

Conference Program



Norwegian Semantic Days 2007

Semantiske dager 2007



Semantic technology enhances value creation in knowledge based organizations

- Semantic web and netcentric collaboration
- Integrated operations and interoperability

Clarion Hotel Stavanger
Stavanger, Norway
April 24 – 25

Free tutorial April 23 (see last page)

Norwegian and international experts present solutions, technologies and market forecasts

Learn how semantic technology is applied in Norway within

- The oil, gas and energy sector
- The construction industry
- The public sector

New opportunities for a Norwegian knowledge industry

- Intelligent IT systems
- Semantically enabled services
- New business models

A rapidly growing global market: The semantic web and "Web 3.0" takes off in 2007



*Norwegian Semantic Days 2007 is hosted by Abelia, OLF and W3C together with NorStella,
The Norwegian Computer Society, POSC Caesar and Standards Norway*

Welcome to Semantic Days 2007

Tuesday April 24 – Wednesday April 25



Program day 1 - Tuesday April 24

08.30-09.10	Registrering og kaffe Opening session and keynotes – Status and outlook. <i>Session leader: Roar Fjellheim, Computas</i>
09.10-09.30	Welcome and introduction - Semantic opportunities for Norwegian knowledge industry <i>Paul Chaffey, Managing director, Abelia</i>
09.30-10.00	State of the Semantic Web <i>Ivan Herman, Semantic Web Activity Lead, W3C</i>
10.00-10.30	Semantic technologies and solutions for the enterprise <i>Richard Benjamins, Director of R&D and Board member, iSOCO, Spain</i>
10.30-11.00	PAUSE
11.00-11.30	An oil and gas ontology is required for integrated operations <i>Trond Lilleng, Chief professional Integrated Operations, Hydro</i>
11.30-12.00	An integrated manufacturing operations system based on open standards <i>Ronald Montgomery, Executive principal engineer, IBM, US</i>
12.00-13.00	LUNSJ



	PARALLEL SESION 1 Interoperability and standards <i>Session leader: Arild Haraldsen, NorStella</i>	PARALLEL SESION 2 Semantic solutions 1 <i>Session leader: Tore Christiansen, DNV</i>
13.00-13.30	Semantic standards – different paths to the same goal (in Norwegian) <i>Arne-Jørgen Berre, Sjefsforsker, SINTEF</i>	Knowledge technology used in residential building design <i>Per Christian Engdal, System architect, Selvaag BlueThink</i>
13.30-14.00	Standardized terminology as a required hub of the semantic web (in Norwegian) <i>Håvard Hjulstad, Project manager, Standard Norway</i>	Intelligent data sets using the oil and gas ontology <i>Magne Valen-Sendstad, Senior engineer, DNV</i>
14.00-14.30	SERES – The semantics registry for electronic collaboration (in Norwegian) <i>Hallstein Husand, Department manager, Brønnøysundregistret</i>	Importance of semantics in future enterprise SOA <i>Elmar Dorner, Deputy director CEC Karlsruhe, SAP Research, Germany</i>
14.30-15.00	PAUSE	
15.00-15.30	The public sector interoperability reference model – a status report (in Norwegian) <i>Olaf Østensen, Chairman, The Standardization Board</i>	An ontology for reasoning about past experiences during drilling <i>Agnar Aamodt, Professor, and Pål Skalle, Professor, both NTNU</i>
15.30-16.00	The buildingSMART standard – a paradigm shift for the Norwegian construction industry (in Norwegian) <i>Jøns Sjøgren, Project manager, Boligprodusentenes forening</i>	Shape ontologies for product design, shape acquisition and virtual humans <i>Tor Dokken, Chief scientist, SINTEF</i>
16.00-16.30	Cross industry interoperability using semantic technologies - Automotive industry examples <i>Petra Frenzel, Secretary general, Enterprise Interoperability Center (EIC), Germany</i>	Managing multi-media archives with semantic technology <i>Robert Engels, Business developer, CognIT</i>
	Closing session. <i>Session leader: Thore Langeland, OLF</i>	
16.40-16.50	Summing up <i>Thore Langeland, Manager Integrated Operations, OLF</i>	
16.50-17.30	The art of creating useful ontologies <i>Barry Smith, Professor, National Center for Ontological Research, University at Buffalo, US</i>	
19.00-22.30	CONFERENCE DINNER <i>Host: Thore Langeland, OLF</i>	





Program day 2 - Wednesday April 25

08.00-08.30 **Opening session and keynotes – Challenges and opportunities.** Session leader: Ivan Herman, W3C

Business use cases for Semantic Web technology for the energy/oil industry
Frank Chum, Enterprise architect, Chevron, US

08.30-09.00 Ontology languages and tools - Recent developments and research challenges
Ian Horrocks, Professor, University of Manchester, UK

09.00-09.30 Data integration using semantic web technology
Susie Stephens, Chairperson, W3C Semantic Web Education and Outreach (SWEO) Interest Group

09.30-10.00 **PAUSE**

PARALLEL SESION 1

Technology and R&D 1

Session leader: Arne-Jørgen Berre, SINTEF and The Norwegian Computer Society

PARALLEL SESION 2

Semantic solutions 2

Session leader: Nils Sandmark, POSC Caesar Association

10.00-10.30 The challenge of reasoning for OLF's IO G2
Arild Waaler, Associate professor, University of Oslo

