

The “Semantic Bundle”

Yaron Koren
National Library of Israel
August 11, 2011

Semantic MediaWiki

An extension to MediaWiki that allows for storing and querying text in the wiki as data, turning the wiki into a “collaborative database”.

“Semantic Bundle”

A collection of Semantic MediaWiki-based extensions that can be downloaded together – I help to maintain it.

These also represent, in my opinion, the ideal set of extensions to be used jointly with SMW (although there are many other helpful MediaWiki extensions).

Some of the Semantic Bundle extensions

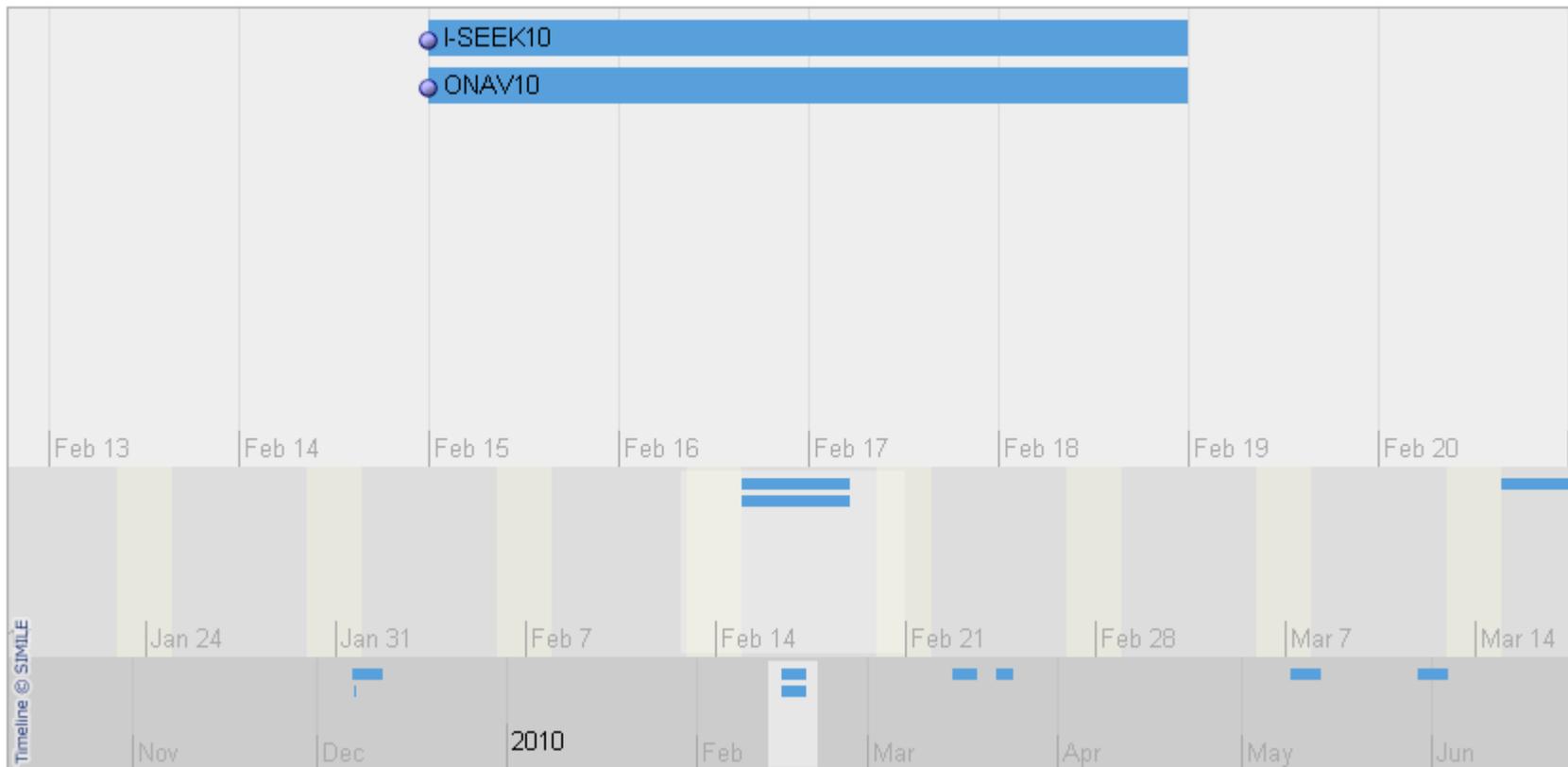
- Semantic MediaWiki
- Semantic Result Formats
- Semantic Maps
- Semantic Compound Queries
- Semantic Forms
- Semantic Drilldown
- Semantic Internal Objects
- External Data
- Data Transfer
- Approved Revs
- ParserFunctions
- Widgets
- Header Tabs
- Replace Text
- Admin Links

