SWRL <\rightarrow> SQURL

- Language

- Action: change of status property

- Query

  - List of something values

  - Show, Export, ...

  - User list

- Web:

  - User registration
  - Manipulate database
  - Execute functionality (Web service)

- Booking of flights

- List of flights
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]
Related technologies

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

Semantic Web Service frameworks:
- WSME
- OWL-S
- Quasar
- WSMO
- IRS-II
- METEOR-S
- HALEY
- BioMOBY (Bioinformatics)
- SSWAP

Related projects

European projects
- Ongoing projects funded in the Seventh Framework Programme
  - SHAPE
  - SOA4ALL
  - Service Web 3.0
  - Service-Finder
What is OData?

Framework,

- protocol execution of services
- presentation of knowledge (atom)
- representation of data
### Josef Noll's Calendar

#### March 2013

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
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<td>Mar 1</td>
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<tr>
<td>7:30am</td>
<td>Cahill ski</td>
<td>8:45am</td>
<td>Arvid/Jo</td>
<td>7:30am</td>
<td>Cahill ski</td>
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<td>9:30am</td>
<td>Skattefors</td>
<td>9am</td>
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<td>Gerard@UP</td>
<td>10:30am</td>
<td>Skype Ant</td>
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</tbody>
</table>

**Events shown in time zone: Oslo**

- Holidays

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Source: [Josef Noll's Calendar](http://cal.noll.net)
* Which courses I registered
* Which room the course are taught
* Who is registered in UMK 4710
* Which resources are able to use for a specific user/student

DFA overview

- Create a course registry
- Create study plan
Cross-check of Information → Consistency check
Person ⇔ Course ⇔ Resources

has Course ⇔ has Resources → has Access

Ben

Inf2003 → Nav14770

Jon
Suggestion: Run Query `@ sq wrl Select(?c, ?s)` use `?S&` if that means! 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