

SWRL $\leftrightarrow$ SQWR

Language

action: change of status
property

Query

$\hookrightarrow$ List of something
values

Show, export, ...

Web:

 user registration

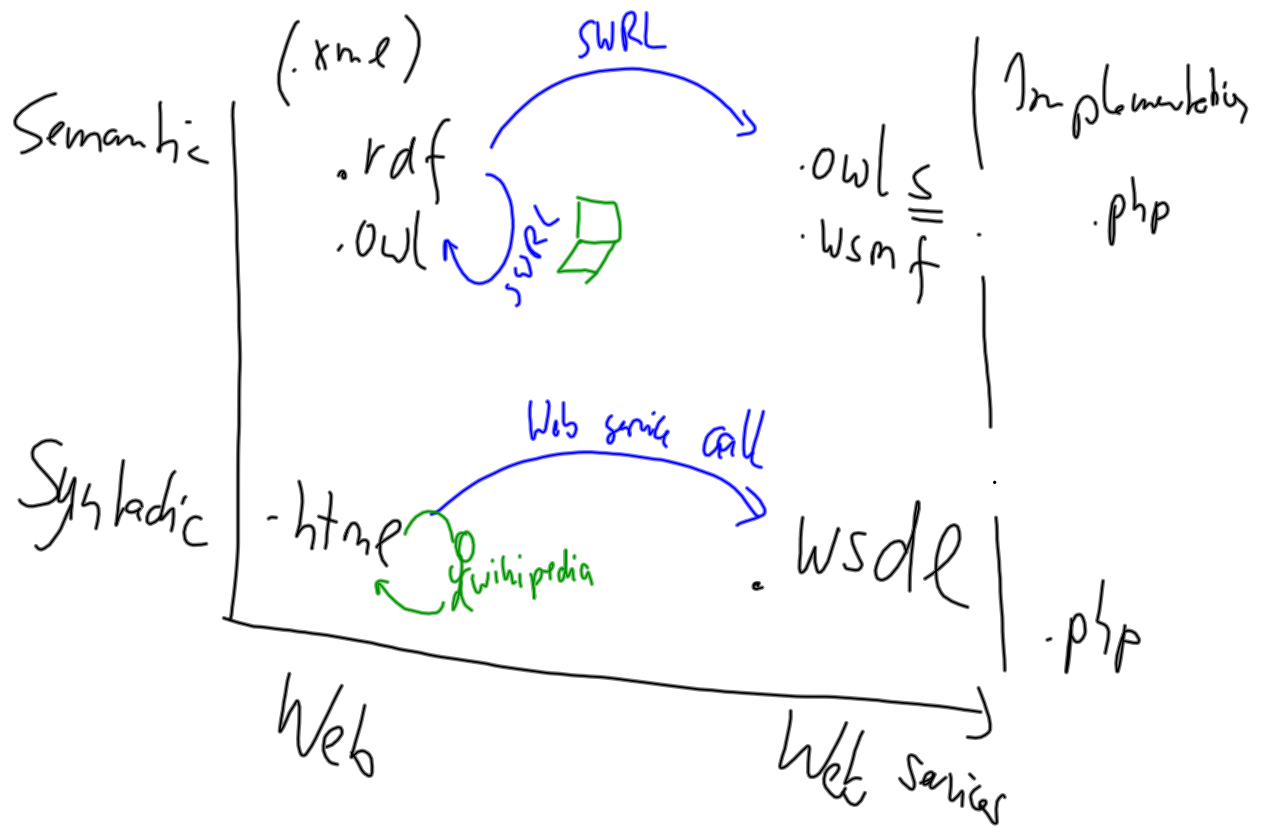
manipulate database..

execute functionality (Web service)

booking of flights

 Search
User List

List of flights



Applying SWRL to your ont... Prepare for Reasoning with... Video conference - CWI... Web service - Wikipedia, t...

en.wikipedia.org/wiki/Web_service

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electronic devices over the **world wide web**. A **web service** is a software function provided at a network address over the web or the cloud, it is a service that is "always on" as in the concept of **utility computing**.

