

Agentcities.NET

Testbed for a Worldwide Agent Network:
Take-up Measure (Trial)

Agentcities Working Groups Overview

AgentLink - Agentcities - OntoWeb Liaison Meeting
Barcelona, February 4th 2003
Presenter: Matthias Klusch, DFKI

Deutsches Forschungszentrum für
Künstliche Intelligenz GmbH

Universitat Politècnica de Catalunya

Motorola

Ecole Polytechnique Fédérale de
Lausanne

BT exact Technologies

Agentcities Working Groups

- Objectives & Creation -

- Provide an **open forum**
 - on specific areas of interest and issues related to the testbed Agentcities .RTD & other Agentcities projects world-wide
- Promote **collaborations**
 - disseminate knowledge, experience, and cross-fertilise ideas between members
- **Recommend solutions**
 - to Agentcities project for beneficial exploitation
- Prepare **input to standard bodies**
 - on relevant technology and application areas
- **Creation** at any time possible via application
 - first 10 groups have been initiated at iD1 in feb 02 and launched in may 02 (proposals peer reviewed by PMB)

Current Working Groups on Agentcities core technologies

- Network Architecture

S Willmott (UPC, E);
www.agentcities.org/Activities/WG/Arch/

- Security Services

A Yip (ICST, UK);
www.agentcities.org/Activities/WG/Security/

- Communication

S Willmott (EPFL, CH);
www.agentcities.org/Activities/WG/Comms/

- Web Services

J Dale (Fujitsu, USA) & M Kernland
(Whites tein, CH);
www.agentcities.org/Activities/WG/WebServices/

- Ontology & Semantics

L Cecceroni (Fujitsu USA) &
V Tamma (U Liverpool, UK)
www.agentcities.org/Activities/WG/Ontology/

- Service Description and Composition

S Ambroszkiewicz (IPI PAN, PL);
www.agentcities.org/Activities/WG/SDC/

Current Working Groups on special application domains

- Business Process
Infrastructure

N Mehandjiev (UMIST, UK)
[www.agentcities.org/Activities/WG/
BPI/](http://www.agentcities.org/Activities/WG/BPI/)

- Health Care

J Nealon (U Oxford, UK) &
A Moreno (ETSE, Spain);
[www.agentcities.org/Activities/WG/
Healthcare/](http://www.agentcities.org/Activities/WG/Healthcare/)

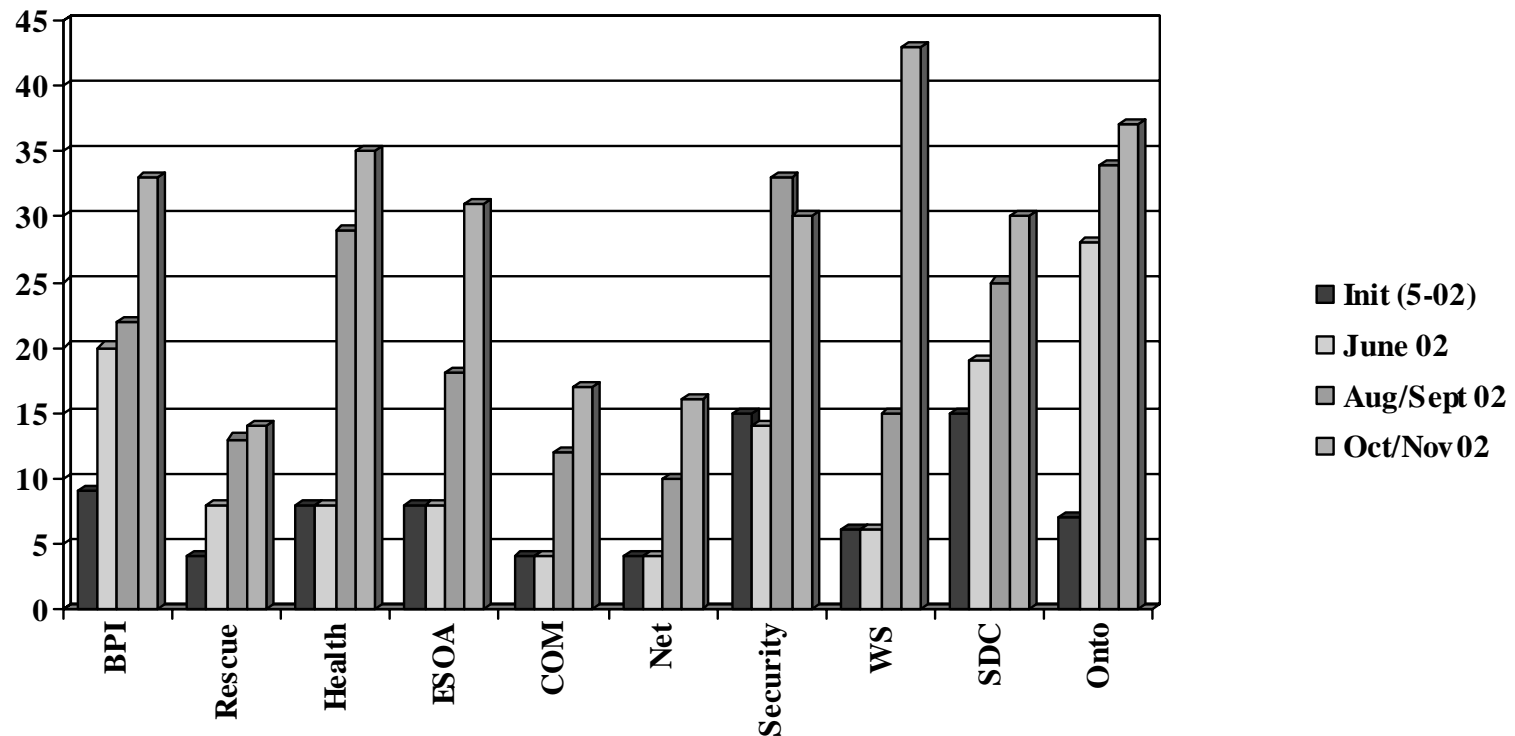
- Service Coordination for
Emergency Response

