The world is everything that is the case.
Ludwig Wittgenstein

Linked Data

Semantic Publishing

Semantic Web

Thesaurus Management

Chatbot Systems

Records Management

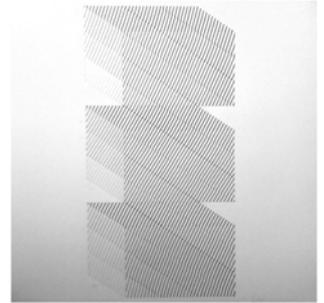Document Management

semweb

Software Development

Solution Architecture

New Systems

Complex Projects

Expertise/Consulting

Testing/Training

"Mission Impossible"

$$P(\psi|\varphi) = \frac{P(\varphi|\psi)P(\psi)}{P(\varphi)}$$

The facts in logical space are the world.
Ludwig Wittgenstein

semweb LLC

Semweb specializes in semantic web and it is an agile and highly qualified provider of services in various disciplines and roles of software development.

Semweb is targeted towards the CTO of medium and large companies, or specialized service providers, who are confronted by complex projects but are unable to implement or resolve them quickly and successfully. Often, the required system implementation or design strategies extend beyond the day-to-day business of IT. For instance the design and modeling of databases is crucial for subsequent strategies to be successful. Or a business may lack short-term capacity for ongoing or planned projects, such as document management, system integration, data mining or semantic web. "Mission Impossible" is also a welcomed challenge. We are computer scientists by vocation and passion.

Semweb supports as well universities in their realization of semantic and linked data web projects.

founded 2007, CH-8700 Küsnacht

**Semantic Web Technologies –
Records Management**
**Software Development – ICT Consulting –
Project Management**

Semweb represents the activities, achievements and experiences of its proprietor Fabio Ricci, computer scientist (at the Dortmund Technical University) with additional training,
Fabio Ricci has successfully implemented numerous large software projects in research and in industry, at home and abroad, since 1990.
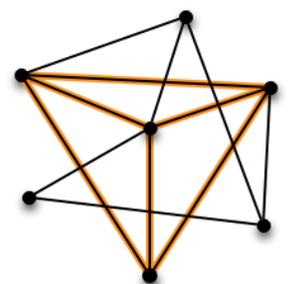Fabio Ricci is a university lecturer and entrepreneur

Geographical reach: Switzerland, Germany, Austria, Italy, France
Communication languages: DE, EN, IT, FR
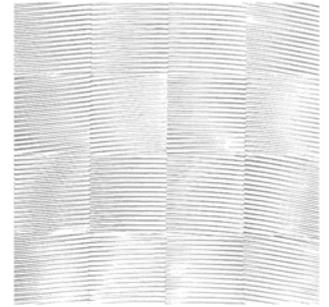
We are **specialist** in the following domains:

- Semantic Web
- Linked Data
- Semantic Publishing
- Web Mining
- Thesaurus Management
- Document Lifecycle
- Document Management
- Records Management

As well as **generalist** combining the versatile and practical experience of a senior software engineer with the creativity and passion of a dynamic scientist.

semweb

The world is determined by the facts,
and by their being all the facts.
Ludwig Wittgenstein

know-how

Programming languages
AJAX, Java (applications, applets/servlets), PERL,
PHP, HTML, VRML, C/C++,XML, RDF, SOAP,
Pascal, LISP, PROLOG

Collaborative Web Technologies
WEB2.0, WEB3.0 (Semantic Web), Records Management, Document Management

Semantic / SemanticWeb & Data mining Tools
Protégé, DERI Pipes, Lucene, SOLR, Virtuoso

GUI builders
QT 3.4.4, X11, NET, Eclipse, Websphere, phpStorm

Operating systems
Windows (Server2003, XP, 7)
MacOSX
OS2/PM
VMS (OpenVMS)
X-Windows (Irix 6.3)
Unix (BSD4.3, System V, Solaris, Ultrix, Irix)
Unix Scripting (sh, csh, ksh, zsh)
Linux
z/OS – (interfacing from Unix/Windows for document
transfer)

