SEMANTIC WEB FOR BUSINESS pdf

1: Semantic Web and Semantic Technology Trends in - DATAVERSITY

The Semantic Web is an extension of the World Wide Web through standards by the World Wide Web Consortium (W3C). The standards promote common data formats and exchange protocols on the Web, most fundamentally the Resource Description Framework (RDF).

However, due to the Web deployment challenges, this very ambitious vision was simplified in order to facilitate its take-off. Then, why this vision is being retaken now? And why is this important for E-Business? It represents a set of technologies that work equally well on internal corporate intranets because it tries to solve several key problems in current information technology architectures. In the context of E-Business, the key contribution of the Semantic Web is integration. The Internet and the World Wide Web have made it possible to interconnect information systems worldwide. The result is a global market where enterprises have the potential of carrying out business with any partner by electronic means. However, exploiting this potential is difficult due to the communication barriers among information systems, e. The key to break these barriers is integration. A lot of effort has been invested to achieve it and two initiatives can be highlighted due to their tight relation to the Web and their impact in the E-Business world: XML and Web Services. The former provides a common data model and the latter the global channel through which systems can communicate. Both constitute a good foundation for systems integration but something more is needed if we want to scale it to a worldwide framework. Each system has its own history, development team, etc. In other words, there is a common syntax but disparate semantics, i. Manual intervention might lower the semantic barrier. In any case, it is not sustainable if developers are forced to analyse each potential conversation and develop a particular adapter that makes it understandable. There are also standardisation efforts that establish common frameworks that facilitate communication in concrete domains. However, they have proliferated so much and are based on the same syntactic-level interoperability principles that, in most cases, they have just moved the barriers slightly down. The Semantic Web focuses on interoperability at the conceptual level. It provides the building blocks that facilitate establishing connections among the meanings of the things managed by computers. These connections tell computers simple facts such as that two pieces of data refer to the same thing or, more complex ones like that everything of one kind is accompanied by something of another kind so, when something of the first kind is seen, it can be assumed that the accompanying thing is from the second kind. Computers are not able to deduce these connections on their own, it is still necessary that we teach them the roots from which they can start integrating data automatically. However, although this implies a great initial effort, it scales to web wide environments. In fact, as more and more connections among concepts are added, computers have more paths to follow as they try to realise if two pieces of data match or the kind of product an invoice is referring to. The research community has placed great efforts in the Semantic Web initiative and we are starting now to see its practical benefits in many domains, especially in one with great impact that is E-Business. The main opportunities are anticipated in information systems interoperation and range from inter to intra-organizational links. The question is then if the Semantic Web will help the takeoff of a webbed economy where, in spontaneous inter-organizational relations, the involved parties share data and integrate their internal business processes in a transparent and trustful way. Mill Davis strongly supports this idea in his Semantic Wave report Davis, He anticipates that semantic technologies are going to carry multi-billion dollar opportunities in the next decade. For instance, it is foreseen a 50 billion dollars market of information and communication semantic technologies. The objective of this book is also to provide more evidences about the Semantic Web takeoff in E-Business, but from an innovative point of view compared to existing related books. The approach is to present a compendium of business cases that show the application of Semantic Web technologies in E-Business problems. Other issues that are relevant from the business point of view are also covered, such as strengths, weaknesses, opportunities and threats analysis SWOT. The aim of this combination of technological and business perspectives is to make the book also appealing to IT managers and decision makers that. Apart from technological and methodological issues, the book also sketches costs and benefits analysis showing that the Semantic Web is prepared to do business. Consequently, in addition to Semantic