The **W3C** defines a "Web service" as "a software system designed to support **interoperable** machine-to-machine interaction over a **network**". It has an interface described in a machine-processable format (specifically Web Services Description Language, known by the acronym **WSDL**). Other systems interact with the Web service in a manner prescribed by its description using **SOAP** messages, typically conveyed using **HTTP** with an **XML serialization** in conjunction with other Web-related standards."^[1]

The W3C also states, "We can identify two major classes of Web services, **REST**-compliant Web services, in which the primary purpose of the service is to manipulate XML representations of Web resources using a uniform set of "**stateless**" operations; and arbitrary Web services, in which the service may expose an arbitrary set of operations."^[2]

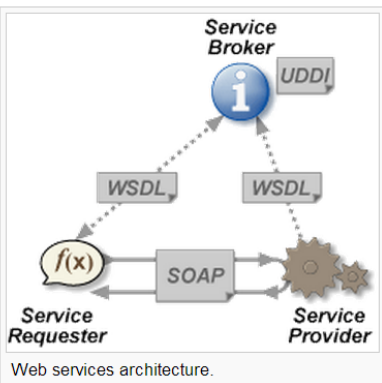
Contents ^[hide]

- 1 Web API
- 2 XML Web services
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Web API ^[edit]

Web API is a development in Web services where emphasis has been moving to simpler **representational**

materials about **Web service**



Web services architecture.

Service-Oriented Architecture
A completely service-oriented model

Applying SWRL to your ontologies x Prepare for Reasoning with OWL x Video conference - CWI x Semantic Web Services - \ x

en.wikipedia.org/wiki/Semantic_Web_Services

Related technologies [\[edit\]](#)

Semantic Web languages:

- [Ontology Inference Layer \(OIL\)](#)
- [DARPA Agent Markup Language \(DAML\)](#)
- [DAML+OIL](#)
- [Web Ontology Language \(OWL\)](#)
- [Resource Description Framework \(RDF\)](#)
- [Web Services Modeling Language \(WSML\)](#)
- [Web Services Semantics \(WSDL-S\)](#)
- [SAWSDL](#)^[3]

Semantic Web Service frameworks:

- [WSMF](#)^[4]
- [OWL-S](#)
- [QuASAR](#)^[5]
- [WSMO](#)
- [IRS-III](#)^[6]
- [METEOR-S](#)^[7]
- [HALEY](#)^[8]
- [BioMOBY \(Bioinformatics\)](#)
- [SSWAP](#)^[9]

Related projects [\[edit\]](#)

European projects [\[edit\]](#)

- Ongoing projects funded in the [Seventh Framework Programme](#)
 - [SHAPE](#)^[10]
 - [SOA4All](#)^[11]
 - [Service Web 3.0](#)^[12]
 - [Service-Finder](#)^[13]

What is OData?

Framework,

- └ protocol execution of services
- └ presentation of knowledge (atom)
- └ xml representation of data (xml)

Applying SWRL to your on x Prepare for Reasoning with x Video conference - CWI x Semantic Web Services - x Webnodes Semantic CMS x

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Webnodes CMS is an enterprise quality ASP.NET CMS with a unique semantic content technology . Users work in a polished and user-friendly interface.

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- Action Jose

CMS E-commerce Mobile Media handling Social media



Use your ASP.NET skills
Developers can take advantage of existing ASP.Net skills and tools when working with Webnodes CMS. The API is compact and easy to learn, and you work in Visual Studio.
[Find out more](#)



Why choose Webnodes?
Webnodes delivers the ultimate in flexibility and adaptability with its semantic content engine, while at the same time offering a user-friendly interface.
[Find out more](#)



Why Schema.org? *invite*
Get more traffic from structured data markup (Semantic tags) proposed by Schema.org - the most important Search Engine Optimization (SEO) tool.
[Find out more](#)



Microsoft uses Webnodes in demo
Microsoft's Mix11 conference was held in Las Vegas from the 12th to the 14th of April 2011. Webnodes was used to demonstrate OData uses in content management systems.
[Find out more](#)



