



ACSI – Artifact-Centric Service Interoperation



D6.3.3

Publications in scientific journals and conferences – Third year

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Abstract

This document reports the full list of journal, and conference publications, and other related venues for publication of ACSI project achievements.

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Acronyms

Acronym	Explanation
ACSI	Artifact-Centric Service Interoperation

1. List of publications

Conforming to the dissemination action plan (D6.2), all academic and research project partners strive to report their work achievements in ACSI through related channels, including journals, conferences, books and workshops. This deliverables details all disseminated publications, summarizing the scientific efforts in ACSI during its entire period. A ‘live’ version of this report is also publicly posted on ACSI’s website at www.acsi-project.eu.

1.1. Scientific Journals

Publications in 2013

- Babak Bagheri Hariri, Diego Calvanese, Marco Montali, Giuseppe De Giacomo, Riccardo De Masellis, Paolo Felli. *Description logic Knowledge and Action Bases*. J. of Artificial Intelligence Research, 46: 651-686 (2013).
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- Diego Calvanese, Giuseppe De Giacomo, Domenico Lembo, Maurizio Lenzerini, Riccardo Rosati. *Data Complexity of Query Answering in Description Logics*. Artificial Intelligence, 195: 335-360 (2013).
- Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Moshe Y. Vardi. *On Simplification of Schema Mappings*. J. of Computer and System Sciences, 79(6): 816-834 (2013).
- Evgeny Kharlamov , Dmitriy Zheleznyakov, Diego Calvanese. *Capturing Model-Based Ontology Evolution at the Instance Level: The Case of DL-Lite*. J. of Computer and System Sciences, 79(6): 835-872 (2013).
- Federico Chesani, Paola Mello, Marco Montali and Paolo Torroni. *Representing and Monitoring Social Commitments using the Event Calculus*. Autonomous Agents and Multi-Agent Systems, 27(1): 85-130 (2013).
- Francesco Belardinelli, Alessio Lomuscio, Fabio Patrizi. *Verification of Agent-Based Artifact Systems*. Submitted to Journal of Artificial Intelligence Research (CoRR abs/1301.2678), 2013.
- Giuseppe De Giacomo, Fabio Patrizi, Sebastian Sardina. *Automatic Behavior Composition Synthesis*. Artificial Intelligence, 196: 106-142, (2013).
- Marco Montali, Fabrizio Maria Maggi, Federico Chesani, Paola Mello and Wil M. P. van der Aalst. *Monitoring Business Constraints with the Event Calculus*. ACM Transactions on Intelligent Systems and Technology (2013). To appear.

Publications in 2012

- Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Riccardo Rosati. *View-based Query Answering in Description Logics: Semantics and Complexity*, Journal of Computer and System Sciences 78 (2012) 26-46. 2012.

- Dirk Fahland and Wil M.P. van der Aalst. *Simplifying Discovered Process Models in a Controlled Manner*. Information Systems, 2012.
- Francesco Belardinelli, Alessio Lomuscio. *Interactions between Knowledge and Time in a First-Order Logic for Multi-Agent Systems: Completeness Results*. Journal of Artificial Intelligence Research. Vol 45, pp 1-45, 2012.
- Riccardo De Masellis, Giuseppe De Giacomo, Riccardo Rosati. *Verification of Conjunctive Artifact-Centric Services*. International Journal of Cooperative Information Systems (IJCIS), Vol. 21, No. 2 (2012) 111-139.