Web researchers and developers, the intended audience of the book is also IT professionals, IT researchers, business executives, consultants and students undergraduate, graduate, PhD and MBA. Thanks to this cross-discipline approach, the hope is that this book will encourage and facilitate the transfer of technologies and methodologies from the Semantic Web to the E-Business world. The next section provides a small introduction to Semantic Web technologies together with some pointers for further reading. Then, Section presents the business case structure followed by each case description chapter and Section details the contents of the book with a small summary for each chapter. Finally, there is a conclusions section that ends this preface. Semantic Web Technologies Overview The Semantic Web is rooted on a data model, a way to represent data, geared towards interoperability. It is based on a directed graph, i. This graph model constitutes the first building block for semantic interoperability because a graph can be used to represent many other kinds of data structures. For instance, it is easy to model a tree using a graph -it is just a graph without cycles- or a table -each row is represented by a node that is connected to the different row values by edges labelled after each column name. This makes it easier to integrate data coming from XML documents or relational databases into the Semantic Web. Moreover, it easier to mash-up data from disparate sources into a graph because the result is always a graph. However, this is not enough. We can put it all into a graph but, how do we tell the computer that one part of the graph can be joined to another part because they refer to the same thing? And, what is even more important, how do we put restrictions on how the graph is built in order to make it model interesting things and avoid that it becomes a messy bunch of nodes? It is possible to accomplish these features using schemas and ontologies. First of all, they guide graph construction by providing restrictions on how nodes are connected to other nodes using different kinds of edges, called properties. It provides primitives similar to those from object oriented programming so it is possible to define classes with defined sets of properties and appropriate values. Classes are then used to categorise the things represented by nodes, called the resources, in order to apply the corresponding restrictions to them. Ontologies also provide ways to restrict how the graph is modelled, and how it should be interpreted by the computer Fensel, They are a more sophisticated way to do so and are based on logic formalisms. This makes it possible to use logic reasoners in order to deduce new things about the data being managed. These kinds of deductions are a key feature in order to enable scalable data integration by computerised means. Computers use the clues and rules captured by ontologies in order to make sophisticated data integration at the semantic level, such as realising that two pieces of data match together or the kind of product that an invoice is referring to, e. There are three sublanguages with different levels of complexity, which require increasing computation power but provide more expressive ways to pose restrictions. The technologies previously described provide the means for semantic interoperability at the data level. Additionally, interoperability is also required at the operational level and, nowadays, Web services are the common approach to solve this issue. However, the foreseen Web of services where applications can be built from the combination of services published all over the world in an almost automatic way has not yet come true. The barrier continues to be the difficulties to integrate the disparate data models that services process and the different ways to describe their functionality. It might be the case that two services that can be used interchangeably, but the different terms used to describe what they do make it impossible for the computer to realise that one can be used in place of the other. The Semantic Web approach for this problem is also to use semantic descriptions of the services, called Semantic Web Services Cardoso, There are some approaches Yu, to Web services description that allow to say what they do, how they do it, what kind of data they get as input and what is the output, etc. All these technologies are put into practice in the different Semantic Web in E-Business application scenarios included in this book. The reader can follow the references provided in this section in order to get deeper into Semantic Web technologies. Each chapter also provides relevant references and additional readings that help getting into the details. The Business Case Structure In order to make the book more practical and appealing for IT decision makers, chapters follow a business case structure. The idea is to make it easier to read for the managers that would at last decide to put Semantic Web technologies into practice in enterprises. Many information systems managers are used to business cases and they are a common teaching resource in management masters e. The objective is to make more people aware of the benefits that Semantic Web technologies can carry to E-Business

information systems, focusing on the people that would have the last word in this process. There is still room in the case for the technical details, but it is also important to highlight the opportunity or problem and to make the benefits of the proposed solution clear and justifiable from a costs and benefits point of view. This approach pretends also to make chapter more practical and less theoretic. Each business case presents a current E-Business situation where Semantic Web technologies are being applied producing some benefits and opportunities that justify the cost. Some question business cases should answer are: Why the project is needed? Existing issues and opportunities. How will the effort solve the issues or opportunities facing the organisation? What is the recommended solution s? How does the solution address the issues or opportunities benefits? What are the risks if the issues or opportunities are not faced? Qualitatively, how much will all this cost? Is it worth compared to the benefits? A part from the abstract, chapters begin with a description of the current situation. The scenario is described paying special attention to how the things were before Semantic Web methodologies and technologies are applied. Then, from the previous situation description, the current problem is highlighted. This statement should make it clear that there are issues that are limiting how E-Business is conducted and that there is an opportunity for the Semantic Web. Once the opportunity has been signaled, there is the description of the proposed solution. First of all, the objectives of the proposed solution are stated and an overview of the solution is given. Then, we get into details and the technicalities of the proposed solution are presented, i. Then there are the alternatives. This is a related work section that introduces some alternative solutions, either based on the Semantic Web or not. In other words, this section shows the competitors of the proposed solution. Next, the costs and benefits are analyzed. The idea is to provide an overview of the costs associated to the solution. There is no need to enter into detailed economic costs, just some sketches of the implications associated to development costs, additional infrastructure requirements, etc.