Developer community
The Webnodes Developer Community is a site for developers with extensive documentation, code snippets, forums and tutorials.
[Find out more](#)



Data endpoints
Webnodes CMS has extensive support for data endpoints, for flexible integrations, multi-channel publishing and open data scenarios.
[Find out more](#)

Latest blog posts Buy Webnodes CMS Latest press releases

Applying SWRL to your ... Prepare for Reasoning ... Video conference - CWI ... Semantic Web Services ... Webnodes Semantic CM ... Josef's calendar

caljnnoll.net

Josef Noll's calendar

Today March 2013

Print Week Month Agenda

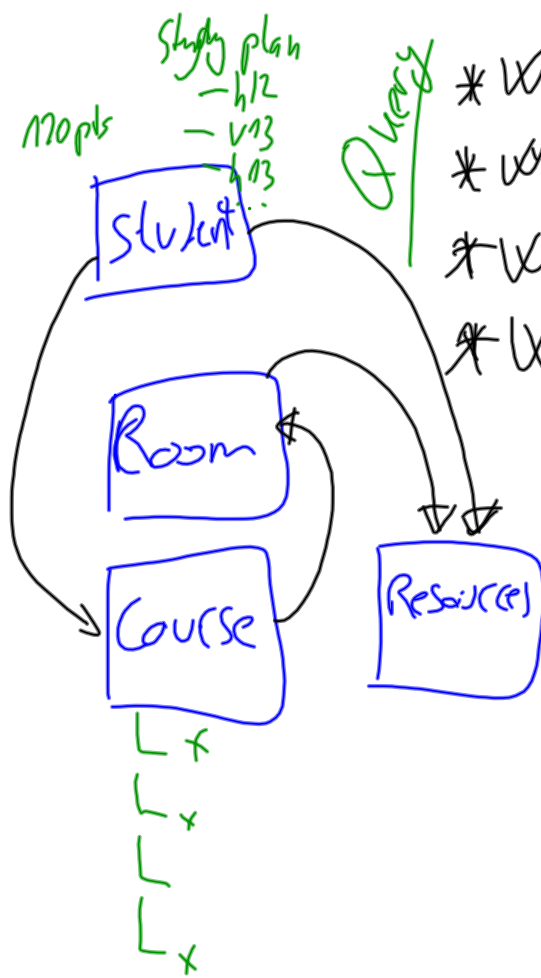
Mon	Tue	Wed	Thu	Fri	Sat	Sun
25 7:30am Gå til sk 9am Gerard@UN 9am Din rolle i E +3 more	26 8am Gerard@UN 8pm Hsil Powet	27 8:45am Arvid/Jos 9:30am Skattefu 2pm nSHIELD ta +2 more	28 7:30am Gå til sk 9am UNIK4250 12pm Skype Ant +2 more	Mar 1 9am UNIK4710 12pm Conferenc 12pm Nextelco p +2 more	2	3
4 8am NæringsPh 6pm Driftsstyret	5 6:10pm LH2455	6 nSHIELD meeting 7:30am Gå til sk 7pm Volley KFUI	7 9:45pm LH864 FI	8 9am UNIK4710 1:15pm 14:15 UL 1:30pm NShield	9	10
11 work@hom 10am Serhat/Ma 1:30pm ULM 4:40pm Ahus kor	12 9am U3 - cc:Jos	13 10:30am Devotek 2pm Syncrotech 7pm Volley KFUI	14 9am UNIK4250	15 9am UNIK4710 1:30pm NShield	16	17
18 9am NOFAS 10am Serhat/Ma	19 9am IoT conf. FI	20 7pm Volley KFUI	21 9am UNIK4250	22 7:30am Pick up C 9am Josef ferie 1:30pm NShield	23	24
25 10am Serhat/Ma 1:30pm ULM	26	27 7pm Volley KFUI	28 9am UNIK4250	29 9am UNIK4710 1:30pm NShield	30	31

Events shown in time zone: Oslo

Google Calendar

Josef's home page Publications Presentations

Handwritten notes: Red 'X' over March 22-23, green 'X' over March 29-30, and 'holidays' written in red.