Application servers
Silverstream, Websphere, JBOSS – Basic knowledge

CRM Systems
Applix (use and customising), Maximizer (use)

Data base systems
Oracle, mySQL, ACCESS, ARC2

Enterprise Directory Systems
LDAP / Softerra

Documental Systems
Livelink Content Server Enterprise Edition,
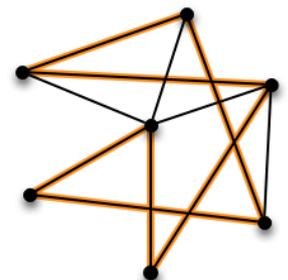CQ5 – Adobe Web Authoring System

Archiving systems
SAP-ArchiveLink, VDRNet4.2

Virtual world authoring tools
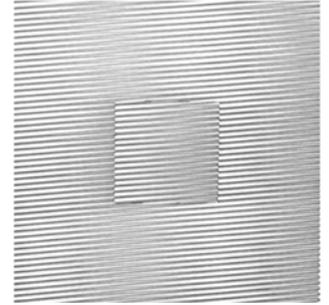CosmoWorlds, Medit, Clarus CAD, OpenInventor

CAD/DMU Tools
Tecoplan's Virtual Workshop
DMU-Navigator
Teraport DMUTools
CATIA V4 – Faces and Solids
CATIA V5 – GUI and automation interface

semweb

reason why

We focus on the latest methods and modes of thought during implementation. We measure our-selves against results, deadlines and budgets.

Semweb is scientifically oriented and familiar with the latest technologies, stringently using the latest methods in analysis, planning and implementation. Our rich experience has however made us aware of the dilemmas, problems and concerns, which can act as barriers, hindering the development of IT projects or causing them to fail.

Caesura, Benchmarking, Impartiality, Fairness

The external evaluation of an IT project allows an unobstructed view of the required overall context, reveals alternative ways and new approaches to finding solutions.

We consistently focus on the iterative quality assurance of development projects and the timely manageable interaction between all project participants and project instances.
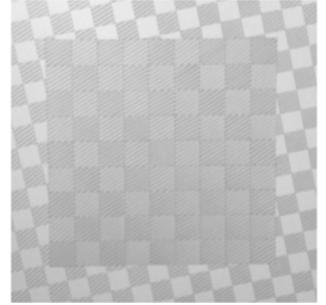
For us the term "problem" has positive connotations. We identify problems, break them down, label them and discuss them constructively – impartially and relentlessly – with you by our side. Then we organize, suggest management and development models – conventional or evolutionary – design and build structures, and develop the solution agreed upon while monitoring money, time and results.

For successful cooperation, we consider it essential that our clients are willing to analyze the project in an open, efficient, critical and constructive discourse. In this way, successful troubleshooting as well as "mission impossibles" are achievable.

We lead projects and teams with our extensive experience. Our communication is clear and integrative, decisions pragmatic, yet participatory and transparent.

semweb

credo

**Ideal client –
strong developer,
structured programmer,
optimal result.**

Knowledge, skills

Real knowledge is attained by curiosity, practice, hard work and constant comparison. Competence requires proof, in practice; empirically recognize success and failure, decide, improve and track. Only the courage to embrace new ways and unorthodox scenarios, while being mindful of the risks, enable the highly trained to further expand their knowledge and abilities.
The skilled are typically fast.

Communication

Computer scientists inherently possess a vertical understanding of communication. The purpose of their skill lies at the surface – in the needs and requirements of organizations and individuals. Perhaps the basis of all of today's actions, be it of man or machine, can be found in communication. The truly professional computer scientist communicates with his partners on a horizontal plane, where technical depths are considered, and appropriate methods are discussed so that treasures can be found.
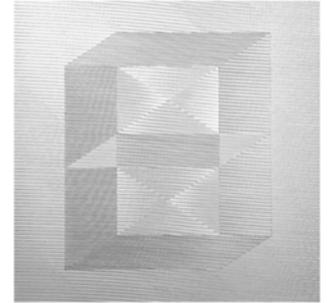
Methodologies and Ideas

As a computer scientist, the methods are natural and a matter of course for me. Methodology is indispensable and it requires stringency in analysis, conception and implementation. But do not underestimate the importance of alert intuition, the pivotal idea and the unorthodox approach, as they often lead to solutions.

