DEBS 2008

USENIX · Φ · IEEE · SIG SOFT · acm · ACM SIGMOD · ifip

the second International Conference on
Distributed Event-Based Systems

- preliminary program -

July 1st - 4th, 2008
Rome - Italy

University of Rome 'La Sapienza'

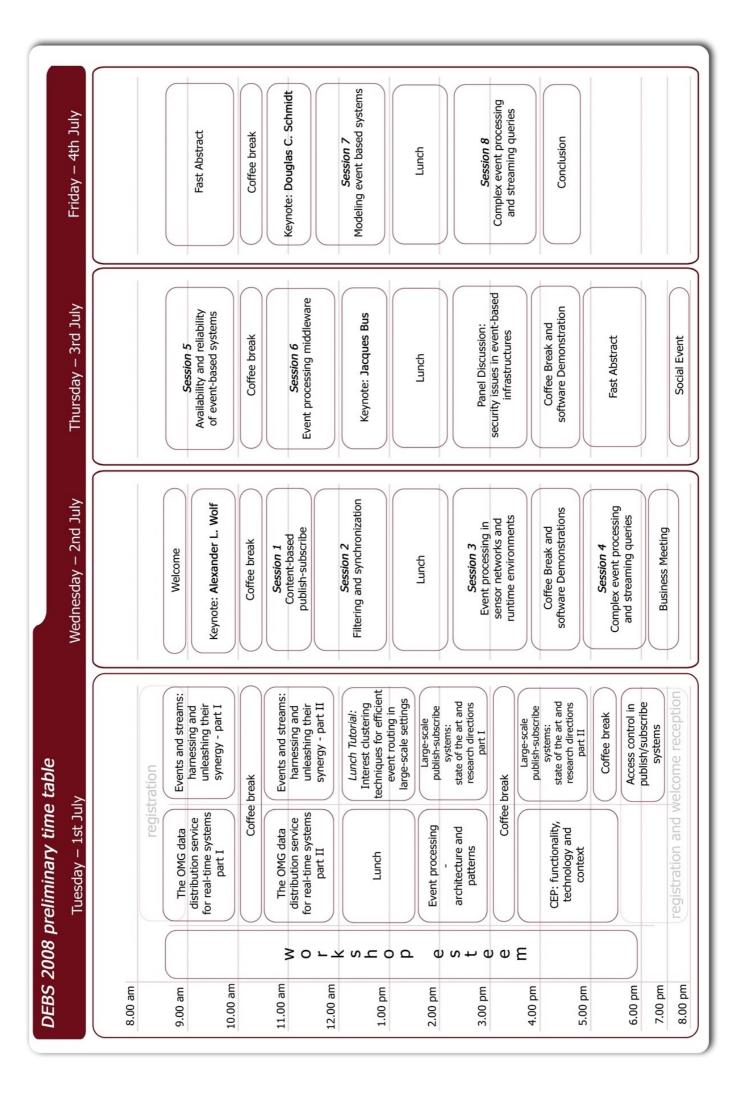Dipartimento di Informatica e Sistemistica "Antonio Ruberti"

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DEBS 2008 preliminary time table

	Tuesday – 1st July	Wednesday – 2nd July	Thursday – 3rd July	Friday – 4th July
8.00 am	registration			
9.00 am	The OMG data distribution service for real-time systems part I / Events and streams: harnessing and unleashing their synergy - part I	Welcome / Keynote: **Alexander L. Wolf**	**Session 5** Availability and reliability of event-based systems	Fast Abstract
10.00 am	Coffee break	Coffee break	Coffee break	Coffee break
11.00 am	The OMG data distribution service for real-time systems part II / Events and streams: harnessing and unleashing their synergy - part II	**Session 1** Content-based publish-subscribe	**Session 6** Event processing middleware	Keynote: Douglas C. Schmidt
12.00 am	Lunch / *Lunch Tutorial:* Interest clustering techniques for efficient event routing in large-scale settings	**Session 2** Filtering and synchronization		**Session 7** Modeling event based systems
1.00 pm		Lunch	Keynote: **Jacques Bus**	
2.00 pm	Event processing – architecture and patterns / Large-scale publish-subscribe systems: state of the art and research directions part I	Lunch	Lunch	Lunch
3.00 pm	Coffee break / Large-scale publish-subscribe systems: state of the art and research directions part II	**Session 3** Event processing in sensor networks and runtime environments	Panel Discussion: security issues in event-based infrastructures	**Session 8** Complex event processing and streaming queries
4.00 pm	CEP: functionality, technology and context / Coffee break	Coffee Break and software Demonstrations	Coffee Break and software Demonstration	
5.00 pm	Access control in publish/subscribe systems	**Session 4** Complex event processing and streaming queries	Fast Abstract	Conclusion
6.00 pm	registration and welcome reception	Business Meeting		
7.00 pm			Social Event	
8.00 pm				

workshop e s t e e m

Tuesday – 1st July

08,00 am – 10,00 am
Registration

08,30 am – 7.00 pm
All tutorials will take place on July 1st in two parallel tracks

