CIMOSA - News

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INTEROP (IST-2003-508011)

The main to date results of INTEROP - with its focus on the interoperability and synergy between the domains of Enterprise Modelling, Ontology and Architecture & Platforms.- can be summarised in three clusters of project work packages:

1.) Integrating Activities (WP1 to WP4): Selection and installation of a collaboration platform (www.interop-noe.org); Design of a Knowledge Map with a query function for interoperability research, a classification framework (taxonomy) and a prototype for data collection (Protégé); Definition of a model for the definition of the Virtual Laboratory to persist after the termination of the project.

2.) Joint research activities (WP5 to WP9): Analysis of how to classify, organise and map existing enterprise modelling languages, taking into account semantic requirements; Definition of a framework and a methodology for the management and the synchronisation of distributed enterprise models; Collection of interoperability good practices and solutions as well as a proposition of design principles and patterns for interoperability; Production of state of the art documents on "Ontology-based integration of enterprise modelling and architectures & platforms" and on "Model driven and dynamic, federated enterprise architectures and interoperability".

3.) Dissemination and spreading of excellence activities (WP10 to WP12): Initial elaboration of a glossary of interoperability terms; Definition of a list of Web courses and tutorials to be developed; Initial rules for the creation of an Interoperability Master Program; Co-ordinated organisation of and participation in a large number of events like international conferences and workshops, the most significant of them being the First International Conference on Interoperability for Enterprise Applications and Software (I-ESA), Geneva, February 2005. Most of the results are available as public deliverables.

The Second I-ESA Conference will again be jointly organised by the Integrated Project ATHENA (www.athena-ip.org), the Network of Excellence 'INTEROP (www.interop-noe.org) .

Selected dissemination activities 1) INTEROP Dissemination workshop held on 2005-09-20 at the EDOC Conference, concerned with the convergence of the paradigms, technologies and methods involved in enterprise computing. At the workshop, attended by researchers and practitioners, different views on interoperability were presented. The discussion focussed on the major challenges to fill the gap between interoperability needs of the business and IT support. This gap is even increasing by the divergence of interests in industry and in academia (http://www. edocconference.org).

2) industry workshop organised on 2005-09-23 with the UK Dept of Trade and Industry (DTI) in London, with the goal to initiate a National body prepared to advise the Government on the needs of particularly SMEs and to produce a roadmap focussing on enterprise interoperability with short, medium and long term requirements. A further meeting was agreed to follow the completion of an agreed set of actions.

Reports from Events

KnowTech 2005, 7th Conference on Application of Knowledge Management in Industry and Public Administrations, Munich, Germany, 2005-10-24/25, has been held as part of the SYSTEMS Fair. The conference was organised by BITCOM the German Association of the Information and Telecommunication Industry and New Media e.V. and sponsored by major IT providers.

The deployment of Knowledge Management (KM) is considered a strategic success factor for the growth of the German economy. Hence, the focus of the conference was on applications of KM related methods, integration concepts and implementation technology. Following a plenary session, five parallel sessions with a total of 58 papers have been held. One major KM topic was

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the development of reference methods for a knowledge balance to capture the intellectual properties and capabilities of an enterprise. The conference proceedings can be ordered via BITKOM Servicegesellschaft mbH (http://www.bitkom.org/)

EE&I Standardisation

IEC/SC 65A-ISO/TC 184/SC5/JWG15 meeting in Stockholm, Sweden, 2005-07-20/22 with 30 participants. Objective was to review and influence the definition of the upcoming IEC/ISO 62264 multipart standard "Enterprise-Control System Integration" which is based on a series of standards from ISA (Instrumentation, Systems and Automation Society). One predominant issue of Enterprise-Control System Integration and interoperability is to identify and describe the boundary between the enterprise domain and the manufacturing operations and control domain. Issues: Many information/data flows between production control functions and other enterprise functions, which need to be managed. Further, various requirements to shift from total integrated systems to interoperability with more flexible, decentralised and distributed interoperable manufacturing systems.

CEN TC 310 WG 1 Modelling and Architectures meeting in Frankfurt, Germany, 2005-06-28/29, attended by people from France, Germany and UK focussed on revising CEN/ISO 19440 Constructs for Enterprise Modelling. Emphasis was on the introduction of the role concept, following a request from several people and which is being used in relevant efforts in standardisation and research (e,g. ODP, ATHENA project), Meta model of 19440 has been mapped to those of ODP and ATHENA POP* efforts and have been documented as annexes in the 19440 standard. The document has been submitted for ballot with an extended ballot deadline of February 2006. Next meeting planned in Paris 2006-03-14/16.

ISO TC 184 SC5/WG1 Modelling and Architectures meeting in Beijing, 2005-10-26/28 was attended by people from China, France and the USA. Discussions have been on Decision Centre, Process modelling and Interoperability, Terminology, ISO 15704 review, NWIP on Interoperable Process Model Standard changed to System integration using process modelling methods consistent with a reference methodology. The latter has resulted in an outline document. Next meeting planned at ITESM in Monterrey, Mexico, 2006-05-22/24.

ISO/IEC JTC1/SC7 meeting in Bari, Italy, 2005-10-24/28 was organised in plenary and parallel sessions of several working groups of SC7. Participation was on behalf of O. Noran, Australia, the SC5 Liaison and two presentations have been prepared on SC5 and related efforts on architecture frameworks and interoperability, which have been presented in a plenary and in a web publication, respectively. The relevance to SC7 work will be further explored in the forthcoming meeting in Bangkok, Thailand in 2006.

Publications

Papers published and presented

K. Kosanke, *"An Initiative for International Consensus on Enterprise Inter- and Intra-Organisational Integration"*, in A. Dolgui et al (Eds), Supply Chain Optimisation: product/process design, facility location and flow control, 2005, Springer, ISBN Hardback 0-387-23566-3, eBook 0-387-23581-7

K. Kosanke, *"Standards in Enterprise Inter- and Intra-Organisational Integration"* In P. Bernus, M. Fox „Knowledge Sharing in the Integrated Enterprise – Interoperablity Strategies for Enterprise Architects", Springer Verlag, ISBN 0-387-26608-9

Kurt Kosanke, Martin Zelm, *"Interoperability, the INTEROP Project and Standardisation"*, in F. Weber, K.S. Pawar, K-D Thoben, (Eds.), Enterprise Engineering in the Networked Economy, 542 pages, Proceedings of the 11th Intern. Conf. on Concurrent Enterprising, Munich 2005, Published by University of Nottingham, ISBN 0 85358 128 2 / 978 0 85358 221 2 http://www.nottingham.ac.uk, or http://www.ice-2005.org,/

Upcoming Events

- Second Conference on Interoperability for Enterprise Software and Applications - I-ESA 2006, on Bordeaux, France, 2006-03 20/24

- 12th IFAC Symposium on Information Control Problems in Manufacturing INCOM'2006, St. Etienne, France, 2006-05-17/19, http://www.emse.fr/incom06

- 12th Intern. Conference on Concurrent Engineering ICE 2006, Milan, Italy 2006-06-26/28, http://www.ice-conference.org/