Semantic Result Formats

Additional display formats for Semantic
MediaWiki: calendars, graphs, etc.

Semantic Result Formats: timeline format

The following timeline shows the next 50 events with articles in this wiki.



Semantic Result Formats: calendar format

KIT
Karlsruhe Institute of Technology

Institut für Angewandte Informatik und Formale Beschreibungsverfahren (AIFB)

Suchen

- Home
- Lehre und Prüfung
- Personen
- Forschungsgruppen
- Veröffentlichungen
- Veranstaltungen**
- Projekte
- Kooperationen
- Stellenmarkt
- Kontakt

Veranstaltungen

Dezember 2009

Dezember 2009

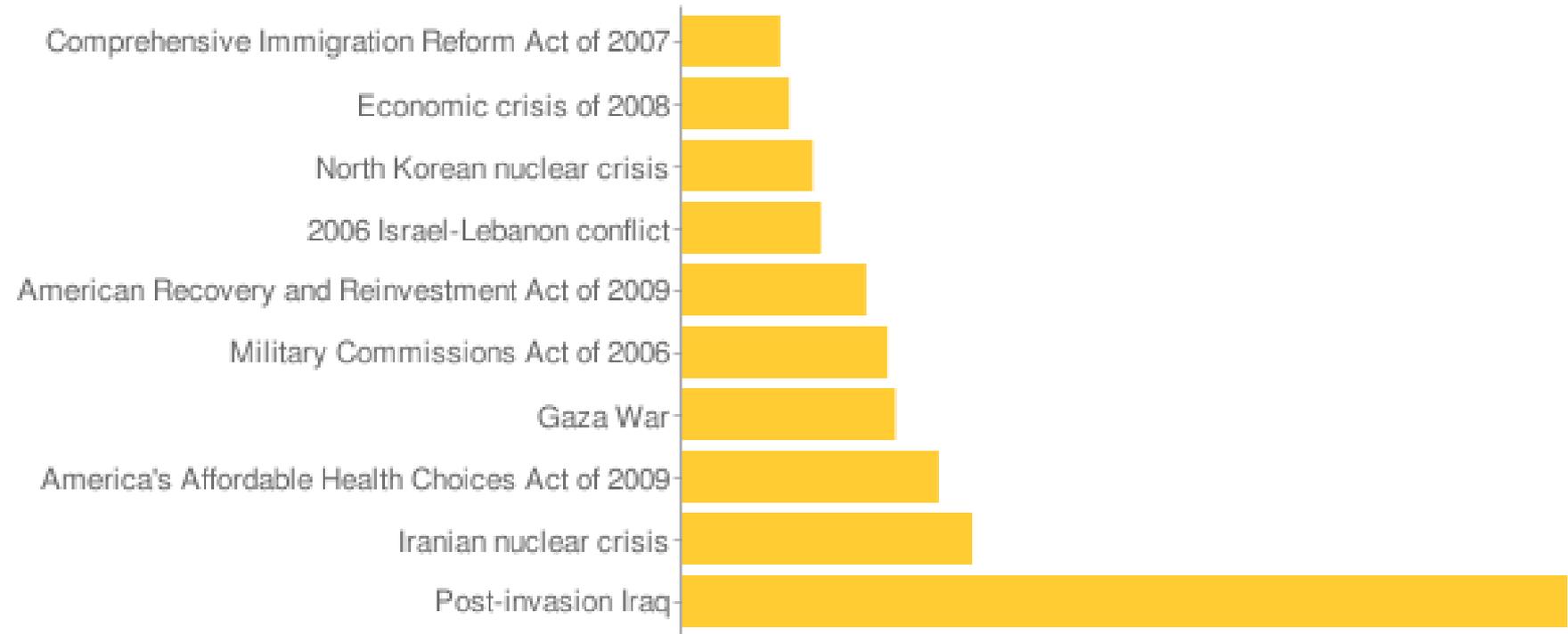
Heute

Gehe zu Monat

Sonntag	Montag	Dienstag	Mittwoch	Donnerstag	Freitag	Samstag
29	30	1	2	3	4	5
6	7	8 Organisches Service-Level- Management in Service-orientierten Architekturen (Graduiertenkolloquium)	9	10 Adaptive and Reactive Rich Internet Applications (Graduiertenkolloquium)	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26

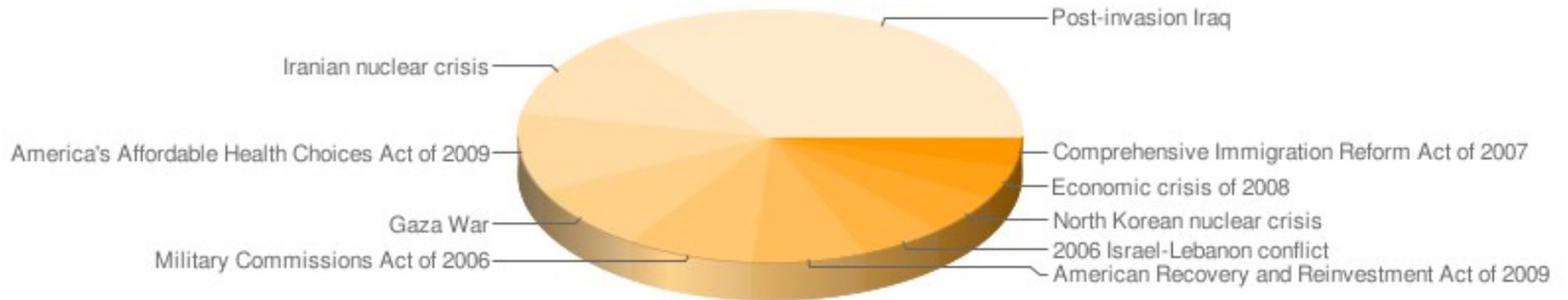
googlebar (Google bar chart) format

The 10 most popular topics:

