

Advance Programme

**5th International Workshop on
Networked Appliances**

October 30-31, 2002

Liverpool, U.K.

Technical Co-Sponsor:



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IWNA5 Programme Timetable

Wednesday 30th October

Morning

08:30 – 10:00 *Workshop Registration + Coffee*

10:00 – 10:15 Welcome and Opening Remarks (*Prof. Madjid Merabti, IWNA5 Chair*)

10:15 – 11:00 Keynote Speech (Prof. David Marples, OSGi)
'Building appliances for my Dad'

11:00 – 12:30 Session 1 “Services”
(*Chair: Philippe Boucachard, Canon Research, France*)

Afternoon

12:30 – 13:30 **Lunch**

13:30 – 15:30 Session 2 “Security”
(*Chair: Dr. Qi Shi, Liverpool John Moores University, UK*)

15:30 – 15:45 *Coffee*

15:45 – 17:45 Session 3 “Middleware”
(*Chair: Dr. Haifa Takruri-Rizk, Salford University, UK*)

Workshop Evening Dinner – Maritime Museum, 19:00 – 23:00

Thursday 31st October

Morning

08:30 – 10:30 Session 4 “Interoperability & Usability”
(*Chair: Prof. Michihiko Minoh, Kyoto University, Japan*)

10:30 – 10:45 *Coffee*

10:45 – 12:45 Session 5 “Applications”
(*Chair: Prof. Taleb-bendiab, Liverpool John Moores University, UK*)

Afternoon

12:45 – 13:45 **Lunch**

13:45 – 15:45 Session 6 “Architectures”
(*Chair: Dr. Ibrahim Kamel, Panasonic Research, USA*)

15:50 – 16:30 Panel – Hot Topics in Networked Appliances (*Chair: Dr. Charles Judice*)

16:30 – 16:45 Closing Remarks (*Prof. Madjid Merabti, IWNA5 Chair*)

16:45 – 17:00 *Coffee*

Day 1 – WEDNESDAY 30th October

Keynote Session Chair: Prof. Madjid Merabti

Prof. David Marples, *Executive Director OSGi* 'Building appliances for my Dad'

Session 1: Services Chair: Philippe Boucachard, Canon Research, France

Service Production using Service Scenario and its Control Scheme on AMIDEN architecture

Y. Tajika, A. Sawada, M. Minoh, T. Kamae, *Toshiba, Japan*

Open Service Architecture for Heterogeneous Home Environment

H. Jormakka, J. Koivisto, T. Kyntaja, *VTT, Finland*

Using Capability Profiles for Appliance Aggregation

M. Butler, *HP Labs, UK*

Providing Printing Web Services

A. Silva, F. Meneguzzi, P. Schneider, R. B. Barcelos, V. Rodrigues, D. Waldman, A. Benso, *Pontificia Universidade Catolica do Rio Grande (PUCRS), Brazil*

Session 2: Security Chair: Dr. Qi Shi, Liverpool John Moores University, UK

On Secured End-to-End Appliance Control Using SIP

M. Rahman, *Panasonic Research, USA*, C. Akinlar, *University of Maryland, USA*, I. Kamel, *Panasonic*

Secure Component Composition for Networked Appliances

B. Askwith, Q. Shi, M. Merabti, *Liverpool John Moores University, UK*

Security Issues in Networked Appliances and Home Gateways

N. Pittsley, I Suandy, *Mindspring, USA*

Security Models for Trusting Network Appliances

C. English, P. Nixon, S. Terzis, A. McGettrick, H. Lowe, *University of Strathclyde in Glasgow, UK*

ESES/Signature and its Applications for Secure Data Exchange

Jae Seung Lee, Ki Young Moon, Seung Won Sohn, *Electronics and Telecommunications Research Institute (ETRI), Korea*

Session 3: Middleware Chair: Dr. Haifa Takruri-Rizk, Salford University, UK

Application-Compliant Networking on Embedded Systems

S. Beyer, K. Mayes, B. Warboys, *Manchester University, UK*

Standard SIP-Based Instant Messaging and Presence APIs for Networked Devices

M Debbabi, M Rahman, W. Lin, J. Gopal, *Panasonic Research, USA*, S. Sridhar, *Columbia University, USA*