08,30 am – 6,00 pm
Workshop esteem

Track I

08,30 am – 10,00 am
The OMG Data Distribution Service for Real-Time Systems *Part I*
Angelo Corsaro (PrismTech)

10,00 am – 10,30 am
Coffee Break

10,30 am – 12,00 pm
The OMG Data Distribution Service for Real-Time Systems *Part II*
Angelo Corsaro (PrismTech)

12,00 pm – 1,30 pm
Lunch Break

1,30 pm – 3,00 pm
Event Processing – Architecture and patterns
Opher Etzion (IBM)

3,00 pm – 3,30 pm
Coffe Break

3,30 pm – 5,30 pm
CEP: Functionality, Technology and Contex
Dieter Gawlick (Oracle) , *Shailendra Mishra* (Oracle)

Track II

08,30 am – 10,00 am
    Events and Streams: Harnessing and Unleashing Their Synergy *Part I*
    Sharma Chakravarthy (University of Texas at Arlington, Computer Science and Engineering Department)

10,00 am – 10,30 am
    Coffee Break

10,30 am – 12,00 pm
    Events and Streams: Harnessing and Unleashing Their Synergy *Part II*
    Sharma Chakravarthy (University of Texas at Arlington, Computer Science and Engineering Department)

12,00 pm – 1,30 pm
    Interest clustering techniques for efficient event routing in large-scale settings
    Leonardo Querzoni (Sapienza University of Rome, Department of Computer and Systems Sciences)

1,30 pm – 3,00 pm
    Large-scale publish-subscribe systems: state of the art and research directions *Part I*
    Peter Triantafillou (University of Patras, Department of Computer Engineering and Informatics) ,
    Anne-Marie Kermarrec (INRIA Rennes, Bretagne Atlantique)

3,00 pm – 3,30 pm
    Coffe Break

3,30 pm – 5,00 pm
    Large-scale publish-subscribe systems: state of the art and research directions *Part II*
    Peter Triantafillou (University of Patras, Department of Computer Engineering and Informatics) ,
    Anne-Marie Kermarrec (INRIA Rennes, Bretagne Atlantique)

5,00 pm – 5,30 pm
    Coffe Break

5,30 pm – 7,00 pm
    Access Control in Publish/Subscribe Systems
    J*ean Bacon* (University of Cambridge, Computer Laboratory)*, David Eyers* (University of Cambridge, Computer Laboratory)*, Jatinder Singh* (University of Cambridge, Computer Laboratory) and
    Peter Pietzuch (Imperial College London, Department of Computing)

6,00 pm – 7,00 pm
    Registration

6,30 pm – 8,30 pm
    Welcome Reception

08,30 am – 09,00 am
  Welcome from the Chairs

09,00 am – 10,00 am
  Keynote : Has the time finally arrived for content-based networking
    Alexander L. Wolf **(**Imperial College London**)**

10,00 am – 10,30 am
  Coffee Break

10,30 am – 11,30 am
  Session 1: **Content-based pub/sub**

  - Extending Siena to support more expressive and flexible subscriptions
    John Keeney (Trinity College Dublin, Ireland)*, David Lewis* (Trinity
    College Dublin, Ireland) *, Dominik Roblek* (Trinity College Dublin, Ireland)*,*
    D O'Sullivan (Trinity College Dublin, Ireland) *and Dominic Jones* (Trinity College Dublin, Ireland)

  - Dynamic Content-based Channels: Meeting in the Middle
    Sasu Tarkoma (Helsinki University of Technology, Finland)

11,30 am – 1,00 pm
  Session 2: **Filtering and synchronization**

  - Event Dissemination via Group-Aware Stream Filtering
    Ming Li (Dartmouth College, USA) *and David Kotz* (Dartmouth College, USA)

  - Bloom Filter Based Routing for Content-Based Publish/Subscribe
    Zbigniew Jerzak (TU Dresden, Germany) *and Christof Fetzer* (TU Dresden, Germany)

  - A Synchronization Protocol For Supporting Peer-to-Peer Multiplayer Online Games
    in Overlay Networks
    Stefano Ferretti (University of Bologna, Italy)