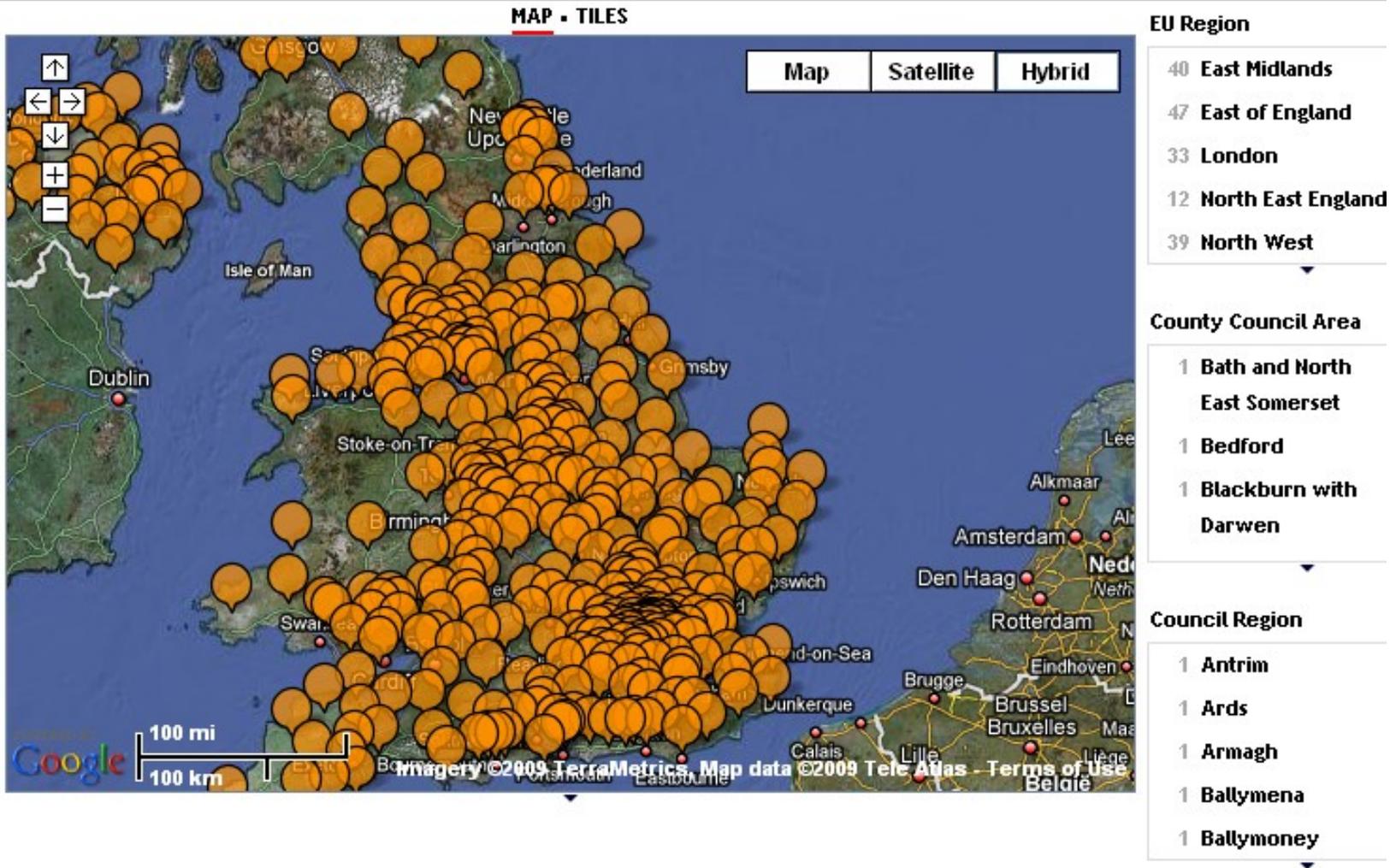


googlepie (Google pie chart) format

The 10 most popular topics:



“exhibit” format



Semantic Maps

Map-based display and input of coordinate data.

Semantic Maps: Google Maps

OpenEI | OPENENERGYINFO

Browse ▾ View ▾ Share ▾ Help ?

