

International Joint Conference on

Work Activities Coordination and Collaboration WACC '99

Advance Program
February 22-25, 1999

Cathedral Hill Hotel
San Francisco, California, USA

WACC '99 brings together researchers and practitioners from a variety of disciplines who are addressing or facing issues in work activities coordination and collaboration. Various aspects of this topic have been addressed previously under the separate banners of workflow, software process, groupware, and computer-supported cooperative work.

WACC '99 provides a multi-purpose forum for the presentation, discussion, and demonstration of key ideas in this important area. Sessions presenting novel research results are complemented by tutorials, workshops, invited speakers, panel discussions, informal research demonstrations and posters.



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In Cooperation with International Software Process Association (ISPA)
In Association with IEEE Technical Committee on Data Engineering (TCDE)

TUTORIALS - Monday, February 22

8:00 a.m. - 12:00 noon, Half Day

1:00 p.m. - 5:00 p.m., Half Day

8:00 a.m. - 5:00 p.m., Full Day

T1

XML: Modeling Data and Metadata

Rohit Khare, *University of California, Irvine*

Intended Audience: This tutorial is intended for CSCW developers evaluating the XML family of standards. No prior knowledge of markup languages, metadata systems, or knowledge representation is assumed.

Abstract: Designers of computer supported cooperative work systems have long sought a portable information delivery format to share knowledge. Extensible Markup Language (XML) provides an effective solution for communicating across time, space, and communities. First, when recording a data structure for future reuse, XML format storage is self-descriptive enough to extract its schema and verify its validity. Second, when transferring data structures between different machines, XML's link model in conjunction with Web transport protocols reduces the burden of marshaling entire data sets. Third, when sharing collaborative data structures between disparate communities, it is easier to compose new systems and convert data definitions to the degree that XML documents are well adapted to the Web.

This tutorial introduces the family of Extensible Markup Language specifications to CSCW researchers and practitioners: XML, Namespaces, XML Stylesheet Language (XSL), XLink, XPointer, Resource Description Framework (RDF), RDF Schemas, as well as XML's interaction with other Web standards such as HTML, CSS, URI, and HTTP.

About the Instructor: Rohit Khare, a UCI doctoral student, was a member of the technical staff of the World Wide Web Consortium and was Editor-In-Chief of the World Wide Web Journal.

This tutorial was codeveloped with Adam Rifkin, a doctoral student at Caltech.

T2

Internet Scale Workflow: Standards for Cross-Enterprise Business Processes

Keith Swenson, *MS2*

Intended Audience: This tutorial is valuable to those implementing groupware or workflow systems or evaluating workflow systems. The audience is expected to be knowledgeable about collaborative system concepts, but does not need to know any particular system in detail.

Abstract: While workflow systems support processes within an organization, process support breaks down when more than one organization takes part in the process. In the same way that documents are linked across organizations on the web, we now foresee the day when processes will be similarly linked across organizations achieving truly internet scale workflow processes. To do this, standards must exist. This tutorial gives an overview of (1) issues and problems to be solved, (2) standards efforts currently evolving in the Workflow Management Coalition, the OMG workflow RFP, and the IETF SWAP protocol, and (3) complementary and supporting efforts such as XML, EDI, HTTP, internet notification protocols, LDAP, SMTP/MIME, and common representations for users. Through comparisons, attendees will obtain an understanding of which options are appropriate for different situations, and the near future trend of new workflow technology. References for standards will be supplied.

About the Instructor: Keith D. Swenson is currently at MS2, Inc. in Mountain View, California. Previously, at Netscape he was the architect for Process Manager and Visual JavaScript. At Fujitsu, he led the development of Regatta Technology, now known as TeamWARE Flow. Previous positions include project manager for Framework at Ashton-Tate and development lead for Open Access at Software Products International. He is a past vice-chair for ACM SIGGROUP. He was elected fellow of the Workflow Management Coalition. He has an M.Sc. in Computer Science with a specialization in public hypertext information systems.

T3

CSCW, Groupware and Workflow: Experiences, State of the Art, and Future Trends

Jonathan Grudin, *University of California, Irvine*, Steven E. Poltrock, *The Boeing Company*

Intended Audience: This introductory tutorial is intended for actual and potential users, developers, researchers, marketers, or managers of some CSCW, groupware, or workflow system. Minimal requirements are a general background in HCI and experience working collaboratively. Broad knowledge or experience with collaborative technologies is not expected.

