

# Autonomic Networking 2006

SMARTNET / INTELLCOMM / IWAN / WAC

15 rue de l'École de Médecine - Paris, France

September 27 – 29, 2006

**Location:** Conference venue:  
Université Paris 6, Paris, France

URL: <http://www.autonomic-net.org>  
E-mail: [information@dnac.org](mailto:information@dnac.org)

IFIP TC6 Conference, sponsored by  
WG6.2 (Network and Internetwork Architectures)  
WG6.6 (Management of Networks and Distributed Systems)  
WG6.7 (Smart Networks)  
WG6.8 (Mobile and Wireless Communications)

## Wednesday, September 27, 2006

**08:30 – 09:30 – Registration**

**09:30 - 11:00 am – Opening of the conference and keynote presentations**

- *Welcome and opening presentation*  
Roberto Kung, *Orange, FR*

- *TBD*

Radu Popescu Zelletin, *FOKUS, DE*

**11:00 - 11:30 am- Coffee Break**

**11:30 - 01:00 pm - Session 1: Autonomic Networks**

- *Towards Autonomic Networks (WAC)*

Stefan Schmid\*, Manolis Sifalakis\*\*, David Hutchison\*\*\*, *\*NEC Europe Ltd., DE, \*\*Lancaster University, UK, \*\*\*Lancaster University, UK*

- *A Cognitive Architecture for Personal Networks (INTELLCOMM)*

Yunfei Wu, *Delft University of Technology, NL*

- *A Cross-Layer Architecture For Autonomic Communications (WAC)*

Mohammad Razzaque, *UCD, Dublin, IE*

**01:00 - 02:00 pm – Lunch**

**02:00 - 03:30 pm - Session 2: Self-configuration**

- *Self-configuration of Network Devices with Configuration Logic (INTELLCOMM)*

Sylvain Hallé, *Université du Québec à Montréal, CA* ; Roger Villemaire, *Université du Québec à Montréal, CA* ; Omar Cherkaoui, *UQAM, CA*

- *Dynamic Decision Making for Candidate Access Point Selection (SMARTNET)*

Burak Simsek\*, Hakan Coskun\*\*, *\*Humboldt Universitaet zu Berlin, DE, \*\*Technischen Universität Berlin, DE*

- *A Multi Agent System Approach for Self Resource Regulation in IP Networks (WAC)*

Gerard Nguengang\*, Louis Hugues\*, Dominique Gaiti\*\*, *\*Ginkgo-Networks, FR, \*\* University of Troyes, FR*

**03:30 - 04:00 pm - Coffee Break**

**04:00 - 06:00 pm - Session 3: Autonomic Platform and Services**

- *A DoS protection for a Pragmatic Multiservice Network Based on Programmable Networks (IWAN)*

Bernardo Alarcos\*, María Calderón\*\*, Marifeli Sedano\*\*\*, Juan Velasco\*\*\*\*, *\*University of Alcalá, ES, \*\*Universidad Carlos III de Madrid, ES, \*\*\*Universidad Politécnica de Madrid, ES, \*\*\*\*University de Alcalá*

- *Lessons for Autonomic Services from the Design of an Anonymous DoS Protection Overlay (INTELLCOMM)*

David Ellis, *University of Sussex, UK* ; Ian Wakeman, *University of Sussex, UK*

- *An extensible and flexible System for Network Anomaly Detection (IWAN)*

Thomas Gamer, *Universität Karlsruhe (TH), DE* ; Marcus Scholler, *University of Karlsruhe, DE* ; Roland Bless *University of Karlsruhe, DE*

- *Design and Implementation of a new Service Provisioning Platform using Smart Cards (SMARTNET)*

Vincent Guyot\*, Nadia Boukhatem\*\*, *\*LIP6, FR, \*\*ENST, FR*

**07:30 pm Gala Diner**



## Thursday, September 28, 2006

### 09:00 - 10:00 am - Session 4: State of the art

- *Policy Based Context Aware Management for Autonomic Networks*  
John Strassner, *Motorola, USA*

