# The 2nd IFIP WG6 .3, WG6.6 Workshop on Autonomic Communication

**http://www.autonomic-communication.org/wac**

International Federation for Information Processing:
TC Communication Systems (WG6.3 and WG6.6)

## October 3-5, 2005, Athens, Greece

(The Margi Hotel, Vouliagmeni, Athens)

Organized by FP6 project ACCA

Sponsored by

First Call

## Scope

The purpose of this workshop is to present and to discuss the principles of Autonomic Communication (AC) – a new communication paradigm to assist the design of the Next Generation Network (NGN). This workshop explicitly focuses on the grounding principles to achieve purposeful behavior on top of self-organization (self-management, self-healing, self-awareness, etc.). This Call solicits papers that study the network element's autonomic behavior as a consequence of innovative protocol structures (as opposed to traditional stack) and their interaction with numerous and largely-dynamic network groups and communities. The goals are to understand how autonomic behaviors are learned, influenced or changed, and how, in turn, these affect other elements, groups and the network.

The self-organized networking structures will be able to sense their environment, detect and perceive changes and understand the meaning of these changes, thus facilitating new ways of performing network control, management, middle box communication, service creation, etc. This will be based on universal and fine-grained multiplexing of numerous policies, rules and events which are done autonomously but facilitate the desired behavior of groups of network elements. Papers addressing autonomic communication principles applicable to the Internet or new networking paradigms and structures are welcome.

The emphasis of the event is on the long-term research agenda with a *broad interdisciplinary approach* to explore concurrently *multiple paradigm spaces.* In addition to technical papers, well though-out position papers will also be accommodated.

Important Dates:

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| Papers Due: | April 18, 2005 |
| Acceptance notification: | May 30, 2005 |
| Camera Ready: | June 15, 2005 |

Papers are solicited in topics including:

- Policy-based communication and policy multiplexing in NGN
- Group communication for control and management plane
- Designing evolvable next generation networks
- Self-organisation for NGN re-configurability
- Management of nomadicity
- Large AC testbeds
- AC calculi
- Modelling and analysis of AC systems
- Theoretical foundations of autonomic network control
- Mobile code and network programmability for AC
- Generic network-level service composition at run-time
- Context handling within AC;
- Theoretical foundations of rule-based systems;
- Security, immunity and resilience of AC;
- Applied AC (QoS, traffic engineering, routing, etc.);

WAC 2005 is technically co-sponsored by IFIP TC6 WG6.3 and WG6.6 (pending) and will be organized by the FP6 project "Autonomic Communication Coordination Action" of Future and Emerging Technologies program of the IST.

## FET Proactive Initiative on "Situated and Autonomic Communication"

WAC2005 aims to become the premier international forum on autonomic communication principles, as well as hosting the ideas and technical work developed in the context of the recently launched European Union IST FET Proactive initiative program on "Situated and Autonomic Communication". This is a long-term research initiative aiming to address visionary and high-risk research of a fundamental nature and exploring its limits and opportunities in increasingly important areas of economics and social development in Europe. Autonomic Communication addresses these challenges from a network-centric technological viewpoint.

General workshop Chair:
I. Stavrakakis, U Athens, Greece

Programme Committee:
I. Stavrakakis, U Athens, co–Chair
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G. Pujolle, UPMC, France
C. Santivanez, BBN, USA
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