Truth and Courage

IT projects often fail simply due to human error. The pair "true or false" has been mastered by machines, not humans. That is why especially IT projects require that decision makers and those who are responsible have a high degree of integrity. The fact that IT projects are expensive is an additional reason for this.

semweb

> The totality of facts determines what is the case, and also whatever is not the case.
> *Ludwig Wittgenstein*

testimonials

Extract

" His pronounced educational and didactic abilities as well as his pleasant demeanor made Mr. Ricci an expecially competent lecturer. … he coordinated the French and German speaking courses with the lecturers of the parallel courses … in a way that … profound synergy effects were created.

Prof. Dr. Rene Schneider, Professor
HEG, Genf, CH

" Due to the extremely efficiently implemented development method … the developed system was recognized as an expecially worthy basis for the further development of our research activities in the area of semantic web. The … created infrastructure is considered to be the foundation for new research contracts, licenses and spin-offs for years to come. We thank him for his … outstanding commitment…!

Prof. Dr. Rene Schneider, Professor
HEG, Genf, CH

" We thank him for his … outstanding commitment … high identification and best diplomacy …!

Claude Bossard, Executive
Bossard und Partner Unternehmensberatung,
Berikon, CH

" The … developed method/software for the handling of statical 3D collision test results in the DMU process was appreciated by our … specialist department as very valuable process support.
  For this reason we decided to make productive use of the prototype in the development process MP2 (model update ACTROS) … we would like to thank him for … his committed and successful collaboration!

Dr. Thomas W. Helmuth, Abteilungsleiter Entwiklung
LKW Europa
DaimlerChrylser, Stuttgart, D

" Outstanding contribution to the ReSiPi project… besides his efficient way to design, deliver and integrate results in the target architecture,… organized proactively knowledge transfer workshops to share… with all project stake holders. Besides the technical achievements… Mr. Ricci is a friendly and creative teamplayer… our gratitude for this excellent cooperation.
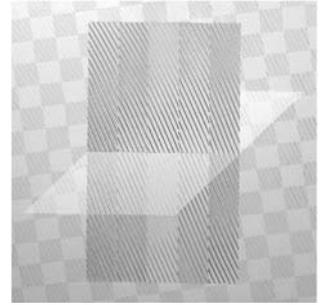
Prof. Dr. Patrick Ruch, Professor
HEG, Genf, CH

" Outstanding collaboration … The developed portal for sale department directors of big banks exceeded our expectation timely, in form and content and made our customers enthusiastic!

Sascha Jacobs, Executive
RCOM Gruppe, München, D

semweb

Fabio Ricci

Diplom-Informatiker (univ.) TU Dortmund

Graduate Computer Scientist, senior advisor, system engineer, expert, coach, developer, problem solver, trouble-shooter, project leader, lecturer, communicator.

Computer scientist by vocation and passion.

At every stage of a project, communication skills are demanded from computer scientists in each role, but especially from those in leading positions. Communication skills influence, promote and make success possible. My natural, and through practice perfected talent for communication allows me to show my clients and teams the "big picture" even in stressful situations and under a complex context, allowing them to reach their goals.
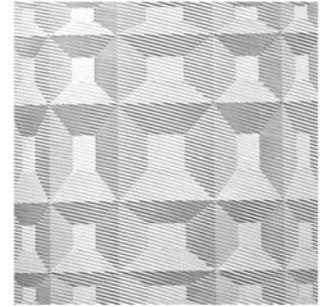
I am fluent in German, English, Italian and French and write and conceptualize in these languages. My theoretical background and strong tendency towards research have lead me to a fascination with one the most thrilling areas of knowledge that will prove to be the future of research and the economy: the semantic web.