Page Discussion View source History

Map of Clean Energy Companies

✚ Add a new Company



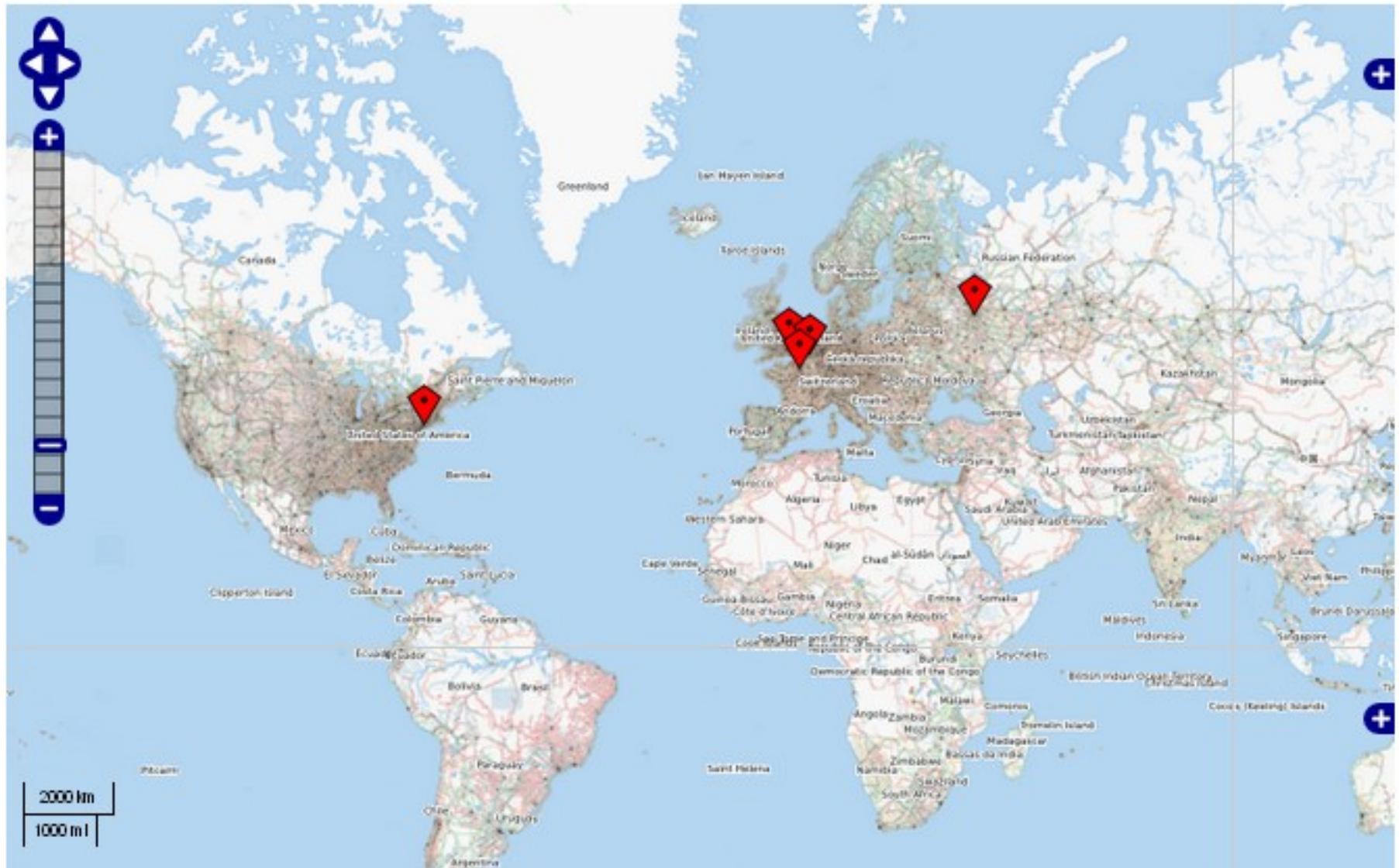
Map | Satellite | Hybrid | Terrain

Asia, Europe, Africa, South America, Australia, Indian Ocean, Pacific Ocean, Atlantic Ocean, India Ocean

POWERED BY Google 5000 mi 5000 km Terms of Use

The image shows a screenshot of a web application interface. At the top, there is a blue header with the text 'OpenEI | OPENENERGYINFO'. Below the header, there are navigation buttons: 'Browse', 'View', 'Share', and 'Help ?'. Underneath these are buttons for 'Page', 'Discussion', 'View source', and 'History'. The main title of the page is 'Map of Clean Energy Companies', with a link to '+ Add a new Company'. The central part of the page features a world map with several red location pins. A large cluster of pins is concentrated in North America, particularly in the United States. Other pins are scattered across Asia, Europe, Africa, and Australia. Above the map, there are four map style selection buttons: 'Map', 'Satellite', 'Hybrid', and 'Terrain'. The 'Map' button is currently selected. At the bottom left of the map, there is a scale bar showing '5000 mi' and '5000 km', and the text 'POWERED BY Google'. At the bottom right, there is a link for 'Terms of Use'.

Semantic Maps: OpenLayers



Semantic Compound Queries

Can display multiple Semantic MediaWiki queries
at the same time.