Abstract: Through lecture, video, and group discussions you will learn what groupware technologies are being used, what problems people encounter, and how successes with groupware have been attained. You will learn how different disciplines contribute to use and design of collaborative systems and how these technologies will affect individuals, organizations and society. You will:

- ◆ Discover the multi-disciplinary nature of CSCW.
- ◆ Learn about state of the art technologies.
- ◆ Understand behavioral, social, and organizational challenges.
- ◆ Learn development and usage approaches that lead to success.
- ◆ Anticipate future trends in groupware and global social impacts.

About the Instructors: Steven Poltrock and Jonathan Grudin, Co-Chairs of CSCW '98, began collaborating in 1986. Jonathan Grudin, Editor-in-Chief of ACM Transactions on Computer and Human Interaction, has worked as a developer and researcher, and has published numerous technical and popular articles. Steven Poltrock, a Boeing Technical Fellow, introduces, evaluates, and deploys groupware systems that support information sharing, organizational memory, concurrent engineering, collaborative authoring, and workflow management. Together they have authored several overviews of CSCW and groupware.

WORKSHOPS - Monday, February 22

8:00 a.m. - 5:00 p.m., Full Day

W1

Cross-Organizational Workflow Management and Coordination

Christoph Bussler, *The Boeing Company*, Paul Grefen, *University of Twente*, Heiko Ludwig, *IBM Zurich Research Laboratory*, Ming-Chien Shan, *Hewlett Packard Labs*

The objective of this workshop is to provide a forum to discuss workflow management and work coordination in situations in which processes span several independent organizations.

WFMS and collaboration tools are now widely used within organizations, but currently available systems are not well suited for cross-organizational collaboration. Various problems have to be addressed before such systems will be able to deal with organizational boundaries like technical interoperability, common terminology on business and contents level, common language for process models, and management of inter-organizational process status.

The purpose of this workshop is to:

- ◆ Get an overview of ongoing projects and upcoming products.
- ◆ Compile requirements for such systems.
- ◆ Learn about successful deployments.
- ◆ Identify research issues related to cross-enterprise collaboration and workflow execution.
- ◆ Start building a research community.

Submission deadline:
December 14, 1998

Send submissions to:
Heiko Ludwig
IBM Zurich Research Laboratory
hlu@zurich.ibm.com

Position papers must not exceed 2500 words. Submissions should be sent by e-mail in HTML, Postscript, or PDF format.

WACC '99 papers may be submitted (please indicate), but will not be part of the publicly available workshop report.

For more information:
<http://www.Zurich.ibm.com/~hlu/WACCworkshop/>

8:00 a.m. - 5:00 p.m., Full Day

W2

Implementing Tailorability in Groupware

Gunnar Teege, *Technical University of Munich*, Helge Kahler, *University of Bonn*, Michael Koch, *Xerox Research Centre Europe*, Oliver Stiemerling, *University of Bonn*

The purpose of this workshop is to bring together researchers and practitioners from several different disciplines (organizational, social, psychological, HCI) in addition to computer science, which must all be integrated for a successful implementation of tailorability in groupware.

The goal of the workshop is to compile an overview of the state-of-the-art in all aspects of tailorability implementation for groupware. This ranges from processes and interfaces for collaborative tailoring to system architectures supporting tailoring. We expect both research contributions and experience reports from the domain.

Participation Requirements:

Participation in the workshop requires the submission of a position paper which describes work that is in progress, is near completion, or has been completed. Submissions should describe either a research or an experience contribution. The intent of the workshop is to use the results from the experience contributions for an assessment of the research contributions.

Position papers should be 3-6 pages in length, and must be submitted in electronic form, either in HTML, Postscript or PDF.

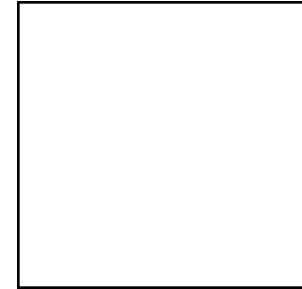
Complete submission details are available at the workshop web site (see below).

