

1st International Workshop on Dynamic Business-to-Business Collaboration (DynaCo10)

Workshop Description:

Collaboration between organizations is complex from a business, conceptual, and technological point of view. Service consumers may source from service providers for several reasons, e.g., the OEM cannot produce a specified quality, or for a set low price per piece, the production capacity is not available, required special know-how is lacking, and so on. In this situation, collaborating parties want to control how much process detail they expose and which parts of them are observable. While a service provider has to adhere to the requirements agreed with the service consumer, the provider still needs flexibility for extending and adjusting the service provisioning to internal needs that remain opaque to the consumer, e.g., to perform back-office tasks. Moreover, with respect to dynamic B2B collaboration, during the setup phase the question arises based on what criteria business parties find each other and determine the counterpart is trustworthy and reputable. Also, while enacting a B2B collaboration with multiple business parties, it must be clear how to behave if one violates collaboration agreements, how to resolve conflicts, how to re-organize an existing B2B collaboration if needed.

A promising approach for supporting dynamic B2B collaboration combines service-oriented business integration and workflow management over web-based infrastructures to satisfy the need of organizations for dynamically bringing together a service consumer and one or several service providers. The term *dynamic* means that during process enactment collaborator organizations are found by searching business process marketplaces and the sub-processes are integrated with the running process. Besides the simple way of bringing services together on a name basis, other methods may employ the comparison of attribute values, ontologies realized with semantic web technology, or comparison of service structures. Hence, a need arises to manage the occurring complexity with dedicated service-oriented artifacts such as architectures, specification languages, collaboration patterns, and so on.

Innovative concepts and technologies of service-oriented computing are a means for automating dynamic B2B collaboration. In order to realize dynamic B2B collaboration, concepts and technologies for a basic infrastructure are necessary to create an e-business service ecosystem. For organizations, such a service ecosystem to manage infrastructure, objects, software, platforms, business processes as a service, poses an opportunity for total customer integration with the help of so-called service hubs that are necessary to manage the potential communication overhead. Hence, hubs within the ecosystem may be used for collecting service proposals from customers, applying mining methods to automatically detect the most promising, inter-organizationally matching and adapting these services for carrying out e-business transactions, versioning existing services, and finally discarding services when they reach the end of their lifecycles. The Workshop on Dynamic B2B Collaboration aims at bringing together contributions to address these complex challenges.

Topics of interest:

- Service-oriented architectures;
- Orchestrations and choreographies in supply chains;
- Security in B2B collaborations;
- Integration of legacy systems;
- Life-cycle of dynamic B2B collaborations;
- Trust, reputation, conflicts and resolutions;
- Matching of business parties;
- Service-level agreements;
- Ontologies for semantics, formal graph-based methods;
- Models for inter-organizational business processes;
- Inhouse processes vs. externalized processes;

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- Inter-organizational process composition;
- Enactment-related observability of local and external processes;
- Extended business-process specification languages;
- Advanced concepts of e-business transactionality;
- Data mining and business intelligence for B2B collaboration;
- Modeling notations and supporting tools;
- Control-flow, data-flow, resource management, exception- and compensation handling.
- Case studies and experience reports of dynamic B2B collaboration

Workshop Goals:

The goal of this workshop is to foster research in the emerging area of dynamic B2B collaboration. A keynote address will be followed by presentations. The workshop will end with a collaborative discussion aimed at identifying core research challenges alongside promising approaches for future work. A summary of this discussion will be published in the workshop post-proceedings alongside the papers.

Preliminary Format:

09:30 – 10:30 Keynote Presentation (I asked Paul Grefen and need to wait for his response)
10:30 – 11:00 – Coffee Break
11:00 – 12.30 Paper sessions I
12:30 – 14:00 - lunch
14:00 – 15.30 Paper sessions II
15:30 – 16:00 – Coffee Break
16:00 – 17:00 – Paper Sessions III
17:00 – 18.30 Discussion, workshop manifesto

Publicity:

The organizers of DynaCo'10 are well connected to research groups and companies in the field. Hence, we will advertise the workshop through targeted email sent to members of our network. Additionally, we will publicize the workshop in Internet forums, e.g., SEWORLD mailing list, AISWorld mailing list, and so on.