Semantic Compound Queries: map

The screenshot displays the website for the European Public Sector Award (EPSA). At the top, there are tabs for 'page' and 'discussion'. The main header features the EPSA logo and the text 'European Public Sector Award'. Below this, a paragraph describes the award as a pan-European learning platform for public administration. A navigation menu on the left includes links to 'Main page', 'Overview', 'Projects', 'Organisations', 'Countries', 'Timeline', and 'Help'. A search bar is also present. The central content area contains text about the 2007 award winners and a link to the 2009 award information. A map of Europe is shown with numerous red pins indicating award locations across various countries. The map includes a 'Map', 'Satellite', and 'Hybrid' view selector and is powered by Google.

page discussion

European Public Sector Award

EPSA 2007 - the European Public Sector Award is the first pan-European learning platform for public administration. It allows organisations to share experiences and best practices and learn from each other. The EPSA brings together the best and most innovative performers from the European public sector. To learn more about EPSA, visit the EPSA Web site at <http://www.eps-award.eu> The projects documented here were submitted to the award 2007 and have previously been released in the [Fact Sheet Booklet](#).

Visit the [help page](#) for a guidance on how to use this site.

For information on EPSA 2009 please visit the [EPSA 2009 Web site](#).

EPSA 2007 award and diploma winners:

Map Satellite Hybrid

powered by Google

Semantic Compound Queries: calendar

October 2008

◀ Today ▶

October 2008

Go to month

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29 A Bailout Is Just a Start A Main Street Rescue Beg, Borrow, or Steal	30 Congressional Neroses	1 McCain for president: A certain leader for uncertain times A Vote Against Rashness	2	3	4
5	6 P-I endorsement: Elect Obama	7	8	9	10 Barack Obama for president	11
12 It's Obama: We need a president who will break with the past	13	14	15 McCain for President: A real leader for America	16	17 Barack Obama for President (Washington Post)	18 We recommend John McCain for president

Semantic Forms

Allows for making forms for creating and editing template-based wiki pages.

Forms can also be used to run search queries.

Semantic Forms

Features include:

- many input types (text, textarea, dropdown, radio button, checkboxes, listbox, combo box, date field)
- autocompletion (single and multiple values)
- other extensions can define additional input types (Semantic Maps defines a map-based input)
- field validation (mandatory fields, etc.)

Semantic Drilldown

Provides a drill-down interface for SMW data.

Semantic Internal Objects

Allows for saving “n-ary data”, such as a table of information, within a wiki page.

External Data

Can query the information from a web-based API, database or LDAP server, and display it (and, using SMW, store it) on a wiki page.

Data Transfer

Can import and export template-based information into and out of the wiki, via either XML or CSV.

Approved Revs

Lets administrators mark a certain revision of a page as approved; that revision (and its semantic data) are then displayed to users.

(This is a simpler alternative to the FlaggedRevs extension, used on Wikipedia.)

ParserFunctions

Helpful parser functions for logic (like “#if”),
math, and string manipulation.

Not at all semantic-related, but indispensable!

Widgets

Enables adding pre-set bits of HTML and Javascript to pages, to enable video players, audio players and many others.

Eliminates the need for many 10-line MediaWiki extensions.

Header Tabs

Allows for easily creating tabbed sections in both regular pages and forms.

Replace Text

Global text search-and-replace.

Admin Links

Provides a page of helpful links for administrators.

Admin Links

Special page

Admin links

General

[Statistics](#) · [Version](#) · [Special pages](#) · [System messages](#) · [Edit sidebar](#) · [Edit CSS file](#) · [Edit name of main page](#)
[Approved pages](#) · [Replace text](#) · [Delete batch of pages](#)

Users

[User list](#) · [Create a user](#) · [User rights management](#)

Data structure

[Categories](#) · [Templates](#) · [Properties](#) · [Unused properties](#) · [Forms](#) · [Semantic statistics](#)
[Create a class](#) · [Create a property](#) · [Create a template](#) · [Create a form](#) · [Create a category](#) · [Admin functions for Semantic](#)
[Semantic MediaWiki documentation](#)  · [Semantic Forms documentation](#) 

Data display

[Inline queries help](#)  · [Semantic Result Formats documentation](#)  · [Maps documentation](#)  · [Semantic Maps documenta](#)

Browse and search

[All pages](#) · [Search](#)
[Browse wiki](#) · [Semantic search](#) · [Search by property](#)
[Browse data](#) · [Filters](#) · [Create a filter](#) · [Semantic Drilldown documentation](#) 