

Contents

1	Introduction	1
	M. Brian Blake, Liliana Cabral, Birgitta König-Ries, Ulrich Küster, and David Martin	
Part I Results from the S3 Contest: OWL-S and SAWSDL Matchmaker Evaluation Tracks		
2	Overview of the S3 Contest: Performance Evaluation of Semantic Service Matchmakers	17
	Matthias Klusch	
3	SeMa²: A Hybrid Semantic Service Matching Approach	35
	N. Masuch, B. Hirsch, M. Burkhardt, A. Heßler, and S. Albayrak	
4	OPOSSUM: Indexing Techniques for an Order-of-Magnitude Improvement of Service Matchmaking Times	49
	Eran Toch	
5	Adaptive Hybrid Selection of Semantic Services: The iSeM Matchmaker	63
	Patrick Kapahnke and Matthias Klusch	
6	SPARQLent: A SPARQL Based Intelligent Agent Performing Service Matchmaking	83
	Marco Luca Sbodio	
7	Semantic Annotations and Web Service Retrieval: The URBE Approach	107
	Pierluigi Plebani and Barbara Pernici	

8	SAWSDL Services Matchmaking Using SAWSDL-iMatcher	123
	Dengping Wei and Abraham Bernstein	
9	Self-Adaptive Semantic Matchmaking Using COV4SWS.KOM and LOG4SWS.KOM	141
	Ulrich Lampe and Stefan Schulte	

Part II Results from the S3 Contest: Cross Evaluation Track

10	Overview of the Jena Geography Dataset Cross Evaluation.....	161
	Ulrich Küster and Birgitta König-Ries	
11	Evaluation of Structured Collaborative Tagging for Web Service Matchmaking	173
	Maciej Gawinecki, Giacomo Cabri, Marcin Paprzycki, and Maria Ganzha	
12	Ontology Based Discovery of Semantic Web Services with IRS-III	191
	Liliana Cabral and John Domingue	

Part III Results from the Semantic Web Service Challenge

13	Overview of the Semantic Web Service Challenge	205
	Liliana Cabral	
14	Loosely Coupled Information Models for Business Process Integration: Incorporating Rule-Based Semantic Bridges into BPEL	217
	Nils Barnickel and Matthias Fluegge	
15	The XMDD Approach to the Semantic Web Services Challenge	233
	Tiziana Margaria, Christian Kubczak, and Bernhard Steffen	
16	Service Offer Discovery in the SWS Challenge Shipment Discovery Scenario	249
	Maciej Zaremba, Tomas Vitvar, Raluca Zaharia, and Sami Bhiri	
17	A Solution to the Logistics Management Scenario with the Glue2 Web Service Discovery Engine	263
	Alessio Carenini, Dario Cerizza, Marco Comerio, Emanuele Della Valle, Flavio De Paoli, Matteo Palmonari, Luca Panziera, and Andrea Turati	
18	The COSMO Solution to the SWS Challenge Mediation Problem Scenarios: An Evaluation	279
	Camlon H. Asuncion, Marten van Sinderen, and Dick Quartel	

Part IV Results from the Web Services Challenge

19 Overview of the Web Services Challenge (WSC): Discovery and Composition of Semantic Web Services	297
Ajay Bansal, Srividya Bansal, M. Brian Blake, Steffen Bleul, and Thomas Weise	
20 Effective QoS Aware Service Composition Based on Forward Chaining with Service Space Restriction	313
Peter Bartalos and Mária Bielíková	
21 Semantics-Based Web Service Composition Engine	329
Srividya K. Bansal, Ajay Bansal, and Gopal Gupta	
22 Efficient Composition of Semantic Web Services with End-to-End QoS Optimization	345
Bin Xu and Sen Luo	
Index	357