Submission deadline:
December 14, 1998

Send submissions to:
Gunnar Teege
Technical University of Munich
teege@informatik.tu-muenchen.de

For more information:
<http://www11.informatik.tu-muenchen.de/workshops/wacc99-ws-impltailor/>

KEYNOTE - Tues., Feb. 23



Managing Processes in the Networked Economy

Thomas W. Malone, *MIT Sloan School of Management*

Biography: Thomas W. Malone is the Patrick J. McGovern Professor of Information Systems at the MIT Sloan School of Management. He is also the founder and director of the MIT Center for Coordination Science and one of two founding co-directors of the MIT Initiative on "Inventing the Organizations of the 21st Century". Prof. Malone's research focuses on how new organizations can be designed to take advantage of the possibilities provided by information technology.

Among other things, Prof. Malone is known for having led the MIT team that developed the Information Lens system, a pioneering groupware tool in which intelligent agents help users find, filter, and sort large volumes of electronic information. He also predicted, long before these things became widely believed, that information technology would lead to more electronic buying and selling, to more "outsourcing" of non-core functions in a firm, and to smaller firms.

Prof. Malone has been a co-founder of three software companies and has consulted and served as a board member for a number of other organizations. He has published over 50 research papers and book chapters and has been frequently quoted in publications such as *Fortune*, *Scientific American*, and *Wired*. Before joining the MIT faculty, Prof. Malone was a research scientist at Xerox Palo Alto Research Center (PARC) where his research involved designing educational software and office information systems. He holds a Ph.D. from Stanford University and degrees in applied mathematics, engineering, and psychology.

CONFERENCE SCHEDULE - Tuesday, February 23

7:30	Registration	
8:45 - 9:00	Welcome <i>Richard N. Taylor (University of California, Irvine, General Chair)</i>	
9:00 - 10:30	Keynote: Managing Processes in the Networked Economy <i>Thomas W. Malone (MIT Sloan School of Management)</i>	
10:30 - 11:00	Break	
11:00 - 12:30	SESSION 1 A Reference Model for Workflow Application Development Processes <i>Mathias Weske (Münster University), Thomas Goesmann (Fraunhofer ISST), Roland Holten (Münster University), Rüdiger Striemer (Fraunhofer ISST)</i> Systems Architecture: Product Designing and Social Engineering <i>Rebecca E. Grinter (Bell Labs, Lucent Technologies)</i> WIDE Workflow Development Methodology <i>L. Baresi, F. Casati (Politecnico di Milano), S. Castano (University of Milano), M.G. Fugini, I. Mirbel, B. Pernici (Politecnico di Milano)</i>	
12:30 - 1:45	Lunch	
2:00 - 3:30	SESSION 2 Panel: Practical Issues in Workflow Project Development Chair: <i>Ming-Chien Shan (Hewlett Packard Laboratories)</i> Panelists: <i>Christoph Bussler (The Boeing Company), Dimitrios Georgakopoulos (MCC), Surendra Reddy (Oracle), Marc-Thomas Schmidt (IBM), Robert Mayberry (Hewlett Packard Laboratories)</i>	
3:30 - 4:00	Break	
4:00 - 5:30	SESSION 3A Virtual Enterprise Co-ordinator - Agreement-Driven Gateways for Cross-Organisational Workflow Management <i>Heiko Ludwig, Keith Whittingham (IBM Zurich Research Laboratory)</i> Interoperability as a Means of Articulation Work <i>Carla Simone, Dario Giubilei (University of Torino), Gloria Mark (GMD-FIT)</i> Herbal-T, Enabling Integration, Interoperability, and Reusability of Internet Components <i>Israel Hilerio (i2 Technologies), Weidong Chen (Southern Methodist University)</i>	SESSION 3B A Unified Framework for Tolerating Exceptions in Workflow/Process Models - A Persistent Object Approach <i>Alex Borgida, Takahiro Murata (Rutgers University)</i> Declarative Workflows that Support Easy Modification and Dynamic Browsing of Workflows <i>Richard Hull, Bharat Kumar, Francois Lllirbat (Bell Labs), Eric Simon (INRIA), Jianwen Su (University of California, Santa Barbara), Gang Zhou (Bell Labs)</i> A Comprehensive Approach to Flexibility in Workflow Management Systems <i>Petra Heintl, Stefan Horn, Stefan Jablonski, Jens Neeb, Katrin Stein, Michael Teschke (University of Erlangen-Nuremberg)</i>
6:00 - 8:00	Reception - with Informal Research Demonstrations and Posters	

CONFERENCE SCHEDULE - Wednesday, February 24

9:00 - 12:00 **Informal Research Demonstrations and Posters**

9:00 - 10:30 **SESSION 4**

Panel: Real World Issues in Developing and Deploying Groupware Products

Chair: Keith Swenson (MS2, Inc.)

