

ASG - Integrated Project -
Competence, Knowledge and Expertise of major European research institutions with significant contributions from the software, telecommunications, and telematics industry:

	University of Potsdam, Germany
	University of Leipzig, Germany
	Fraunhofer IESE, Germany
	University of Innsbruck, Austria
	HPI at University Potsdam, Germany
	DaimlerChrysler Research, Germany
	National University of Ireland Galway, Ireland
	Swinburne University, Australia
	Thuringer Anzeugszentrum fuer Software- und Informations- und Kommunikations-technologie GmbH, Germany
	NIWA, Austria
	Telenor Communications II AS, Norway
	Siemens AG, Germany
	Rodan Systems, Poland
	University Jyväskylä, Finland
	Telekomunikacja Polska, Poland
	Marketplanet, Poland
	University of Karlsruhe, Germany
	ASTEC Sp. z o.o., Poland
	The Poznan University of Economics, Poland
	FH Furtwangen, Germany
	Polska Telefonia Cyfrowa, Poland

Location:

Hasso-Plattner-Institut
 für Softwaresystemtechnik GmbH
 Prof.-Dr. Helmert-Str. 2-3
 14482 Potsdam

Registration / Audience:

Participation only after previous Registration and Confirmation by the local organizer! Use exclusively the Registration Form and the contact data on the internal ASG-Web-Site: **www.asg-platform.org**
 (Audience: for ASG-Partner and Invited Speaker only)

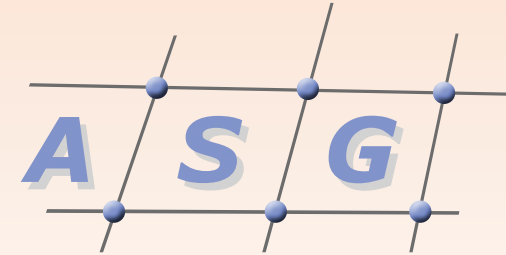
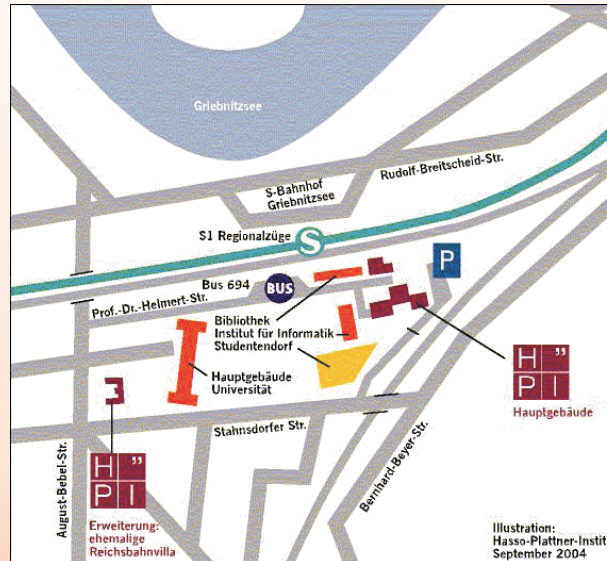
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Map of Location:

HPI - Hasso Plattner Institut



Integrated Project
 Adaptive Services Grid (ASG)

**Web Service
 Modeling Ontology**

*Scientific Session -
 Multi-component Workshop
 lead by
 Work Component C-1*



Preface

The goal of the ASG Dissemination Instrument *Scientific Session* is to exchange knowledge of competent partner institutions of ASG-Consortium to set up an effective project ongoing based on own, well-known experiences or solutions.

The *Scientific Session Web Service Modeling Ontology* (WSMO) focuses on the Semantic Web Services initiative mainly carried by DERI and several European Union projects in order to provide an ontology that allows describing the various aspects of Semantic Web Services, providing a solution for the integration problem.

Around WSMO, several tools for handling Semantic Web Services are developed, including a reasoner for discovery of Web Services, an editor for WSMO component descriptions, and repository for WSMO components. WSMO embodies a world-wide standard initiative, developed together with industrial partners and other research groups, and aligned with many different research projects.

The pillars of WSMO are supplied by the Web Service Modeling Framework (WSMF), which serves as a conceptual basis. Moreover, WSMO is aligned with several other initiatives that address the problems arising in Semantic Web Services, aiming at integrating emerging technologies and overcoming the drawbacks of existing approaches.

These tutorial sessions will mainly provide practical knowledge about the Web Service Modeling Language (WSML) under the perspective of using semantics in the ASG-platform.

Agenda --- Scientific Session Web Service Modeling Ontology

Monday, 13/12/2004

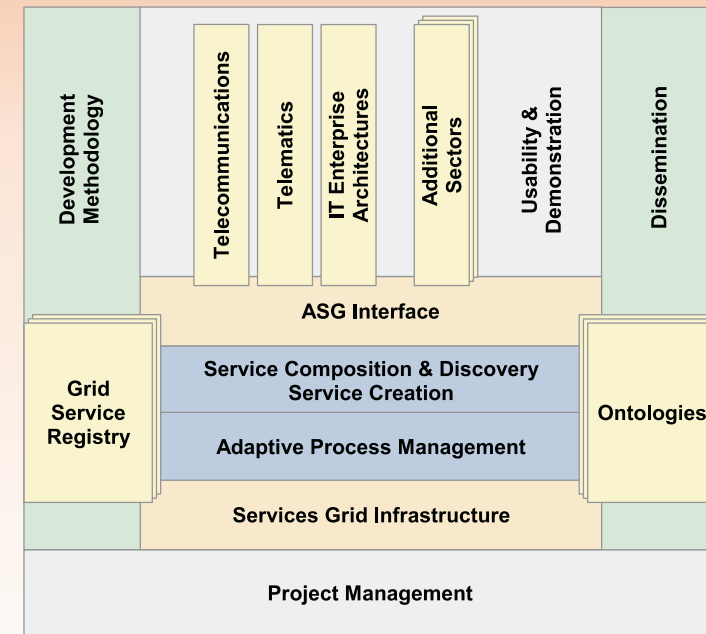
WSMO and WSML

- 09:30 Introductions and Welcome
Mathew Moran
- Conceptual Model for WSML
Titi Roman, Uwe Keller (90 min.)
- Creating WSML and Reasoning Support for WSML
Uwe Keller, Adrian Mocan (90 min.)
- Hands-on Session using Flora/XSB
Adrian Mocan, Uwe Keller (90 min.)
- WSML in the Use Case Scenario
Kashif Iqbal, Matthew Moran (90 min.)
- 17:00 Open issues and Closing

Tuesday, 14/12/2004

Evaluation of the WSMO Approach

- 09:30 Opening --- Introduction
- Alternatives Discussion
Other possible semantic languages, reasoners or deductive databases
- Decision-making
 - › on a reasoner or deductive database and its integration
 - › on the C-2 internal architecture
- 17:00 Final Remarks --- Closing



ASG - Structure

ASG Interface

Services Specification with semantic interoperability considering pre/post-conditions

Service Discovery & Composition

Grid-oriented mechanism to register, discover, and compose services using semantic specifications of desired functionality

Service Creation

using a re-worked MOF- approach to transform semantic specifications to domain-specific language constructs

Adaptive Process Management

Quality of Service approach to guarantee computational performances as well as discovery, creation, and composition of services in special use cases and with respect to specific business models

Services Grid Infrastructure

generic, web-based Grid infrastructure with business-oriented Quality of Service functionalities, semantic interoperability and parameterisation

ASG Development Methodology

concept for a GRID-service oriented software development process