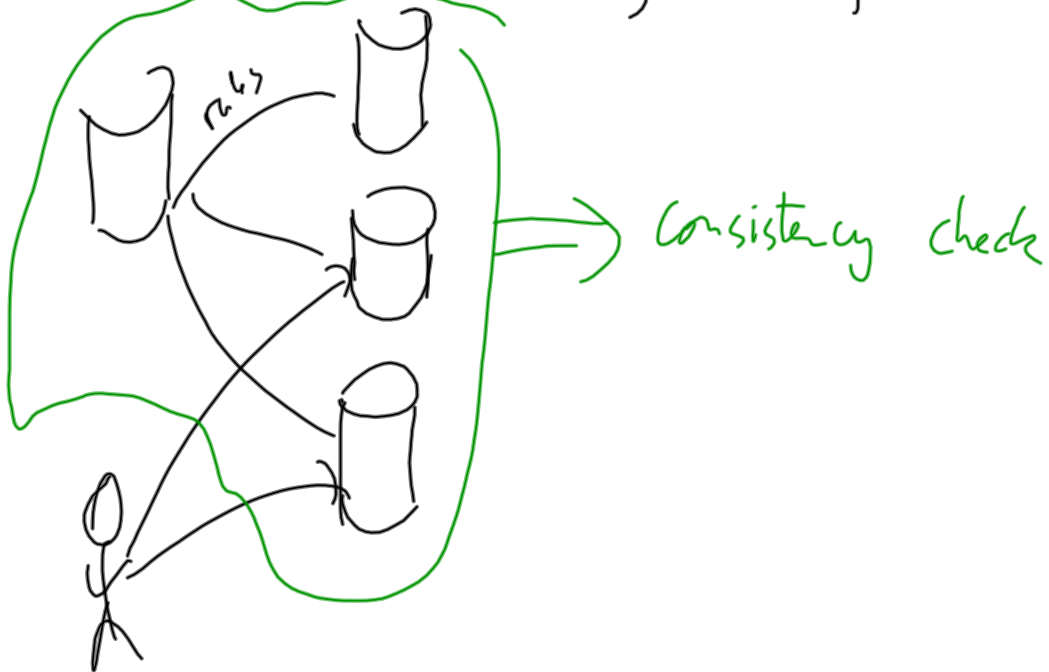


Query

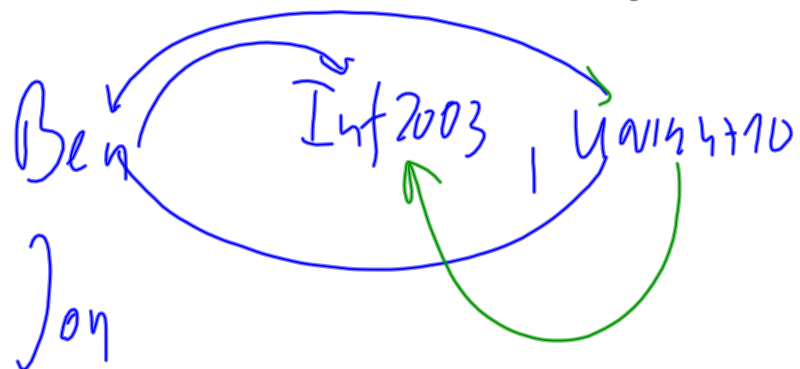
- * Which course I registered *
- * Which room the course are taught
- * Who is registered in UNIK 4710
- * Which resources are able to use for a specific user/student

exam overview
* (create a course registry for all course in h12)
create study plan

Cross-check of Information



Person $\wedge$ Course $\rightarrow$ Resources
 $\wedge$ has Course $\wedge$ has Resources $\rightarrow$ has Access



Suggestion: Run Query $\wedge$ `sqwrl Select(?C, ?S)`

use $\boxed{S \&}$

if that wins, clone the rule & run Jess
check updated .owl

be aware of "symmetrical properties"

Option 1:

Rule 1



Rule 2



event based trigger

Option 2 = complex rules