10:30 - 11:00 **Break**

11:00 - 12:30 **SESSION 5A**

“Got COCA?” A New Perspective in Building Electronic Meeting Systems

Du Li, Zhenghao Wang, Richard R. Muntz (University of California, Los Angeles)

Virtual Environments at Work: Ongoing use of MUDs in the Workplace

Elizabeth F. Churchill (FX Palo Alto Laboratory), Sara Bly (Sara Bly Consulting)

The Effects of Narrow-bandwidth Multipoint Videoconferencing on Group Decision Making and Turn Distribution

Shinji Takao (NTT, Japan)

12:30 - 1:45 **Lunch**

2:00 - 3:30 **SESSION 6A**

Metaphorical Representation in Collaborative Software Engineering

James D. Herbsleb (Bell Labs, Lucent Technologies)

WWAC: WinWin Abstraction Based Decision Coordination

Prasanta Bose, Zhou Xiaoqing (George Mason University)

Coordinating Agent Activities in Knowledge Discovery Processes

David Jensen, Yulin Dong, Barbara Staudt Lerner, Eric K. McCall, Leon J. Osterweil, Stanley M. Sutton, Jr., Alexander Wise (University of Massachusetts, Amherst)

3:30 - 4:00 **Break**

4:00 - 5:30 **SESSION 7A**

Supporting the Writing of Reports in a Hierarchical Organization

Andreas Girgensohn (FX Palo Alto Laboratory)

Information Sharing, Quality and Intermediation

Svetlana (Claire) Vishik, Andrew B. Whinston (University of Texas at Austin)

SaveMe: A System for Archiving Electronic Documents Using Messaging Groupware

Stefan Berchtold, Alexandros Biliris, Euthimios Panagos (AT&T Labs Research)

SESSION 5B

Invited talk: Workflow Standards in Object Land

Marc-Thomas Schmidt (IBM, WfMC/OMG Working Group Chair)

Invited talk: SWAP Reference Model and Interface

Surendra Reddy (Oracle, SWAP Working Group Chair)

SESSION 6B

Invited talk: Workflow Management Coalition (WfMC) Workflow Model and API

Workflow Management Coalition speaker TBA

Invited talk: Workflow Management Coalition (WfMC) Workflow Interoperability

Workflow Management Coalition speaker TBA

SESSION 7B

A Configuration Management Approach for Large Workflow Management Systems

Hans Schuster (MCC), Jens Neeb, Ralf Schamburger (University of Erlangen-Nuremberg)

Temporal Workflow Management in a Claim Handling System

J. Leon Zhao (Hong Kong University of Science and Technology), Edward A. Stohr (New York University)

Building a Federation of Process Support Systems

Jacky Estublier, Mahfoud Amieur, Samir Dami (L.S.R. Actimart)

CONFERENCE SCHEDULE - Thursday, February 25

8:30 - 10:00	SESSION 8 Moksha: Exploring Ubiquity in Event Filtration-Control at the Multi-user Desktop <i>Rameshsharma Ramloll, John Mariani (Lancaster University)</i> The Design of an Interactive Online Help Desk in the Alexandria Digital Library <i>Robert Prince, Jianwen Su, Hong Tang, Yonggang Zhao (University of California, Santa Barbara)</i> Why do Electronic Conversations Seem Less Polite? The Costs and Benefits of Hedging <i>Susan E. Brennan (SUNY, Stony Brook), Justina O. Ohaeri (Lucent Technologies)</i>
10:00 - 10:30	Break
10:30 - 12:00	SESSION 9 Panel: Towards a Research Agenda on Process Models Chair: Giorgio De Michelis (University of Milan)
12:00	Closing Remarks

Call for Submissions: PANELS, POSTERS & RESEARCH DEMONSTRATIONS

WACC '99 invites Panel, Poster, and Informal Research Demonstration submissions. Panels trigger significant debate and opposing views. Posters and Informal Research Demonstrations provide an excellent opportunity to exhibit and discuss late-breaking results and research prototypes.

Display space will be provided for posters in the Poster/Informal Research Demonstration room.

