

1st Open M-Zones Workshop

presented by
Waterford Institute of Technology (WIT)
Trinity College Dublin (TCD) and
Cork Institute of Technology (CIT)

December 11th 2003
Waterford, Ireland

Focus

The current trends in converged networks and pervasive computing show an increasing interest in operation and control of smart space infrastructures. Bringing together adaptable services, ubiquitous management and environments rich on services and devices leads to the concept of a managed zone covering smart space services as well as smart space management. The scientific challenge here is to develop open information and communications management technology that supports dynamic, integrated management of participants, information appliances and the actual smart space infrastructure.

Content

The 1st Open M-Zones Workshop presents conceptual solutions for an open smart space management by means of three research themes.

Adaptive Services investigates techniques and models that support autonomous adaptation of systems to match user needs to available service capabilities and the current context. This theme focuses on aspects of adaptivity that are driven by implicit rather than explicit direction from the user and which therefore need to rely heavily on context information and learnt user patterns.

Seamless Engineering of Open Smart Spaces concentrates on the business to network translation, e.g. adapting a user needs and smart services to dynamically changing physical environments and vice versa. Main objective is to offer solutions for adaptive systems that are enabled to respond effectively to various user locations, service usage needs, QoS capabilities, and connection and device requirements.

Managing Dynamic Environments focuses on network element level management and functional aspects to create a dynamic and adaptive network environment for users, user applications and devices in smart spaces. This theme is driven by context-ware computing and networking technologies, e.g. admission control and roaming in heterogeneous wireless networks, management issues in ad-hoc networks, and sensor network applications for smart spaces.

The presentations given with this workshop show results from the HEA research programme M-Zones, which was started in August 2002. Prior to this open workshop, the M-Zones programme has already hold one internal workshop and has organised a workshop on Adaptive Systems for Ubiquitous Computing Environments at the ACM International Symposium on Information and Communication Technologies, September 2003, Dublin.

Organisation

Venue: Waterford Institute of Technology, Auditorium

Dates: December 11th, 2003, Time: 09:00 – 16:30

The workshop itself is organised in four sessions. Starting with a welcome note given by the Director of WIT, Prof. Kieran R. Byrne, each of the research themes will be presented in a dedicated session. The workshop will finish with a panel session, which will provide the audience with a forum for an open discussion of the workshop presentations as well as other interests in the given research topics.

Programme

08:30 – 09:00 Registration
09:00 – 09:15 Welcome and Keynote, Director of WIT

09:15 – 10:45 Session A – Adapting to a User's Needs
Context-aware, Ontology-based, Managed Person-centric Adaptive Services. *Vinny Wade*
Bridging heterogeneous, autonomous, dynamic knowledge at runtime. *Declan O'Sullivan*
Anatomy of Adaptive Services for Ubiquitous Computing Environments. *Owen Conlan*

11:00 – 12:30 Session B – Seamless Engineering of Smart Spaces
Introduction. *Sven van der Meer*
Design Principles for Smart Space Management. *Sven van der Meer*
Ubiquitous Smart Space Management. *Brendan Jennings*
Infrastructure Requirements for Smart Spaces and Managed Zones. *Micheál ÓFoghlú*

13:30 – 15:00 Session C – Managing Dynamic Environments
Network Access and Handover Control in Heterogeneous Wireless Networks for Smart Space Environments. *Dirk Pesch*
Sensor Network Infrastructure for Smart Spaces. *John Barret*
Management aspects of dynamic networks. *Fergus O'Reilly*

15:30-16:30 Session D, Panel
Smart Space Management – can we close the gap?

WIT Location and Access

The workshop will be held on WIT's main campus. For all access information see also www.tssg.org/location/index.htm and www.wit.ie/ads/gettinghere/gettinghere.htm.



Internationally it can be **accessed from a number of airports**, with Dublin being the best for onward connections via public transport.

Hotels in Waterford City:

- Dooley's: www.dooleys-hotel.ie
- Tower: www.towerhotelwaterford.com
- Granville: www.granville-hotel.ie
- Ivory's: www.ivorys-hotel.ie