1,00 pm – 2,15 pm
  Lunch

2,15 pm – 3,45 pm
  Session 3: **Event processing in sensor networks and runtime environments**

  - Event Detection in Sensor Networks for Modern Oil Fields (Industrial paper)
    Matthew Hill (IBM Research, Hawthorne, USA) *,Yuan-Chi Chang* (IBM Research, Hawthorne, USA),
    Vijay Iyengar (IBM Research, Hawthorne, USA) *and Murray Campbell* (IBM Research, Hawthorne, USA)

  - Event-based Constraints for Sensornet Programming
    Mert Akdere (Brown University, USA)*, Ugur Cetintemel* (Brown University, USA)*,*
    John Jannotti (Brown University, USA) *and Jie Mao* (Brown University, USA)

  - Advanced Event Processing and Notifications in Service Runtime Environments
    Anton Michlmayr (Technical University of Vienna, Austria)*, Florian Rosenberg* (Technical University of
    Vienna, Austria)*, Philipp Leitner* (Technical University of Vienna, Austria) *and Schahram Dustdar*
    (Technical University of Vienna, Austria)

3,45 pm – 4,45 pm
Coffee Break and Demonstrations (TBC):

- **Service-Oriented Agent Architecture for Financial Customer Relationship Management**
  Wen-chih Tsai (National Chiao Tung University,Taiwan) *and An-Pin Chen* (National Chiao Tung University,Taiwan)

- **Efficient Uncertainty Management in Complex Event Systems**
  Segev Wasserkrug (IBM Haifa Research Lab, Israel)*, Opher Etzion* (IBM Haifa Research Lab, Israel), *Avigdor Gal* (Technion,Israel Institute of Technology) *and Yulia Turchin* (Technion,Israel Institute of Technology)

- **Service Oriented Architecture for Heterogeneous and Dynamic Sensor Networks**
  Jérémie Leguay (Thales Communications France)*, Mario Lopez-Ramos* (Thales Communications France)*, Kathlyn Jean-Marie* (Thales Communications France) *and Vania Conan* (Thales Communications France)

- **A Framework for Performance Evaluation of Complex Event Processing Systems**
  Marcelo Mendes (University of Coimbra,Portugal)*, Pedro Bizarro* (University of Coimbra,Portugal) *and Paulo Marques* (University of Coimbra,Portugal)

4,45 pm – 6,15 pm
Session 4: **Reasoning and complex event detection**

- **Top-k/w Publish/Subscribe: Finding k Most Relevant Publications in Sliding Time Window w**
  Kresimir Pripuzic (University of Zagreb, Croatia) *and Ivana Podnar* (University of Zagreb, Croatia), *Zarko* (EPFL, CH) *and Karl Aberer* (EPFL, CH)

- **Unification of Geospatial Reasoning, Temporal Logic, & Social Network Analysis in Event-based Systems (Industrial paper)**
  Jans Aasman (Franz, Inc., USA) *and Steve Sears* (Franz, Inc., USA)

- **Relative Temporal Constraints in the Rete Algorithm for Complex Event Detection**
  Karen Walzer (SAP AG, Germany) *and Tino Breddin* (SAP AG, Germany)

6,20 pm – 7,40 pm
Business Meeting

08,30 am –10,00 am
Session 5: **Availability and reliability of event-based systems**

- **An Adaptive Approach for Ensuring Reliability in Event Based Middleware**
 Shruti Mahambre (IIT Bombay, India) *and Umesh Bellur* (IIT Bombay, India)

- **Availability Models for Underlay Aware Overlay Networks**
 Madhu Kumar S. D (IIT Bombay, India) *and Umesh Bellur* (IIT Bombay, India)

- **Replica Placement for High Availability in Distributed Stream Processing Systems**
 Thomas Repantis and Vana Kalogeraki (University of California, Riverside, USA)

10,00 am – 10,30 am
Coffee Break

10,30 am – 12,00 pm
Session 6: **Event processing middleware**

- **WebLogic Event Server: A Lightweight, Modular Application Server for Event Processing (Industrial paper)**
 Seth White (Bea Systems, USA) *, Alexandre Alves* (Bea Systems, USA) *and David Rorke* (Bea Systems, USA)

- **TOPS – A New Design for Transactions in Publish/Subscribe Middleware**
 Yosef Shatsky (Open University, Israel) *and Ehud Gudes* (Open University, Israel)

- **Industry Paper: a scalable grid based application platform for high volumes of transactional event driven processes (Industrial paper)**
 Elena Pasquali (WareLite Ltd, UK) *and Daniel Grazioli* (WareLite Ltd, UK)