Only versions of tools or systems (a) developed for non-commercial purposes to explore novel research ideas or (b) which are at least six months from commercial offerings will be accepted as research demonstrations. Booths will be provided in the Poster/Informal Research Demonstration room. No internet connections, phone lines, or computing or projection equipment will be provided.

Poster and demonstration researchers are expected to be available during the reception Tuesday evening, Wednesday morning from 9:00 a.m. to 12 noon, and during breaks.

How to submit. Prepare a **one-page** description of the proposed panel, poster, or informal research demonstration. Panel submissions must include a title, the name of the chair/moderator, a short description of the specific topic and its interest to the audience, and a list of panelists; participation by the panelists must be confirmed before submission of the proposal. Poster and informal research demonstration submissions must describe the research problem addressed and include an outline of how the solution will be presented to its audience.

Submissions must be prepared in **plain ASCII text** and sent electronically to: wacc99@cs.colorado.edu

Submission deadline: December 11th, 1998

HOTEL INFORMATION

The host hotel for WACC '99 is the Cathedral Hill Hotel, located at 1101 Van Ness Avenue, San Francisco. The Cathedral Hill Hotel is centrally located in the heart of downtown, 17 miles from the airport. The conference room rate is \$129.00 per night, for single or double occupancy. These rooms will be held until Thursday, January 28, 1999. Attendees are responsible for making their own hotel arrangements. After the cut-off date, reservations will be accepted on a rate available, space available basis.

The hotel may be reached by phone at +1.800.622.0855 or +1.415.776.8200 or fax at +1.415.441.1174.

You must identify yourself as a member of the group booking "WACC".

Reservations must be guaranteed by major credit card or a first night's deposit. The cancellation policy is 24 hours prior to the arrival date. Additional information about the hotel can be found at:

<http://www.cs.colorado.edu/wacc99/>

REGISTRATION FORM

To Register

Fax registration form to: (or)
 Aileen R. Broccardo
 University of California, Irvine
 +1.949.824.1715 Fax

Mail registration form to:
 Aileen R. Broccardo
 University of California, Irvine
 Information and Computer Science
 Irvine, CA 92697-3425 USA

ACM/SIG Member# _____
 Last Name _____
 First Name _____
 Badge Name _____
 Affiliation _____
 Mailing Address _____
 City _____
 State _____ Zip Code _____
 Country _____
 Phone _____ Fax _____
 E-mail _____
 Special needs _____
 Please do not add my name to any mailing lists.

Please select (circle) what you are registering for:

Workshops	<i>Monday, February 22</i>	W1	W2
Tutorials	<i>Monday, February 22</i>	T1	T2 T3
Conference		YES	NO
Reception	Please indicate if you plan to attend.	YES	NO

Method of payment (please check one)

Check or money order
Made payable to ACM/WACC '99
 Visa, Mastercard, or Amex

Cardholder's name _____

Card number _____

Exp. date _____

Signature _____

Total paid: \$ _____

Cancellation Policy:
 Cancellations received prior to **January 22, 1999** will receive a full refund. After this cut-off date **NO** refunds will be offered.

Fees	Workshop		Full day Tutorial			1/2 day Tutorial			Conference			
	Early	Late	Early	Late		Early	Late		Early	Late		
<input type="checkbox"/> ACM/SIG Members	125	175	\$ _____	350	450	\$ _____	175	225	\$ _____	375	475	\$ _____
<input type="checkbox"/> Non-ACM/SIG Members	150	200	\$ _____	450	500	\$ _____	225	250	\$ _____	475	575	\$ _____
<input type="checkbox"/> Full-Time Student	50	50	\$ _____	150	150	\$ _____	150	150	\$ _____	175	175	\$ _____
Total Fee payable (transfer to method of payment box): \$ _____												

Early registration is through **January 31, 1999**. The cut-off for all pre-registrations is February 16. Thereafter, registration will **only** be accepted on site. For additional information, contact Aileen Broccardo at aileen@ics.uci.edu, +1.949.824.1357.

The **Conference Fee includes** continental breakfasts, refreshment breaks, lunches on Tuesday and Wednesday, reception on Tuesday evening, and proceedings.

Tutorial and Workshop Fees include continental breakfast, refreshment breaks and tutorial notebook (if applicable). If you register for a **FULL DAY** of tutorials/workshops, your fee also includes lunch.

WACC '99 Conference Committee

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Association for Computing Machinery

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