Author notification: April 15th, 2007

Final manuscripts due: April 31st, 2007

Review process

Submitted papers will each be reviewed by three members of the program committee, and will be evaluated for originality, significance and technical merit. We shall ensure that the reviewing process is prompt and that detailed feedback is provided to all submissions whether accepted or not.

Contact us

We welcome any enquiries or comments, please address these to:

Richard Anthony, R.J.Anthony@gre.ac.uk

Duncan Johnston-Watt, duncan@enigmatec.net

Omer Rana, o.f.rana@cs.cardiff.ac.uk