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2: Journal of Web Semantics - Elsevier

Business users in sectors ranging from e-commerce to financial services and marketing are reaping benefits from semantic technology -- even if they don't always understand how it works.

W3C Semantic Web Activity background. This is more of a white paper than a technical note. It addresses that oft-asked question, "So how is the semantic web going to affect me? Pre and Post Web Consider the state of documentation systems in Suppose you needed to transfer information from one system to another. On a lucky day, you might have a PC which had network access to both systems. However, the remote systems used completely different protocols. You might telnet to one system and have to learn the library access program before you could search its database. Having done that, you would have to copy the information into your clipboard or the back on an envelope and connect somehow -- maybe terminal emulation - to another machine to access its documentation control system. If you were lucky, you could find your way to the right place in the new system, and then paste in or retype the information. That was before the Web. Now, miraculously, we have the Web. Both systems now have Web servers, and despite still in fact running on different machines and the same weird programs, the Web interfaces make them seem part of the same smooth, consistent, world of information. For the documents in our lives, everything is simple and smooth. The Personal Information disaster But what about the data in our lives? There are lots of ways in which our machines can use data when they can understand it. When my calendar understands dates, it can warn me when an appointment is coming up. When my Global Position System device understands latitude and longitude, it can show me the way to where I should be. When my address book understands that something is a phone number or an email address, it can set up communication with a person with a click. But consider the reality of how we use these things. Suppose you are browsing the web and you come across a web page about the meeting you want to go to. It has on it the time and place, details of other documents, and of other people involved in organizing and attending the meeting. You decide to attend the meeting. At this point, you would like your calendar to have an entry at the right date and time, with hypertext links to the details. You would like your in-car navigation system, at that date and time , to be programmed with the coordinates of the location. You would like your Rolodex to seem to contain, until the meeting is over, the contact info for the people involved. What you in fact have to do is laboriously cut and paste details into your address book, finding the date and time yourself. You have to copy the contact details by hand from the web page into your address book, manually sorting out the address lines and phone numbers. And if you use a GPS system, you may have to manually fiddle with the buttons on it to set up a way-point at the coordinates of the meeting. This is just the same as the documentation system before the web. For data, we are still pre-Web. Enterprise Application Integration If this is bad - and evident now you think about it - for personal data, consider the impact for a company. The same situation exists when you look at trying to connect the various data-handling applications on which your company depends. There is a certain overlap between the stock control system and the accounting system which, if the connection were made, would save a lot of re-keying and associated errors. You hire a consultant to write the glue code to suck the data out of the stock control system, reformat it, and blow it into the accounting system. If you have N applications which run your company, there are of order N2 ways in which you may want to connect them together. Which all adds up to a lot of custom programming by a lot of consultants. Of course, the good news is that if all the applications use XML, the consultant only has to learn to handle XML data, not the full range of weird internal formats in which data used to be stored and transferred. The bad news is that the problem is still an N2 problem. For every pair of applications, in fact for each way in which they need to be linked, someone has to create an XML to XML bridge. Relational data strikes again All you need to do is move up a thin layer of interoperability. Just as database systems suddenly became compatible by adopting a consistent relational model, so your unstructured data can also adopt a relational model, and get all the benefits you need to solve these problems. The relational language for data on the Net is called RDF. When information from two sources is in RDF needs to be merged, you basically concatenate the files into one big file. When you want to extend a query on an RDF file to include constraints

from another, you just write it in. When XML is made up of elements and attributes - which tells you only about how things are written into the file - RDF data is made up of statements where each statement expresses the value of one property of something -- the exact equivalent of one cell in a database table. All the relational database ideas work - joins and views, for example, written easily using common tools. What happens now to your enterprise application integration problem? The information from each application is output in, or converted into, RDF. Any query can run over any selection of this data. Filters can be written very simply, and converters to extract and calculate the data you need. Then, this is is input to the applications which need it. Basically, the problem is linear in the size of your system. Just as new web servers can be fitted into the web without disturbing the rest, so new RDF applications supply and use information without upsetting the rest of the system. The N2 problem has gone. Is this rocket science? The Semantic Web, like the World Wide Web, is just taking well established ideas, and making them work interoperability over the Internet. This is done with standards, which is what the World Wide Web Consortium is all about. We are not inventing relational models for data, or query systems or rule-based systems. We are just webizing them. We are just allowing them to work together in a decentralized system - without a human having to custom handcraft every connection.