Submission and Important Dates:

We invite full papers of up to 8 pages and shorter version or position papers up to 5 pages describing original research on the listed or related topics.

Please follow the IEEE Computer Society Press Proceedings Author Guidelines to prepare your papers using the 8.5x 11, two-column format. Submissions must be in the form of PDF documents using our electronic submission system (to be announced).

At least one author is required to attend the workshop and present the work. Attendance of the workshop requires registration to the main CEC'09 conference.

Full papers will be published in the regular conference proceedings by the IEEE Computer Society Press and will be included in the IEEE Digital Library.

Each paper will be reviewed by three members of the Program Committee. Reviewers will score submissions according to their contribution, originality/novelty, technical depth/merit, and quality of presentation. For short position papers, clarity of exposition and the degree of innovation will be sufficient, while for full papers, a clear technical contribution is expected.

Deadline for submission: May 01, 2010

Notifications: July 01, 2010

Camera Ready version for pre-proceedings: August 01, 2010

Workshop Date: October 13, 2010

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Diogo Ferreira, diogo.ferreira (at) tagus.ist.utl.pt

Potential Participants:

Besides participants that will comprise members of the organizer's extensive scientific and corporate collaboration network, we invite researchers and practitioners from a wide range of disciplines to exchange ideas and explore different aspects of B2B collaboration.

Workshop organizers:

Christoph Bussler (<http://www.real-programmer.com>) is Principal Engineer at Saba Software, Inc. His interests include workflow and process management, Business-to-Business and Enterprise Application Integration, Multi-tenant System Construction as well as Semantic Computing. He is author of several books and journal articles on integration, workflow management and semantics. He is active in the professional community as keynote speaker, conference and workshop organizer as well as program committee member. Christoph has a PhD in Computer Science from the University of Erlangen, Germany, and worked in several roles at software product and research organizations, including BEA Systems, Cisco Systems, Digital Enterprise Research Institute, Oracle Corporation, The Boeing Company and Digital Equipment Corporation.

Schahram Dustdar is Full Professor of Computer Science (Informatics) with a focus on [Internet Technologies](#) heading the Distributed Systems Group, Institute of Information Systems, Vienna University of Technology (TU Wien) where he is director of the [Vita Lab](#). He is also Honorary Professor of Information Systems at the [Department of Computing Science at the University of Groningen](#) (RuG), The Netherlands. Since 2009 he is an [ACM Distinguished Scientist](#). More information at: <http://www.infosys.tuwien.ac.at/Staff/sd>

Diogo R. Ferreira is professor of information systems at IST – Technical University of Lisbon where he works on Business Process Management (BPM) and Context-Aware Services and Applications. He holds a PhD from the University of Porto (2004) on the application of workflow systems to business networking. He is in charge of several BSc-, MSc-, and PhD-level courses in the areas of database systems, enterprise integration, and BPM systems, respectively. His research interests include process mining, business process modeling, enterprise application integration, inter-organizational processes, service-oriented architectures, and context-aware BPM.

Alex Nortá, University of Helsinki, Finland. Alex Nortá is a post-doctoral researcher at the University of Helsinki, Finland. He received his MSc degree (2001) from the Johannes Kepler University of Linz, Austria and his PhD degree (2007) from the Eindhoven University of Technology, The Netherlands. His PhD thesis was partly financed by the IST project CrossWork, in which he focused on developing the eSourcing concept for dynamic inter-organizational business process collaboration. His research interests include business-process collaboration, workflow management, e-business transactions, service-oriented computing, software architectures and software engineering, ontologies, mashups, social web. Alex was a co-organizer of the SOC-LOG'09 workshop that aimed at achieving a deeper insight into the potential of applying principles of service-oriented computing to the problem domains of logistics and supply chain. He also organizes the CEC-PAW'10 workshop on cross-enterprise collaboration, people and work.

Program Committee:

Florian Rosenberg, Csiro, Australia