Ontologies, Internet of Things, Web 2.0, Big Data or Industry 4.0 – all these terms describe a particular vision, data, associations and qualities. They also describe interdependent definitions and controlled correlations that lead to meaningful connections.
I am convinced that semantic web is currently only in it's beginning stages, and by the end of 2020 will experience an unforeseen presence in every possible application.

semweb

projects

Cooperation with HEG Genf, ZHDK Zürich, Zentralbibliothek Zürich

- Data provider and software architect for project LODZH – Linked Data Zürich
- Development of the complete infrastructure (Java, Wiki, Issue Tracker, Backups)
- RDF Data Hosting – secured with https/digest
- Consulting for the project partners around RDF / LD issues
- Software architect for the realisation of an RDF based search portal

OIZ – Computing center of the City (Hall) Zurich, CH

Interim team leader of the Web CMS Team

- Release planning and coordination with customer site (Zurich City Hall departments)
- Release dependent tests coordination
- Technical consulter of the innovation staff

HEG (HES-SO) Haute Ecole de Gestion, Geneva, CH
Project ReSiPi

Research consultant & Senior scientist

- CTI Research Project: Real-time Engine for selecting Information for Patentable Inventions Scientist responsible for solution architecture and

-

  technologies.

Project RODIN

Responsible for the solution architecture and development

- Web3.0, semantic web based search portal for data sources aggregation with parallel metasearch and semantic meshups (XMLRDF, AJAX, PHP, Java, MYSQL, APACHE, semantic web)
- Development of frameworks for widget generation
- Partial evaluation of SKOS structures into SOLR ready-to-use documents
- Semantization of free text search results
- Generation and publication of LOD representations of search results

Lecturer for bachelor courses

- Introduction to knowledge management (own script)
- Introduction to database technologies (own script)
- Optimization/coordination of the French and German knowledge management course content.

Zürcher Kantonalbank, Zürich, CH

Head of EAI development – Enterprise Application Integration

- Leading seven team members
- Developing java based modules for the EAI infrastructure
- Responsible for offers for the EAI section
- Coordinating offers / releases with customer departments

Development and support of the ZKB documental system

Roll-out Management

- Responsible for the document archiving interface of the documental system
- Responsible for the test environment of the documental system (Livelink, Websphere/AIX, JBOSS/ Linux and Windows)
- Development of Java applications for the documental system
- Architecture and development of a proactive monitoring system for every segment of the documental system

Implementation of an SAP data archiving system

Technical project leader

- Implementation of an SAP data archiving project (VDRNet4.2 and ArchiveLink, PERL, Windows, AIX, z/OS)
- Responsible for system test and roll-out management

Kornhausbibliotheken, Bern, CH

Development and integration of a semi-adaptive chatbot system

- Architecture, development and integration (AIML, PHP, Apache)
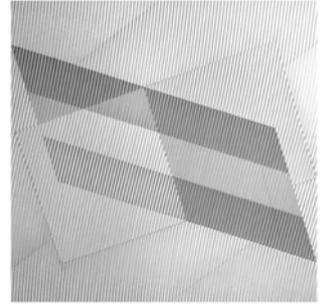
Research Center of DaimlerChrysler AG, Ulm, D

Project lead / architecture / development

- Architecture and software development of a computer based digital mock-up process inside the Project: "Workflows for coordinating and expediting the digital mock-up (DMU) process", 1'000 Users/ Engineers.
- Design and development and project management for a virtual reality visualization front end (using C++ / X11) for mathematical simulation models.

semweb

offer

Specialist and experienced generalist for challenging software projects.