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3: Semantic Web Agency - Web. Design. Business.

To sum up, the book includes a nice overview of the Semantic Web in E-Business and a compendium of comprehensive business cases that illustrate, from a practical point of view, how Semantic Web is growing inside organizations.

Semantic Technology trends in will continue to advance many of the trends discussed in and build upon a number of new changes just entering the marketplace. It also noted that Socrates uses an: Their knowledge graph outperformed the state of the art. That same month, Thomson Reuters introduced a Knowledge Graph feed for customers. With the Linked Data feed, they gain the ability to incorporate its financial content sets as part of their own institutional Knowledge Graphs, and it becomes easier to support data relationship discovery and exploration needs across a range of business requirements, from investment research to sales intelligence. Where will Semantic Technology trends go in ? Michael Bergman, Senior Principal at Semantic Technology Consulting Firm Cognonto Corporation Bergman sees the Thomson Reuters announcement as one harbinger of continued growth and progress, along with the impact of Wikidata as an engine for capturing relationships among numerical, text, visual, and graphical content now five years old and boasting more than 37 million items, 8. Semantic Technologies will come to assume their natural role as essential enablers, but not as keystones on their own for major economic and information change. Artificial Intelligence in combination with Semantic Technology is ideally suited to address this challenge. Venture capitalists are noticing, he says, with increasing investment activities underway in the sector. Engineering and manufacturing, banking and finance, agricultural and life sciences, and even retail: There have been some interesting concepts put into place and standards negotiated, such as around Semantic data streams to address the problems of heterogeneous data in an age of massive data stream processing, but no mature technologies arrived at yet. Blumauer also notes that there have been some obvious options of how to benefit from Semantic Knowledge models and metadata enrichment, such as providing higher Data Quality as input for Machine Learning. Having common data standards is core to the proposition of Semantic interoperability that is the key factor for opening up these markets, Raggett says. Standards for Semantic descriptions are important for providers that choose to publish catalogs describing data sets for download and local processing, as well as for network APIs for services based upon remote data sets. Vendors typically seek to differentiate their offerings from those of their competitors, however, creating challenges for applications to adapt to service variations. There are huge opportunities for data vocabulary standards across many sectors including increased productivity through digitizing industries. The requirements vary considerably. The Web of Things working group at the W3C also is hoping to come up with some candidate recommendations about how to describe things in terms of properties, actions and events by the end of , he says. But they have to consider that there may be more to it than they realize. Many systems start the other way around, which in practice is what causes systems to have myriad ways of expressing, structuring and representing what often is data about the same thing in the real world. By basing many apps on the same model, integration â€” now the single biggest cost item in almost all IT shops and all large IT projects â€” becomes frictionless. Conform the data lake to an ontology, however, and you provide a path that is based on shared knowledge.

4: The Semantic Web | ZDNet

The semantic web vision persists, but the tools and processes don't stand up to today's data chaos. I've been a semantic web skeptic for years. SemWeb is a narrowly purposed replica of a subset of the World Wide Web. It's useful for information enrichment in certain domains, via a circumscribed set.

The company was founded in and is acknowledged as a global leader in Semantic Web technologies. A team of Linked Data and Machine Learning experts provides consulting and integration services for semantic data and knowledge portals. Meet Our Consulting Team Our customers profit from world-class technology and intense customer care. We like to work closely with our customers and partners. He is responsible for the IT infrastructure and PoolParty cloud services. He is a senior advisor for complex PoolParty integration projects. He is the team leader of the PoolParty consultant team. Helmut guarantees that projects are met on time and budget. He takes care of communication flows between partners and the company and nurtures our partner network. Christian Blaschke Senior Consultant Christian holds a degree in bioinformatics. Florian Huber Senior Consultant Florian holds a degree in bioinformatics and he is an expert for text mining. He translates business requirements into technological solution approaches. He excels in designing sophisticated semantic data models and knowledge graphs and integrates them in semantic business applications. He is responsible to expand the technical ecosystem on which our semantic middleware thrives. He is also involved in customer projects. Albin Ahmeti Technical Consultant Albin is a technical consultant that detects synergy potentials with affiliated technologies and make it work. Due to his academic research background, he is the link to the research unit of Semantic Web Company. He ensures that customers are guided through their semantic technology projects with ease. Thomas aligns technical and business demands. Alexander Jackson Technical Consultant Alex works as a Technical Consultant with affiliated technologies to design semantic data models. He supports customers with building cognitive computing applications combining Machine Learning with Semantic Technologies. Juliane Pineiro-Winkler Technical Consultant Juliane has degrees in translation, terminology and software development. She takes advantage of her multidisciplinary background to support customers throughout the entire PoolParty integration process. Alexis Dimitriadis Technical Consultant Alexis has degrees in mathematics and linguistics and has experience in ontologies, linked data, and machine learning. In addition to supporting PoolParty customers, he contributes to internal and external research projects.