B Lopez (U Girona, SP) &
T Kalus (UK);
[www.agentcities.org/Activities/WG/
Rescue/](http://www.agentcities.org/Activities/WG/Rescue/)

- Engineering Self-
Organising Applications

G Di Marzo (U Geneva, CH) &
C van Aart (U Amsterdam, NL);
[www.agentcities.org/Activities/WG/
ESOA/](http://www.agentcities.org/Activities/WG/ESOA/)

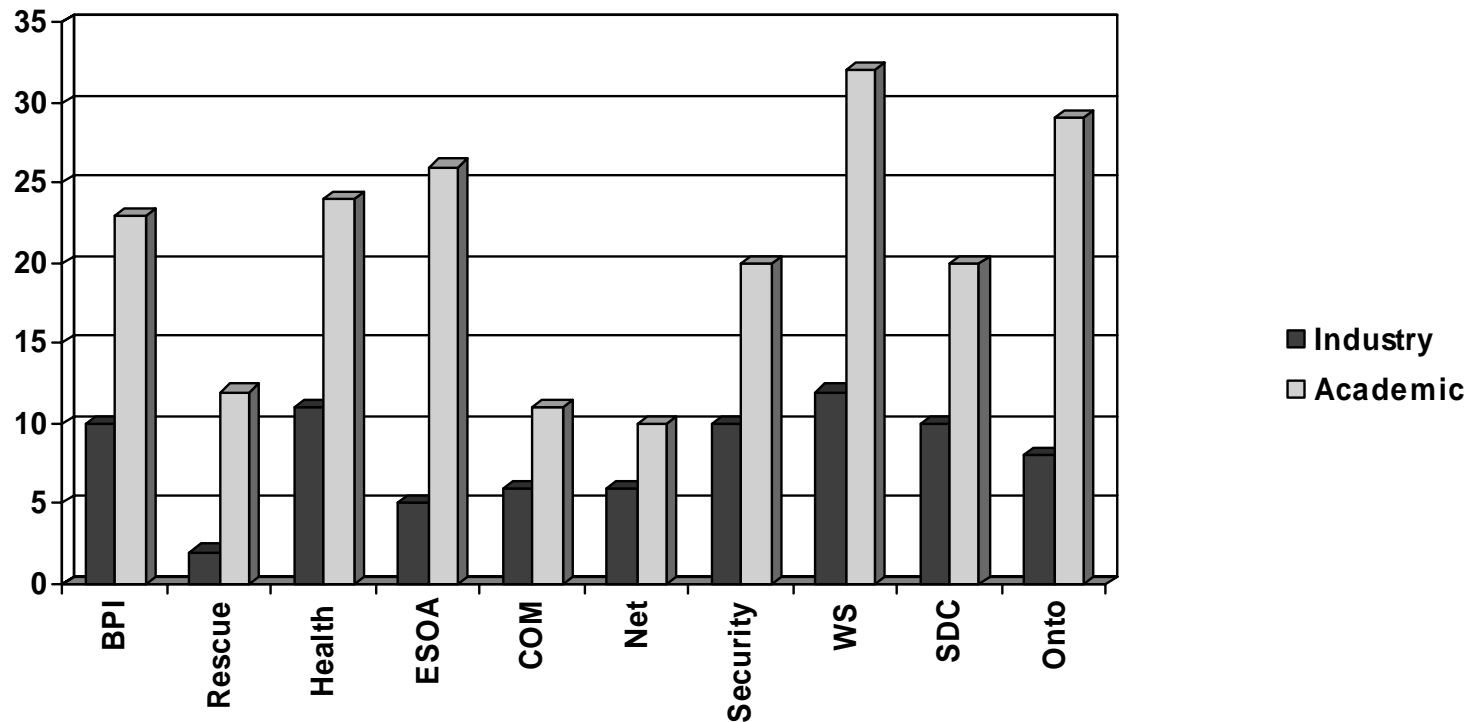
Support of Working Groups Membership



240 persons in total subscribed to the overall working groups discussion list.