Special fields

- Semantic Web
- Semantic Publishing
- Linked Data
- Thesaurus Management
- Records Management
- Web Mining
- Document Livecycle

Software Engineering

- New Systems
- Software Adaptations
- Legacy Replacement
- System Integration

Roles/Functions

- Project leading
- Consulting
- Conception
- Architecture
- Realization/Programming
- Feasibility studies
- Estimations
- Problem solver

Sectors

- Universities Support
- Big enterprises Industry/Trade
- Pharma/Biotech
- Public authorities
- Research, universities
- Finance, insurances
- (Internet) Media houses
- Clinical units, hospitals
- SME in the expansion phase

Some target groups of semweb

Institutions and companies will benefit particularly of our skills, when they experience or have

- → a fast growth
- → knowledge management bottlenecks
- → process changes
- → complexity barriers
- → economical pressure on processing costs
- → completely new challenges in their ICT sector

Fees

Our hourly fee varies between Swiss franc (CHF) 120 to 240, depending on the collaboration, type and complexity of the task and field of expertise.
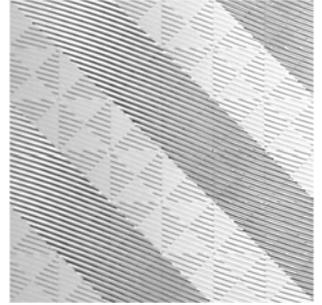
Work-Packages:
We offer targeted work packages for collaboration over a period, or on a per project basis.

Simply contact us!

semweb

services

Our special domains

Semantic Web

Ontology / Thesaurus Management

Find your way through large data and search spaces! Make use of the advantages of domain specific SKOS (Simple KnOwledge Systems) based Thesauri together with text-mining technologies and find previously unknown valuable results.

Semweb efficiently accompanies you during the semantization of relevant parts of your company – especially during the integration of your data bases/ CMS/DMS/ERP systems into a fast semantic search space, within and across sectors.

Open Governement Data

It is certainly a challenge to command rapidly growing data sets and to provide your own linked data along with the data of another institution. The complexity involved means that the appropriate strategy is absolutely necessary. Semweb assists you in finding the appropriate strategy and takes you through all the necessary steps of implementation / expansion of your OGD data semantization and publication, as well as the establishment of LOD endpoints (public access points to your data).

Document Life Cycle

Finding, creating and archiving documents is in these days a widely recognized optimization process. The document life cycle guarantees the maintenance of your information as well as its archiving over the legally agreed period.

Semweb can also carry out the electronification of your document vault.

Know-how

Semweb has acquired specialized know-how through the collaboration on projects ranging from research, services to industry (e.g. HEG – Haute Ecole de Gestion, Geneva (CH), Kornhausbibliotheken Bern (CH), Zürcher Kantonalbank, Zurich (CH)). In addition to the know-how in the semantic web or text mining areas, a solid background in industry projects is also available.
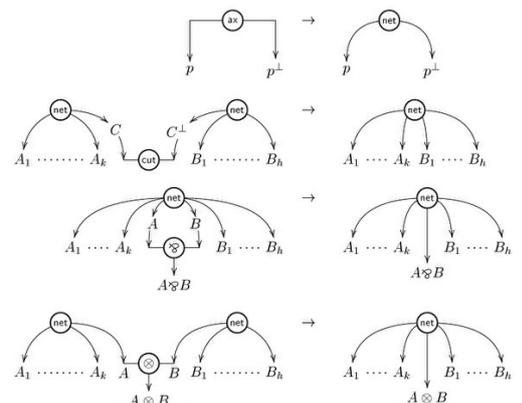
Records Management

Written or typed material administration, management of dossiers, maintenance / destruction of dossiers
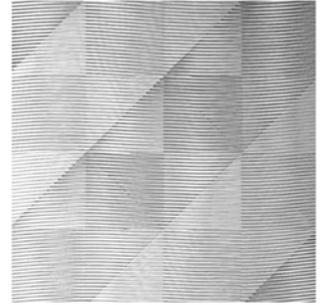
Complete support in record management.
Semweb has five years of experience in records management/document management. We were responsible for the document management of the third largest Swiss bank, from scanning to archiving of documents.