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5: What is Semantic Web? - Definition from Techopedia

The Semantic Web has been around for some years with recent advances in mature technologies and applications. Lately, its development has been demonstrated in its contribution to businesses through the enhancement of e-commerce.

Semantic Reconciliation[edit] Semantic reconciliation is a process cycle constituted of four subsequent activities: First, the community is scoped: Next, relevant facts are collected from documentation such as, e. The deliverable of scoping is an initial upper common ontology that organizes the key upper common patterns that are shared and accepted by the community. These upper common patterns define the current semantic interoperability requirements of the community. Once the community is scoped, all stakeholders syntactically refine and semantically articulate these upper common patterns. Unification[edit] During unification, a new proposal for the next version of the upper common ontology is produced, aligning relevant parts from the common and divergent stakeholder perspectives. If the semantic reconciliation results in a number of reusable language-neutral and context-independent patterns for constructing business semantics that are articulated with informal meaning descriptions, then the unification is worthwhile. Semantic Application[edit] Semantic application is a process cycle constituted of two subsequent activities: This is done by first selecting relevant patterns from the pattern base. Next, the interpretation of this selection is semantically constrained. Finally, the various scoped sources and services are mapped on read: The selection and axiomatization of this selection should approximate the intended business semantics. This can be verified by automatically verbalization into natural language, and validation of the unlocked data. Validation or deprecation of the commitments may result in another iteration of the semantic reconciliation cycle. Business semantics[edit] Business semantics [1] are the information concepts that live in the organization, understandable for both business and IT. Business Semantics describe the business concepts as they are used and needed by the business instead of describing the information from a technical point of view. One important aspect of business semantics is that they are shared between many disparate data sources. Many data sources share the same semantics but have different syntax, or format to describe the same concepts. The way these business semantics are described is less important. In the mind of reader or writer , hidden away in the implementation itself e. They can for example be coupled to a content management application to provide the business with a consistent business vocabulary or enable better navigation or classification of information, leveraged by enterprise search engines to make richer semantic-web -ready websites, etc.. It provides an abstracted way to access and deliver data in a more efficient manner. In that respect, it is similar to Enterprise Information Integration EII with the added benefit that the shared models are not described in technical terms but in a way that is easily understood by the business. Collibra is the first organization to commercialize the idea behind business semantics management.

6: Management Team - Semantic Web Company

The Semantic Web, like the World Wide Web, is just taking well established ideas, and making them work interoperability over the Internet. This is done with standards, which is what the World Wide Web Consortium is all about.