Publications in 2011

- Diego Calvanese, Giuseppe De Giacomo, Domenico Lembo, Maurizio Lenzerini, Antonella Poggi, Mariano Rodriguez-Muro, Riccardo Rosati, Marco Ruzzi, Domenico Fabio Savo. *The Mastro System for Ontology-based Data Access*, Semantic Web Journal (SWJ). 2(1):43-53 2011.
- Federico Chesani, Paola Mello, Marco Montali and Paolo Torroni. *Modeling and Verifying Business Processes and Choreographies Through the Abductive Proof Procedure SCIFF and its Extensions*. Intelligenza Artificiale 5(1), pages 101-105. IOS Press, Amsterdam, 2011. DOI: 10.3233/IA-2011-0011.
- Federico Chesani, Paola Mello, Marco Montali, and Paolo Torroni. *Monitoring Time-Aware Commitments Inside Agent-Based Simulation Environments*. Special issue of Cybernetics and Systems, Vol. 42(7), pages 546-566. © Taylor and Francis, 2011.
- Francesco Belardinelli, Andrew V. Jones, Alessio Lomuscio. *Model checking temporal-epistemic logic using alternating tree automata*. Fundamenta Informaticae. pp 19-37, Vol 112(1), 2011.
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- Alessio Lomuscio, J. Michaliszyn. *An Epistemic Halpern-Shoham Logic*. Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI13). Beijing, China, August 2013, to appear.
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- Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Moshe Y. Vardi. *Query Processing Under GLAV Mappings for Relational and Graph Databases*. In Proc. of the VLDB Endowment, 6(2): 61-72 (2012) - VLDB 2013.
- Diego Calvanese, Magdalena Ortiz, Mantas Simkus. *Evolving Graph Databases under Description Logic Constraints*. In Proc. of the 26th Int. Workshop on Description Logics (DL 2013), 2013.
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- Francesco Belardinelli, Alessio Lomuscio. *Decidability of Model Checking Non-Uniform Artifact-Centric Quantified Interpreted Systems*. Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI13). Beijing, China, August 2013, to appear.
- Giuseppe De Giacomo, Yves Lesperance, Fabio Patrizi. *Bounded Epistemic Situation Calculus Theories*. In Proc. of the 23rd Int. Joint Conf. on Artificial Intelligence (IJCAI 2013), 2013.
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- Dirk Fahland and Wil M.P. van der Aalst. *Repairing process models to reflect reality*. In Business Process Management 2012, volume 7481 of Lecture Notes in Computer Science, pages 229–245. Springer, 2012.
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- Francesco Belardinelli, Pavel Gonzalez, Alessio Lomuscio. *Automated Verification of Quantum Protocols using MCMAS*. Proceedings of 10th Workshop on Quantitative Aspects of Programming Languages (QAPL12). Tallin, Estonia. Electronic Proceedings in Theoretical Computer Science. Vol 85, pp 48-62, 2012.
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- Giuseppe De Giacomo, Yves Lesperance, Christian Muise. *On Supervising Agents in Situation-Determined ConGolog*. Proc. of the 11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'12), 2012.
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- Lior Limonad, David Boaz, Richard Hull, Roman Vaculin and Terry Heath, *A Generic Business Artifacts Based Authorization Framework for Cross-Enterprise Collaboration*, proceedings of the Cross Enterprise Collaboration SIG in the Service Research and Innovation Institute (SRII) Global Conference, San Jose, California, July 24 - July 27, 2012.
- Lior Limonad, Lav R. Varshney, Daniel Oppenheim, Elad Fein, Pnina Soffer, Yair Wand, Moran Gavish and Ateret Anaby-Tavor, *The WaaSBE model: Marrying WaaS and Business-Entities to Support Cross-Organization Collaboration*, proceedings of the Cross Enterprise Collaboration SIG in the Service Research and Innovation Institute (SRII) Global Conference, San Jose, California, July 24 - July 27, 2012.
- Lior Limonad, Pieter De Leenheer, Mark Linehan, Rick Hull and Roman Vaculin, *Ontology of Dynamic Entities*, proceedings of the 31st International Conference on Conceptual Modeling (ER'2012), Florence, Italy, October 15 - October 18, 2012.
- M. de Leoni, F.M. Maggi, W.M.P. van der Aalst, *Aligning Event Logs and Declarative Process Models for Conformance Checking*, In Proc. of the 9th International Conference on Business Process Management (BPM 2012), Tallinn, Estonia, September 3rd-6th, 2012.
- M. de Leoni, W.M.P. van der Aalst, B.F. van Dongen. *Data- and Resource-aware Conformance Checking of Business Processes*. In Proc. of the 15th

International Conference on Business Information Systems (BIS 2012), Vilnius, Lithuania, May 2012, Springer.