12,00 pm – 1,00 pm
Keynote : Towards trustworthy ICT service infrastructures
 ***Jacques Bus* (**Head of Unit, - Security (ICT Programme) DG Information Society and Media,European Commission**)**

1,00 pm – 2,15 pm
Lunch

2,15 pm – 3,45 pm
Panel Discussion : Security issues in Event Based Infrastructures as seen from European Technology Platforms
 Chair: *Jacques Bus*
 Participants:
 ***Neeraj Suri*, Technical University Darmstadt (ETP Artemis)**
 ***Reijo Savola*, VTT, Finland (ETP eMobility)**
 ***Mike Surridge*, IT Innovation, UK (ETP NEM)**
 ***Pascal Bisson*, Thales, France (ETP NESSI)**
 Organizers : *James Clarke* (Waterford Institute of Technology, Ireland), *Alkis Konstantellos* (EU commission), *Angelo Marino* (EU commission), *Thomas Skordas* (EU commission)

3,45 pm – 4,45 pm
Coffee Break and Demonstrations (TBA)

4,45 pm – 6,15 pm
Fast Abstract: (To be confirmed)

-Publish/Subscribe-based Cluster and Routing Algorithm for Actuator and Sensor Networks
Jan Hendrik Schönherr (Communication and Operating Systems Group, Germany), *Helge Parzyjegla* (Berlin Institute of Technology, Germany) ,*Gero Mühl* (Berlin Institute of Technology, Germany)

- BCE-Processor: Boost Up Event Processing for Large-scale Sensor-rich Ubiquitous Environment
Jinwon Lee (Computer Science, KAIST, South Corea)*, Youngki Lee* (Computer Science, KAIST, South Corea)*, Seungwoo Kang* (Computer Science, KAIST, South Corea)*, SangJeong Lee* (Computer Science, KAIST, South Corea)*, Junehwa Song* (Computer Science, KAIST, South Corea)

- Context-Dependent Event Detection in Sensor Networks
Scarlet Schwiderski-Grosche (Royal Holloway, University of London, UK)

- On the Challenges in Event Delivery
Haggai Roitman (Technion , Israel), *Avigdor Gal* (Technion , Israel), *Louiqa Raschid* (University of Maryland, USA)

- Combining Discriminant Analysis and Neural Networks for Fraud Detection on the Base of Complex Event Processing
Alexander Widder (simple fact AG, Germany), *Rainer v. Ammon* (Centrum für Informations-Technologie Transfer GmbH, Germany), *Philippe Schaeffer* (TÜV Rheinland Secure iT GmbH,Germany), *Christian Wolff* (Media Computing, University of Regensburg, Germany)

- Event-Driven Business Process Management
Christian Wolff (Universität Regensburg, Germany), *Rainer v. Ammon* (Centrum für Informations-Technologie Transfer GmbH, Germany), *Christoph Emmersberger* (*C*entrum für Informations-Technologie Transfer GmbH, Germany), *Torsten Greiner* (Teambank AG Nürnberg, Germany), *Adrian Paschke (*Technical University Dresden BioTec), *Florian Springer* (Centrum für Informations-Technologie Transfer GmbH, Germany)

- A Suitable Programming Model for e-Science Workflows?
Beth Plale (Indiana University, USA), *Chathura Herath* (Indiana University, USA), *Rahul Ramachandran* (University of Alabama Huntsville USA)

- Stratified implementation of event processing network
Ayelet Biger (One Software Technologies), *Opher Etzion* (IBM Haifa, Israel), *Yuri Rabinovich* (IBM Haifa, Israel)

- Event-based integration using on-the-fly matching
Anders Moen Hagalisletto (Birkeland Innovation, Norwegian Computing Center), *Steinar Kristoffersen* (Østfold University College, Halden)

- Policy-based Management of Semantic Clustering
Dominic Jones (Knowledge & Data Engineering Group (KDEG) – Trinity College Dublin, Ireland), *John Keeney* (Knowledge & Data Engineering Group (KDEG) – Trinity College Dublin, Ireland), *David Lewis* (Knowledge & Data Engineering Group (KDEG) – Trinity College Dublin, Ireland), *Declan O'Sullivan* (Knowledge & Data Engineering Group (KDEG) – Trinity College Dublin, Ireland)

- Design Patterns for Complex Event Processing
Adrian Paschke (Technical University Dresden, Germany)

7,00 pm - Social Event

08,30 am – 10,00 am
Fast Abstract : (To be Confirmed)

-Event Diffusion in Wireless Mesh Networks using Random Linear Network Coding
Roberto Beraldi (DIS - Università di Roma "La Sapienza"), *Aurelio Forese* (DIS - Università di Roma "La Sapienza"), *Hussein M. Alnuweiri* (Texas A&M University, Qatar)