Applications[edit] The intent is to enhance the usability and usefulness of the Web and its interconnected resources by creating Semantic Web Services , such as: Many converters to RDF exist from different applications. Relational databases are an important source. The semantic web server attaches to the existing system without affecting its operation. This could be machine-understandable information about the human-understandable content of the document such as the creator, title, description, etc. Note that anything that can be identified with a Uniform Resource Identifier URI can be described, so the semantic web can reason about animals, people, places, ideas, etc. Automated agents to perform tasks for users of the semantic web using this data. Web-based services often with agents of their own to supply information specifically to agents, for example, a Trust service that an agent could ask if some online store has a history of poor service or spamming. Such services could be useful to public search engines, or could be used for knowledge management within an organization. Facilitating the integration of information from mixed sources Dissolving ambiguities in corporate terminology Improving information retrieval thereby reducing information overload and increasing the refinement and precision of the data retrieved [21] [22] [23] [24] Identifying relevant information with respect to a given domain [25] Providing decision making support In a corporation, there is a closed group of users and the management is able to enforce company guidelines like the adoption of specific ontologies and use of semantic annotation. Compared to the public Semantic Web there are lesser requirements on scalability and the information circulating within a company can be more trusted in general; privacy is less of an issue outside of handling of customer data. Practical feasibility[edit] Critics question the basic feasibility of a complete or even partial fulfillment of the Semantic Web, pointing out both difficulties in setting it up and a lack of general-purpose usefulness that prevents the required effort from being invested. In a paper, Marshall and Shipman point out the cognitive overhead inherent in formalizing knowledge, compared to the authoring of traditional web hypertext: Effective use of such a formal representation requires the author to become a skilled knowledge engineer in addition to any other skills required by the domain. Indeed, this is a form of programming based on the declaration of semantic data and requires an understanding of how reasoning algorithms will interpret the authored structures. A further issue that they point out are domain- or organisation-specific ways to express knowledge, which must be solved through community agreement rather than only technical means. Furthermore, the Semantic Web relies on inference chains that are more brittle; a missing element of the chain results in a failure to perform the desired action, while the human can supply missing pieces in a more Google-like approach. This phenomenon was well-known with metatags that fooled the Altavista ranking algorithm into elevating the ranking of certain Web pages: For instance, text-analyzing techniques can now be easily bypassed by using other words, metaphors for instance, or by using images in place of words. An advanced implementation of the semantic web would make it much easier for governments to control the viewing and creation of online information, as this information would be much easier for an automated content-blocking machine to understand. In addition, the issue has also been raised that, with the use of FOAF files and geolocation meta-data , there would be very little anonymity associated with the authorship of articles on things such as a personal blog. Some of these concerns were addressed in the "Policy Aware Web" project [30] and is an active research and development topic. Doubling output formats[edit] Another criticism of the semantic web is that it would be much more time-consuming to create and publish content because there would need to be two formats for one piece of data: However, many web applications in development are addressing this issue by creating a machine-readable format upon the publishing of data or the request of a machine for such data. The development of microformats has been one reaction to this kind of criticism. Results of their work include the RDF S based Corese search engine , and the application of semantic web technology in the realm of E-learning.

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7: Business Model for the Semantic Web - Design Issues

Semantic Web Company is the leading provider of graph-based metadata, search, and analytic solutions. We link data semantically for your smart applications.

8: Semantic Web Company - PoolParty Semantic Suite

A Semantic Web Business Case Jeff Pollock, Oracle Corporation on behalf of the W3C Semantic Web Education and Outreach interest group Terms like "Semantic Web," "Web ," and the "Data Web" have been interchangeably used to describe the underlying vision behind.

9: Semantic Web Company Home - Semantic Web Company

By far the most public usage of Semantic Web technologies is the website for the British Broadcasting Corporation (i.e., the BBC). In , their entire World Cup website was powered by Semantic Web technologies, as was reported on ReadWriteWeb and www.enganchecubano.com

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Encyclopedia of guitartab chords Low carb meal plan for weight loss Ayurvedic Zone Diet Dawnland encounters No continuation, no presentation (1:23) How germs cause atherosclerosis Use of cold storage. Learning and the professors Pt. 2. The experience of experience. Ch. 4. Extreme narrative African Worlds (Classics in African Anthropology) Cholesterol Children Edit in photoshop cs6 The women: Gay Games III, Vancouver, Canada Emergency navigation The defenders; Osceola, Tecumseh, Cochise. Cisco router performance field guide Manuscripts and the Text of the New Testament V. 8. Information available for rate setting by the Maryland Health Services Cost Review Commission by Ka The eternal voice Hf 230 collins manual Works by Sylvia Plath Understanding Public Policy (10th Edition) Counting on a Miracle Cbs annual report 2012 Cs201 handouts Evening to remember Marilyn manson long hard road out of hell The nativity (Sibyl detail workshop of Rogier Atlas of the 1st World War The Nanotech Revolution (Scientific American Cutting-Edge Science) POP3 and IMAP at the protocol level 101 successful interviewing strategies The thrive diet Classrooms and corridors Pt. 2. Recommendations from the conference. Aurora 3d text logo maker tutorial De Gaulle revolution. Our disappearing middle class One Hundred Love Poems Kingdom of Armenia