A Model for Controlling Program Behaviour in Pervasive Networks

T. Owen, J. Rathke, I. Wakeman, D. Watson, *University of Sussex, UK*

Standards-based languages for Programming Web Navigation Assistants

V. L. Luque-Centeno, L. Sanchez-Fernandez, C. D. Kloos, P. T. Breuer, E. G. Cabellos, *Universidad Carlos III de Madrid, Spain*

Networked Smart Home Appliance - Enabling Real Ubiquitous Culture

R. Kango, P. R. Moore, J. Pu, *De Montfort University, UK*

Conference Evening Dinner at The Liverpool Maritime Museum

A private showing of the Emigration Trail to the New World exhibition is arranged, for prior to the meal.

Day 2 – THURSDAY 31st October 2002

Session 4: Interoperability & Usability Chair: Prof. Michihiko Minoh, Kyoto University, Japan

Interoperability in In-Home Digital Networks

W. Bronnenberg, *Phillips Research Laboratories, Holland*

An Investigation of the Impact of Mobile Phone and PDA Interfaces on the Usability of Mobile-Commerce Applications

J. Buranatrived, P. Vickers, *Northumbria University, UK*

A Wireless Networked Appliances MAC Bridge

O. Abuelma'Atti, M. Merabti, B. Askwith, *Liverpool John Moores University, UK*

Spontnet: Experiences in Configuring and Securing Small Ad Hoc Networks

L. Feeney, B. Ahlgren, A. Westerlund, A. Dunkels, *Swedish Institute of Computer Science, Sweden*

From Server to PDA: An HCI Perspective on Porting Wireless Roaming Business Applications

P. Clement & P. Vickers, *Northumbria University, UK*

Session 5: Applications Chair: Prof. A Taleb-Bendiab, Liverpool John Moores University, UK

Smarter Service Location

S. Type, I. Wakeman, Steven Watt, *University of Sussex, UK*

Bundle Dependency in Open Services Gateway initiative Framework Initialization

L. Liang, A. Wang, *Southern Polytechnic State University, USA*

Internet Marine Transport Container Global Positioning Service (IMTCGPS)

K. Wang, C-P. Chuang, H-W. Li, Y-C. Lu, *Chunghwa Telecom Co., Taiwan*

Pin&Play: Bringing Power and Networking to Wall-Mounted Appliances

K. Van Laerhoven, N. Villar, H. W. Gellersen, *Lancaster University, UK*, M. Hakansson, *Viktoria Institute, Sweden*

Lightweight Messaging for Simulating Service Portability of Networked Appliances

H. Takruri-Rizk, H. Bin Lenando, B. Bury, *Salford University, UK*

Session 6: Architectures Chair: Dr. Ibrahim Kamel, Panasonic Research, USA

Global Wireless Framework: One World Wireless Devices

A. Mingkhwan, M. Merabti, B. Askwith, *Liverpool John Moores University, UK*

Smart Clustering - Networking Smart Objects Based On Their Physical Relationships

M. Strohbach, H. W. Gellersen, *Lancaster University, UK*

Architectural Implications for Context Adaptive Smart Spaces

P. Nixon, S. Terzis, F. Wang, *University of Strathclyde in Glasgow, UK*, S. Dobson, *Aurium, Ireland*

A Jini-based Infrastructure for Networked Appliance Management and Adaption

D. Reilly, A. Taleb-Bendiab, *Liverpool John Moores University, UK*

Throughput and Delay Analysis of IEEE 802.11 Protocol

P. Chatzimisios, V. Vitsas, A. C. Boucouvalas, *Bournemouth University, UK*

Panel Session – Hot Topics Discussion

Chair: Dr. Charles Judice, *Kodak, USA*. Panelists: Prof. Madjid Merabti, *LJMU*, Prof Paddy Nixon, *Strathclyde University*, Dr. Karen Lawson, *Kodak UK*, Dr. Mark Butler, *HP Labs UK*.