- Marcelo Arenas, Elena Botoeva, Diego Calvanese, Vladislav Ryzhikov, and Evgeny Sherkhonov. *Representability in DL-LiteR knowledge base exchange*. In Proc. of the 25th Int. Workshop on Description Logics (DL 2012), volume 846 of CEUR Electronic Workshop Proceedings, <http://ceur-ws.org/>, 2012.
- Marcelo Arenas, Elena Botoeva, Diego Calvanese, Vladislav Ryzhikov, and Evgeny Sherkhonov. *Exchanging description logic knowledge bases*. In Proc. of the 13th Int. Conf. on the Principles of Knowledge Representation and Reasoning (KR 2012), 2012.
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- P. Gonzalez, A. Griesmayer, A. Lomuscio. *Verifying GSM-based Business Artifacts*. To appear in the Proceedings of the 19th International Conference on Web Services (ICWS2012). Honolulu, USA. IEEE Press.
- Riccardo Rosati. *Prexto: Query Rewriting under Extensional Constraints in DL-Lite*. ESWC 2012, June 2012.

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- Alfonso E. Gerevini, Fabio Patrizi, Alessandro Saetti. *An Effective Approach to Realizing Planning Programs*. In Proc. of ICAPS 2011.
- Babak Bagheri Hariri, Diego Calvanese, Giuseppe De Giacomo, Riccardo De Masellis, Paolo Felli. *Foundations of Relational Artifacts Verification*, Proc of the 9th International Conference on Business Process Management, BPM 2011, 2011.
- Babak Bagheri Hariri, Diego Calvanese, Giuseppe De Giacomo, Riccardo De Masellis. *Verification of Conjunctive-Query Based Semantic Artifacts*, Proc. of the 24th Int. Workshop on Description Logics (DL'11), 2011.
- D. Fahland, M. de Leoni, B.F. van Dongen, W.M.P. van der Aalst. *Checking Behavioral Conformance of Artifacts*. BPM Center Report BPM-11-08, BPMcenter.org, 2011.
- Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, and Moshe Y. Vardi. *Simplifying Schema Mappings*, Proc. of the 14th Int. Conf. on Database Theory (ICDT 2011), pages 114-125, 2011.
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- Dirk Fahland, Massimiliano de Leoni, Boudewijn F. van Dongen, and Wil M.P. van der Aalst. *Behavioral Conformance of Artifact-Centric Process Models*. In Witold Abramowicz, editor, Proceedings of the 14th International Conference on Business Information Systems, BIS 2011, Poznan, Poland, June 15–17, 2011, volume 84 of Lecture Notes in Business Information Processing, pages 37–49. Springer-Verlag, 2011. (best paper).
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- Dirk Fahland, Massimiliano de Leoni, Boudewijn F. van Dongen, and Wil M.P. van der Aalst. *Many-to-many: Some observations on interactions in artifact choreographies*. In Daniel Eichhorn, Agnes Koschmider, and Huayu Zhang, editors, Proceedings of the 3rd Central-European Workshop on Services and their Composition, ZEUS 2011, Karlsruhe, Germany, February 21–22, 2011, volume 705 of CEUR Workshop Proceedings, pages 9–15. CEUR-WS.org, 2011.
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- Evgeny Kharlamov, and Dmitriy Zheleznyakov. *Understanding Inexpressibility of Model-Based ABox Evolution in DL-Lite*. In Proc. of the 5th Alberto Mendelzon Int. Workshop on Foundations of Data Management (AMW 2011), volume 749 of CEUR Electronic Workshop Proceedings, <http://ceur-ws.org/>, 2011.
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- Fahland, D., Leoni, M. de, Dongen, B.F. van & Aalst, W.M.P. van der. *Conformance checking of interacting processes with overlapping instances*. Proceedings of the 9th International Conference, BPM 2011, Clermont-Ferrand, France, August 28-September 2, 2011.
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