Support of Working Groups

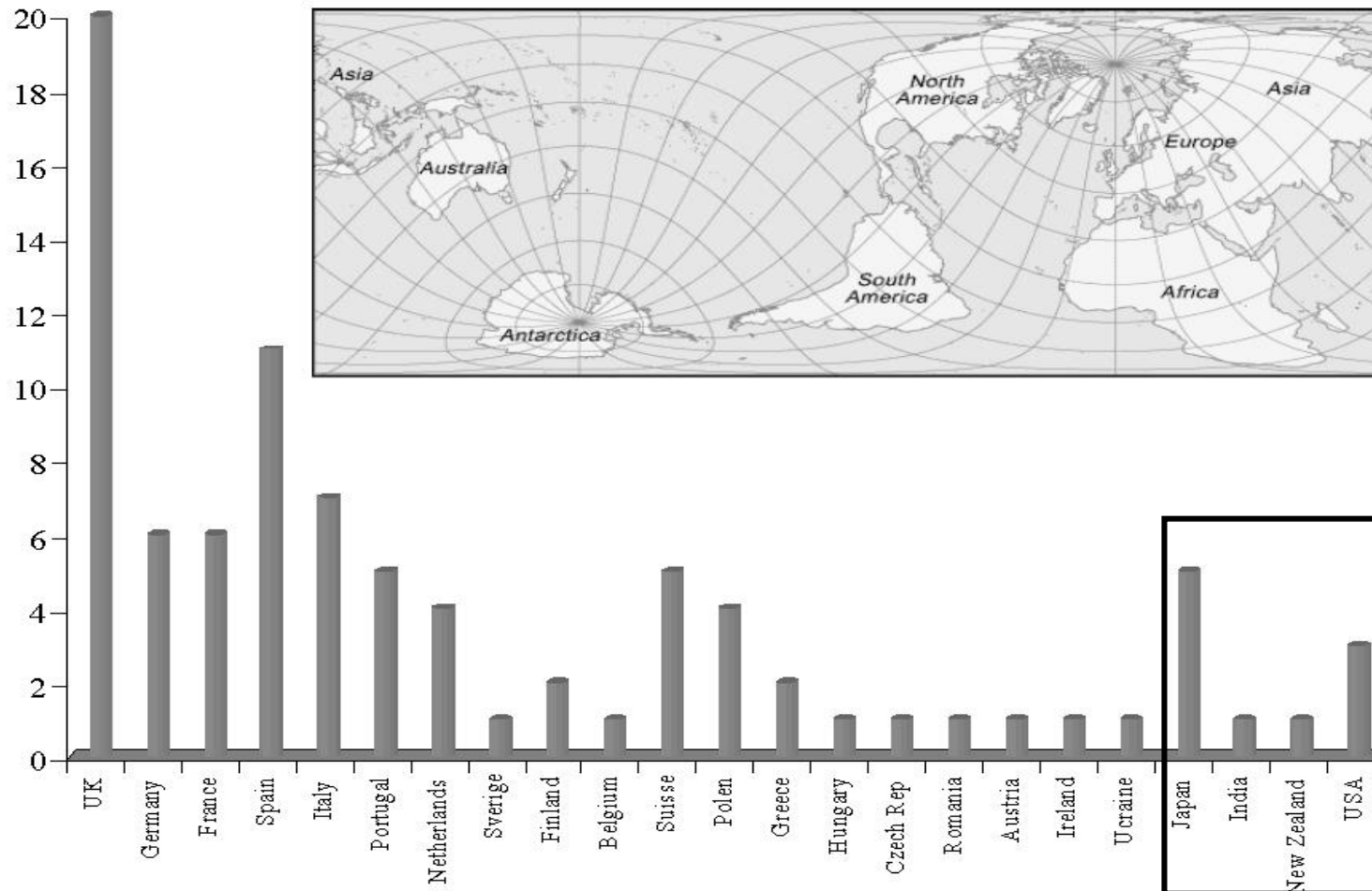
Industrial and academic membership



- 25 industrial members in total; in average one third per working group
- Siemens (D); NetUnion, Whitestein, Bluewin (CH); Agentworks, France Telecom, Motorola, VGuide (F); iSOCO (E); BTextact, Vector-Tri (UK); Sonera, VTT (FI); Anacom (PT); CPMtec, Comtec, ATR, Fujitsu (JP); UOL.com (BR), HP India, Fujitsu (USA), dream.com; tilab.com (I); Profactor (A).

Support of Working Groups

Geographical distribution: Europe and beyond...



Selected Past Activities

- WG meetings
 - iD1: Lausanne, Feb 2002; iD2: Lisbon, Sep 2002; iD3: Barcelona, Feb 2003; AAMAS 2002, Bologna
- Feedback from WGs to Agentcities.RTD
 - Lively discussions on WG mailing lists on technical issues to resolve
 - Technical recommendations, technical notes, white papers
 - Network Architecture [ACT F-001, ACT F-002]; FIPA Security WP, etc.
 - Software
 - Network services (platform management, status, service directory)
 - Number of other monitoring and resource management tools.
 - JADE Agentcities Security Plugin

Selected Past Activities (2)

- Collaborative work
 - WG members are involved in Service Deployment projects of Agentcities as well as many national, cross-national funded projects related to Agentcities
- Dissemination
 - Co-organisation of events
 - iD1 (Lausanne), iD2 (Lisbon), iD3 (Barcelona);
 - Workshops and conferences in related domains, e.g., Agentcities workshop at AAMAS 02 conference, Agents & Health Care at ECAI02
 - More than 25 conference papers, 2 books edited, 1 special issue;
 - Presentation of WG at international events by WG chairs

More details provided in D6.2

Initial Liaisons

- All Agentcities working groups have been initially cross-linked with each other where appropriate