Semweb supports your company in the analysis, requirements assessment and implementation of business transactions, incorporating first-class records management systems.

services

LD-Management with **RDFLink**

Linked open data (LD) describes freely available data in the World Wide Web that can be identified through Uniform Resource Identifiers (URIs) and can thereby be directly accessed via HTTP. Data can also be linked to other data using again URIs. In the ideal case data are represented and linked using the "Resource Description Framework" (RDF) as well as standard technologies based on RDF like "SPARQL Protocol and RDF Query Language" (SPARQL) and the web ontology language (OWL), thus making linked data part of the semantic web.

This linked data constitutes a worldwide network that is also called "linked (open) data cloud" or "giant global graph." For all those cases where the focus is less on the open and free usability of the data we speak simply of "linked data".

Who profitably uses LD?
Public institutions such as NGOs, municipalities, electronic libraries, archives, broadcasting corporations, hotel and airport systems use LD with the purpose of allowing a uniform use of data via the web.

Who has implemented it so far?
In lod-cloud.net is a current example of institutions that have turned their information to LD form. According to lod-cloud.net/state the LD "cloud" amounted to approx. 30 billion records in 2011 with more than 500 million outgoing connections.

Our offer

For generation of RDF Data out of your tabular data Semweb supports you providing a comfortable and unique tool **RDFLINK** (https://rdflink.ch)

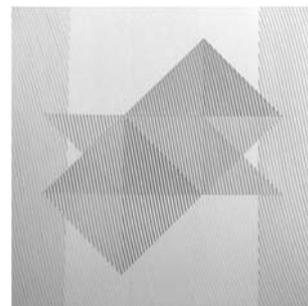## Thesaurus Management with **SKOS Shuttle**

The challenge
Each institution maintains its data in its own data bases, intranets and repositories. The manner in which this knowledge is stored remains proprietary, i.e. in such formats that can only be processed by given commercial applications. The implementation of one's own data base into a LD repository requires fast web technologies as well as special modeling knowledge and needs standards.

Our offer
We analyze your databases or relevant parts of it, and make modeling suggestions in several variants (if possible) on how your represented data knowledge can be modeled and structured using appropriate vocabularies. We implement the variant that is chosen by you, with the guarantee that the mentioned LD repository will be operative within the agreed time frame.

In order to effectively support you with creation / maintenance / operation of RDF thesauri Semweb provides you with **SKOS Shuttle** (https://shosshuttle.ch).

semweb

Specialist for Semantic Web.

Launching, Planning, Realization and Coordination of complex Projects for Industry and Research.

Painting: Renato Ricci 1922-1995

semweb LLC

Business location	Weinmanngasse 26
	CH-8700 Küsnacht
Executive	Fabio Ricci
Year of foundation	2007 [previously WebDMS GmbH]

Services	■ Universities Support
	■ Consulting, Expertises, Planning, Project Leading and Realisation of complex projects
	■ Software Development/Adjustments, Solution Architectures
	■ Problem Solving, Rollout Management, Troubleshooting, Test Engineer, Training, IT Moderator, Application Manager
Focus/main activities	■ Semantic Web Technologies, Ontology Conception / Management
	■ Records Management, Document Management
	■ Thesaurus Management, Text Mining
	■ Complex projects
	■ „Mission Impossible"
Support for	■ Problem Solving
	■ Rollout Delays
	■ Shortage of staff
	■ Special knowledge needed
	■ Re-Modelling of data structures and processes
	■ Semantic Web for the industrie (Smart Factory, CPS/CPPS)
	■ Ontology Conception
	■ Semantical Web Service
	■ Enterprise-Wiki
	■ Knowledge Recycling
	■ System Integration

Telephone	+41 76 528 19 61	+39 389 068 13 34	
Contact	hello@semweb.ch	Skype: semweb-llc	
Websites	semweb.ch	skossshuttle.ch	rdflink.ch

semweb

Semantic Web Technologies · Records Management
Software Development · ICT Consulting · Project Management