How to control the company's knowledge using metadata
Pål Navestad, Onshore operation specialist, ConocoPhillips Norge

10.30-11.00 From Google search to semantic exploration
Jon Atle Gulla, Professor, NTNU

Semantics for smarter experience transfer in integrated operations
Roar Fjellheim, Director, and David Norheim, Senior engineer, both Computas

11.00-11.30 Context and semantics - Next generation search
Aleksander Øhrn, Chief scientist, FAST

How can semantics increase the value of your knowledge network?
Anders Føyen, Strategy advisor, Microsoft

11.30-12.30 **LUNSJ**

PARALLEL SESION 1

Technology and R&D 2

Session leader: Gro-Anett Olsen, Abelia

PARALLEL SESION 2

Semantic solutions 3

Session leader: Jan G. Eriksson, Standards Norway

12.30-13.00 Semantically supported role based admission control
Josef Noll, Prof. stip., University Studies at Kjeller

Shell's downstream data model based on ISO 15926
Matthew West, Reference data architecture and standards manager, Shell, UK

13.00-13.30 How to secure web services using semantic web technologies?
Chunming Rong, Professor, University of Stavanger

Ontologies for the Center for Integrated Operations – tentative plans
Svein Nilsen, Section leader, IFE

13.30-13.45 **PAUSE**

Closing session – Opportunities for the knowledge industry. Session leader: Paul Chaffey, Abelia

13.45-14.15 How and where can Statoil apply an oil and gas ontology? (in Norwegian)
Knut Sebastian Tungland, Senior discipline advisor, Statoil

14.15-14.35 Norwegian knowledge industry and international ICT giants – exploiting synergies (in Norwegian)
Morten Mayer, Manager, Business Consulting Services, IBM

14.35-14.55 The University of Oslo's strategy in eOperations and semantic technology (in Norwegian)
Morten Dæhlen, Professor, Head of Department for Informatics, University of Oslo

15.00-15.45 Panel debate:
How can we facilitate and encourage development of a Norwegian knowledge industry based on semantic technology and open standards? (in Norwegian)
Leader: Paul Chaffey, Managing director, Abelia





Semantic Web and electronic collaboration

The semantic web enables more intelligent use of data for more effective electronic interoperability and collaboration
- An exciting opportunity to create world-class knowledge industry based on synergies between established Norwegian industry, the public sector and ICT companies

- The Norwegian Oil Industry Association (OLF) predicts increased earnings of 50 billion dollars from implementation of integrated operations on the Norwegian continental shelf
- Estimates from the construction industry point to a possible 30 percent cost reduction as benefit of improved interoperability and electronic cooperation
- Electronic cooperation within and between public sector agencies, and between the public sector and industry are preconditions for improved service development

Real gains from interoperability and electronic collaboration cannot be realized until all actors have a common understanding of the meaning of the terms used in their communication. In this connection the semantic web plays an increasingly important part in all forms of electronic exchange. New technology and new standards are used to capture and describe the meaning of information, such that computers and applications can use the information more intelligently.

Norway has an opportunity to increase its global competitiveness by initiating and enabling cooperation between the public sector, general industry and ICT companies in development of semantic technology for integrated operations.

Who should attend?

- Leaders and decision makers in the oil & gas and other industries that depend on information exchange between suppliers and customers
- Information architects and developers of technologies that are meant to enhance interoperability and collaboration
- Researchers and politicians who are concerned about development of knowledge based industries in Norway

What you will learn in this conference

- An introduction to the principles and practices of the semantic web and semantic collaboration technology
- Strategies and examples of semantic web technologies and applications from leading Norwegian and international companies and institutions
- Example applications from selected industries:
 - Oil&gas industry: ISO 15926 for integrated operations
 - Construction industry: IFC for electronic collaboration
 - Public sector: SERES for semantic interoperability

Conference Program Committee

- Paul Chaffey, Abelia (chairman)
- Roar Fjellheim, Computas (deputy chairman)
- Gro-Anett Olsen, Abelia
- Arne-Jørgen Berre, The Norwegian Computer Society and SINTEF
- Tore Christiansen, DNV (Det Norske Veritas)
- Arild Haraldsen, NorStella
- Thore Langeland, OLF
- Nils Sandsmark, POSC Caesar Association
- Jan G. Eriksson, Standards Norway
- Ivan Herman, W3C (World Wide Web Consortium)

Free* tutorial Monday April 23

*** for registered conference participants**

15.00 - 17.00 Introduction to the Semantic Web *Ivan Herman, Semantic Web Activity Lead, W3C*

17.00 - 17.30 Pause

17.30 - 19.30 Ontology engineering - Tools and methodologies *Ian Horrocks, Professor, University of Manchester, UK*

To register for the conference go to

www.abelia.no/semanticDays

Hotel accommodation can be booked together with your registration.

Questions about the Norwegian Semantic Days 2007 can be addressed to the Program Committee via Gro-Anett Olsen (gro-anett.olsen@abelia.no) or Roar Fjellheim (raf@computas.com)

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