



## NEARBY

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*Warning: this Activity has been subsumed, in December 2013, by the [W3C Data Activity](#). That activity has a larger scope; new or current Working and Interest Groups related to “traditional” Semantic Web technologies are now part of that Activity.*

*The current page has been frozen on the 11th December, 2013.*

## W3C SEMANTIC WEB ACTIVITY

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Latest layercake  
diagram (SVG)

Latest layercake  
diagram (PNG)

Latest layercake  
small sized  
(300×315) PNG

## ACTIVITY RSS FEEDS

Activity news  
(RSS 1.0)

(RSS 2.0)

Activity news  
(Atom)

W3C QA blog  
(RSS 1.0)

FAQ (RSS 1.0)

SW Use Cases  
and Case Studies  
(RSS 1.0)



The Semantic Web is a web of data. There is lots of data we all use every day, and it is not part of the web. I can see my bank statements on the web, and my photographs, and I can see my appointments in a calendar. But can I see my photos in a calendar to see what I was doing when I took them? Can I see bank statement lines in a calendar?

Why not? Because we don't have a web of data. Because data is controlled by applications, and each application keeps it to itself.

The Semantic Web is about two things. It is about common formats for integration and combination of data drawn from diverse sources, where on the original Web mainly concentrated on the interchange of documents. It is also about language for recording how the data relates to real world objects. That allows a person, or a machine, to start off in one database, and then move through an unending set of databases which are connected not by wires but by being about the same thing.

## What is the Semantic Web?

The **Semantic Web** provides a common framework that allows **data** to be shared and reused across application, enterprise, and community boundaries. It is a collaborative effort led by W3C with participation from a large number of researchers and industrial partners. It is based on the Resource Description Framework ( [RDF](#)). See also the separate [FAQ](#) for further

## ACTIVE GROUPS

Semantic Web  
Coordination  
Group

RDFa Working  
Group

RDF Working  
Group

Linked Data  
Platform Working  
Group

Health Care and  
Life Sciences  
Interest Group

Semantic Web  
Interest Group

## PAST GROUPS

Best Practices  
and Deployment

information.

See also [the activity news](#) for an account of recent events, publications, etc. For links to tools, books, further details on the technologies, you can also refer to the [Semantic Web Standards Wiki](#) (and you are welcome to modify those pages when necessary and appropriate). You may also want to look at the collection of [SW Case Studies and Use Cases](#) to see how organizations are using these technologies today. Finally, for an exhaustive list of all the specifications published by the activity, please refer to the separate [list of publications](#).

## Publications / Articles / Interviews

The following is a partial list of various publications and or interviews by the W3C Staff that help explain the goals and objectives of the Semantic Web.

["Semantic Link Podcast Series"](#), organized by Eric Franzon, featuring Andraž Tori, Bernadette Hyland, Christine Connors, Eric Franzon, Eric Hoffer, Ivan Herman, Paul Miller, and Peter Brown.

["Tim Berners-Lee and Tim O'Reilly"](#), Web 2.0 Summit 09 discussion (October 2009).

[The Semantic Web in Action](#), by Lee Feigenbaum, Ivan Herman, Tonya Hongsermeier, Eric Neumann, and Susie Stephens, Scientific American, 297(6), pp. 90-97, (December 2007).

[The Semantic Web](#), Scientific American, May 2001, Tim Berners-Lee, James Hendler and Ora Lassila.

Working Group

OWL Working  
Group

RDF Core  
Working Group

Web Ontology  
Working Group

Education and  
Outreach Interest  
Group

RDB2RDF  
Working Group

POWDER  
Working Group

Provenance  
Working Group

SPARQL Working  
Group

Rules  
Interchange  
Format Working  
Group

## [Presentations](#)

Details of [recent and upcoming](#) Semantic Web related talks, given by the [W3C Staff](#), the staff of the [W3C Offices](#), and members of the W3C Working Groups are available separately. A list of *all* Semantic Web related talks since 2004 is [also available](#).

## [Groups](#)

The following groups are part of the Semantic Web Activity.

### [Active Groups](#)

#### *[Semantic Web Coordination Group](#)*

The [Semantic Web Coordination Group](#) is tasked to provide a forum for managing the interrelationships and interdependencies among groups focusing on standards and technologies that relate to this goals of the Semantic Web Activity. This group is designed to coordinate, facilitate and (where possible) help shape the efforts of other related groups to avoid duplication of effort and fragmentation of the Semantic Web by way of incompatible standards and technologies.

#### *[RDFa Working Group](#)*

The mission of the [RDFa Working Group](#), formerly known as the W3C RDF Web Application Working Group, is to support the developing use of RDFa for embedding structured data in Web documents in general. The Working Group will publish W3C Recommendations to extend and enhance the currently published RDFa 1.0 documents.