-Discovery services in the future generation of mobile networks
Younès EL BOUZEKRI EL IDRISSI (ENSIAS, Mohamed V University, Morocco)

-Experimental Evaluation of Ubiquitous Systems. Why and how to reduce WiFi communication range
Marc-Olivier Killijian (LAAS-CNRS Université de Toulouse, France), *David Powell* (LAAS-CNRS Université de Toulouse, France), *M. Roy* (LAAS-CNRS Université de Toulouse, France) and *G. Sèverac* (LAAS-CNRS Université de Toulouse, France)

-FADA: Formalisms and Algorithms for Resilient Services Design in Ambient Systems
Matthieu Roy (LAAS-CNRS Université de Toulouse, France), *Marc-Olivier Killijian* (LAAS-CNRS Université de Toulouse, France), *Leonardo Querzoni* (University of Roma, Italy), *Sara Tucci Piergiovanni* (University of Roma, Italy), *Silvia Bonomi* (University of Roma, Italy), *François Bonnet* (IRISA, France)

-Spatio-Temporal Reasoning with Composite Events Mobile Systems
Scarlet Schwiderski-Grosche (Royal Holloway, University of London, UK)

-CAPS: Content-bAsed Publish/Subscribe services for perr-to-peer systems
Jordi Pujol Ahulló (Universitat Rovira i Virgili, Spain)

-Towards Data Driven Declarative Networking in Delay Tolerant Networks
Eiko Yoneki (University of Cambridge, UK)

-Gravity: An Interest-Aware Publish/Subscribe System Based on Structured Overlays
Sarunas Girdzijauskas (EPFL, Switzerland), *Gregory Chockler* (IBM Research, Israel), *Roie Melamed* (IBM Research, Israel), *Yoav Tock* (IBM Research, Israel)

-On Context-Aware Publish-Subscribe
Gianpaolo Cugola (Politecnico di Milano, Italy), *Matteo Migliavacca* (Politecnico di Milano, Italy)

-MAMBO: Membership-Aware Multicast with Bushiness Optimisation
Lu Fan (University,Edinburgh, UK),*Phil Trinder* (University,Edinburgh, UK),*Hamish Taylor* (University,Edinburgh,UK)

10,00 am – 10,30 am
Coffee Break

10,30 am – 11,30 am
Keynote : Meeting the Challenges of Mission-Critical Distributed Event-Based Systems with QoS-enabled Middleware and Model Driven Engineering
***Douglas C. Schmidt* (**Vanderbilt University**)**

11,30 am – 1,00 pm
Session 7: **Modeling event based systems**

- **A Metamodel for Distributed Event Based Systems**
  Rolando Blanco (David R. Cheriton School of Computer Science University of Waterloo, Canada)*,*
  Jun Wang (David R. Cheriton School of Computer Science University of Waterloo, Canada) *and Paulo Alencar* (David R.Cheriton School of Computer Science University of Waterloo, Canada)

- **Distributed Automatic Service Composition**
  Songlin Hu (Chinese Academy of Sciences, China), *Vinod Muthusamy* (University of Toronto, Canada) *and Arno Jacobsen* (University of Toronto, Canada)

- **Semantics of Dynamic Structure Event-Based Systems**
  Fernando Barros (Universidade de Coimbra, Portugal)

1,00 pm – 2,15 pm
Lunch

2,15 pm – 4,00 pm
Session 8: **Complex event processing and streaming queries**

- **Complex Event Processing Over Uncertain Data**
  Segev Wasserkrug (IBM Haifa Research Lab, Israel)*, , Avigdor Gal* (Technion,Israel Institute of Technology),*Yulia Turchin* (Technion,Israel Institute of Technology) and *Opher Etzion* (IBM Haifa Research Lab,Israel)

- **Speculative Out-Of-Order Event Processing with Software Transaction Memory**
  Andrey Brito (TU Dresden, Germany)*, Christof Fetzer* (TU Dresden, Germany)*, Heiko Sturzrehm* (University of Neuchatel, CH) *and Pascal Felber* (University of Neuchatel, CH)

- **Real-Time, Load-Adaptive Processing of Continuous Queries Over Data Streams**
  Dhananjay Kulkarni (Boston University, USA) *and Chinya Ravishankar* (University of California, Riverside, USA)

- **On Static Determination of Temporal Relevance for Incremental Evaluation of Complex Event Queries**
  François Bry (University of Munich, Germany) *and Michael Eckert* (University of Munich, Germany)

4,00 pm – 4,45 pm
Conclusion from the Chairs