### 10:00 - 10:30 pm - Coffee Break

### 10:30 - 12:30 pm - Session 5: Autonomic management and discovery

- *Autonomous Agents for Self-Managed MPLS DiffServ-TE domain (SMARTNET)*  
Rana Rahim-Amoud, Leila Merghem-Boulahia, Dominique Gaiti, *University of Troyes, FR*
- *An Efficient Dynamic Bandwidth Allocation Algorithm for Quality of Service Networks (INTELLCOMM)*  
Jocelyne Labib Elias\*, Antonio Capone\*\*, Fabio Martignon\*\*\*, *\*LIP6, \*\*Politecnico di Milano, \*\*\*Università di Bergamo*
- *Artificial Intelligence techniques in the dynamic negotiation of QoS: A user interface for the Internet New Generation (SMARTNET)*  
Zeina Jrad, Lahcene Dehni, *University of Paris13, FR*
- *An Approach to Integrated Semantic Service Discovery (SMARTNET)*  
Shanshan Jiang\*, Fin Arve Aagesen\*\*, *\*NTNU, NO, \*\*Norwegian Institute of Science and Technology, NO*

### 12:30 - 01:30 pm - Lunch

### 01:30 - 03:00 pm - Session 6: Policy-based Management

- *Policy-Based Management and Context Modelling Contributions for Supporting Autonomic Systems (SMARTNET)*  
Jaime Serrano\*, Joan Serrat\*, John Strassner\*\*, Ray Carroll\*\*\*, *\*Universitat Politècnica de Catalunya-UPC, ES, \*\*Motorola Labs, US, \*\*\*Waterford Institute of Technology, TSSG, IE*
- *Implicit Context-Sensitive Mobile Computing Using Semantic Policies (INTELLCOM)*  
Hamid Harroud, Ahmed Karmouch, *University of Ottawa, CA*
- *GXLA A language for the specification of Service Level Agreements (SMARTNET)*  
Badis Tebbani \*, Issam Aib\*\*, *\*University of Paris 6 -LIP6-, FR, \*\*University of Waterloo, CA*

### 03:00 - 07:30 pm - ACF Meeting

### 4:00 - 04:30 pm Coffee break

## Friday, September 29, 2006

### 09:00 - 10:00 am - Session 7: State of the art

- *Autonomic networking: achieving stability in the face of pervasive uncertainty*  
Simon Dobson, *UCD, IE*

### 10:00 - 10:30 pm - Coffee Break

### 10:30 - 12:30 pm - Session 8: Ad hoc, sensor and ambient autonomic networks

- *A Service Management Approach for Self-Healing Wireless Sensor Networks (INTELLCOMM)*  
Helen Assunção, Linnyer Ruiz, *Federal University of Minas Gerais, BR*
- *Integration of Mobile IPv6 into Mobile Ad-Hoc Network systems (WAC)*  
Kazuya Monden\*, Hiroki Satoh\*, Junji Yamamoto\*\*, Yusuke Syomura\*\*, Atsushi Shimizu\*, Masato Hayashi, Susumu Matsui\*\*, Satoshi Yoshizawa\*\*, *\*Hitachi, Ltd, Systems Development Laboratory, JP, \*\*Hitachi, Ltd, Central Research Laboratory, JP*
- *AToM: Atomic Topology Management of Wireless Sensor Networks (WAC)*  
Song Shen, *University College Dublin, IE*
- *An Architecture for Autonomic Management of Ambient Networks (INTELLCOMM)*  
Marcos Siqueira\*, Fábio Verdi\*\*, Maurício Magalhães\*\*, Rafael Pasquini\*\*, *\*CPqD Telecom & IT Solutions B, \*\*University of Campinas, (UNICAMP) BR*

### 12:30 - 02:00 pm - Lunch

### 02:00 - 03:30 pm - Session 9: Autonomic control of mobile networks

- *Autonomic Communications: Exploiting Advanced and Game-theoretical Approaches for RAT Selection and Protocol Reconfiguration (WAC)*  
Eleni Patouni\*, Sophie Gault\*\*, Markus Mueck\*\*, Nancy Alonistioti\*, *\*University of Athens, Dept. of Informatics and Telecommunications, GR, \*\* Motorola Labs, FR*
- *Managing Policies for Dynamic Spectrum Access (WAC)*  
Dave Lewis, *Trinity College Dublin, IE*
- *An Intermediate Framework for Unifying and Automating Mobile Communication Systems (WAC)*  
Giannis Koumoutsos, *University of Patras, GR*



03:30 - 04:00 pm - Coffee Break

04:00 - 05:30 pm - Session 10: Panel

- *The industrial point of view on Autonomic Networking*  
Chairman Hubert Zimmermann, *Ginkgo-Networks*  
*Motorola*  
*IBM*  
*Orange*  
*Alcatel*