- Current liaisons of working groups include
 - standard bodies: FIPA, W3C, O T A
 - E U projects: AgentLink 2, P I S A, C R U M P E T , I t r u s t, L I A I S E
 - communities: Agent Technology, S e m a n t i c W e b, R o b o C u p R e s c u e
- T h e s e a c t i v i t i e s a r e s t i l l o n g o i n g ;
 - involvement of industry in WG remains to be improved where appropriate.

Synergy in Collaboration



- **Collaborative research on and development** of enabling technologies for the creation of future open, large-scale, and intelligent service environments
 - agent-based semantic reasoning on data and information
 - advances in semi-automated creation & management of ontologies in DAML+OIL, OWL-Lite language; approaches to semantic inter-ontology mapping(s); etc. [OntoWeb]
 - how to flexibly use them by information agents (e.g. in SeWeb, CIS) [AL: InfoAgents SIG]
e.g. AC WG “Ontologies & Semantics”
 - agent-based co-ordination of data and (Web) services
 - describe, discover, acquire, compose, execute/monitor services
e.g. AC WGs “Web Services”, “Service Description & Composition”

Synergy in Collaboration



- **Joint input to industry and standard bodies**
 - “OntoWeb + ACT F + AgentLink” technical recommendations (“RFC”) for relevant W3C WGs and FIPATCs.
- **Joint co-organisation of events**
 - to cross-fertilise and promote related ideas/themes/solution approaches; initiate proper liaisons between communities; etc.
- **Cross-linkage with relevant activities in FP6 and elsewhere**
 - share practical experiences & theoretical knowledge each project gained in related domains: technology transfer (resource sharing where appropriate)
 - PhD student exchange program (e.g. ACNET Mobility Grants, collaboration within SIGs in AL)