Semantic Web  
Deployment  
Working Group

GRDDL Working  
Group

## RELATED GROUPS AT W3C

Government  
Linked Data  
Working Group

eGovernment  
Interest Group

Media Fragments  
Working Group

Media  
Annotations  
Working Group

Linking Open  
Data Community  
Project

### *RDF Working Group*

The mission of the [RDF Working Group](#), is to update the 2004 version of the [Resource Description Framework \(RDF\)](#) Recommendation. The scope of work is to extend RDF to include some of the features that the community has identified as both desirable and important for interoperability based on experience with the 2004 version of the standard, but without having a negative effect on existing deployment efforts.

### *Linked Data Platform Working Group*

The mission of the Linked Data Platform (LDP) Working Group is to produce a W3C Recommendation for HTTP-based (RESTful) application integration patterns using read/write Linked Data. This work will benefit both small-scale in-browser applications (WebApps) and large-scale Enterprise Application Integration (EAI) efforts. It will complement SPARQL and will be compatible with standards for publishing Linked Data, bringing the data integration features of RDF to RESTful, data-oriented software development.

### *Semantic Web Interest Group*

The Semantic Web Interest Group is a forum for W3C Members and non-Members to discuss innovative applications of the Semantic Web. The Interest Group also initiates discussion on potential future work items related to enabling technologies that support the Semantic Web, and the relationship of that work to other activities of W3C and to the broader social and legal context in which the Web is situated.

### *Semantic Web Health Care and Life Sciences Interest Group*

The Semantic Web Health Care and Life Sciences Interest Group is designed to improve collaboration, research and development, and innovation adoption in the health care and life science industries. Aiding decision-making in clinical research, Semantic Web

technologies will bridge many forms of biological and medical information across institutions.

## Past Groups

### *RDF Core Working Group*

The RDF Core Working Group was [chartered](#) to consider update to the RDF Model and Syntax Recommendation, and to a few revisions to the RDF Schema specification.

### *Web Ontology Working Group*

The Web Ontology Working Group was [chartered](#) to build upon the RDF Core work a language for defining structured web based ontologies which will provide richer integration and interoperability of data among descriptive communities.

### *OWL Working Group*

The mission of the OWL Working Group, is to produce a W3C Recommendation that refines and extends the 2004 version of [OWL](#). The proposed extensions are a small set that: have been identified by users as widely needed, and have been identified by tool implementers as reasonable and feasible extensions to current tools.

### *Provenance Working Group*

The mission of the Provenance Working Group is to support the widespread publication and use of provenance information of Web documents, data, and resources. The Working Group will publish W3C Recommendations that define a language for exchanging provenance information among applications.

### *Rules Interchange Format Working Group*

This Working Group is chartered to produce a core rule language plus extensions which together allow rules to be translated between rule languages and thus transferred between rule systems. The Working Group will have to balance the needs of a community diverse including Business Rules and Semantic users Web specifying extensions for which it can articulate a consensus design and which are sufficiently motivated by use cases.

### ***Semantic Web Deployment Working Group***

The mission of this Working Group is to provide guidance in the form of W3C Technical Reports on issues of practical RDF development and deployment practices in the areas of publishing vocabularies, OWL usage, and integrating RDF with HTML documents.

This group is also responsible for the development of the [RDFa 1.0](#) and [SKOS](#) specifications.

### ***RDB2RDF Working Group***

The mission of the [RDB2RDF Working Group](#) is to standardize a language for mapping relational data and relational database schemas into RDF and OWL, tentatively called the RDB2RDF Mapping Language, R2RML.

### ***Semantic Web Best Practices and Deployment Working Group***

The focus of the [Semantic Web Best Practices and Deployment Working Group](#) was to provide hands-on support for developers of Semantic Web applications.

### ***Semantic Web Education and Outreach Interest Group***

The Semantic Web Education and Outreach Interest Group (SWEIO) was chartered to collect proof-of-concept business cases, demonstration prototypes, etc, based on successful implementations of Semantic Web technologies, collect user experiences,



develop and facilitate community outreach strategies, training and educational resources.

### *SPARQL Working Group*

Formerly known as RDF Data Access Working Group, it developed the SPARQL Query Language recommendation [published in January 2008](#). The group is currently chartered to make small updates to the SPARQL specification that have been identified as users and implementers as feasible and useful extensions.

### *POWDER Working Group*

The mission of the Protocol for Web Description Resources (POWDER) Working Group is to develop a mechanism through which structured metadata ("Description Resources") can be authenticated and applied to groups of Web resources. This mechanism will allow retrieval of the description resources without retrieval of the resources they describe.

### *GRDDL Working Group*

The mission of this Working Group was to complement the concrete RDF/XML syntax with a mechanism to relate other XML syntaxes (especially XHTML dialects or "microformats") to the RDF abstract syntax via transformations identified by URIs.

W3C staff assigned to the Activity are [Sandro Hawke](#) (see also [private blog](#)) , [Ivan Herman](#) (see also [private blog](#)) , [Phil Archer](#) , and [Eric Prud'hommeaux](#)  
[Ivan Herman](#), Semantic Web Activity Lead, <[ivan@w3.org](mailto:ivan@w3.org)>  
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