FEATURED STORY

OASIS: TEN YEARS AFTER

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It would be difficult to establish the exact number of technical standard setting consortia that have come and gone in the last ten years, but their numbers would be in the hundreds. Indeed, the more than 200 such organizations that are in existence today demonstrate a wide range of vitality, from energetic to moribund. Were one to scan the websites of a sampling of these bodies, most would cite a date of formation within the last five years, and few would show more than a trickle of announcements in their press rooms, each relating to a narrow technical focus.

In marked contrast, a review of the website of OASIS (the Organization for the Advancement of Structured Information Standards) would reveal that it is in its 11th year of existence, that it is constantly announcing the release of finished specifications and the launching of new processes, and that it has active initiatives in areas as diverse as biometrics, eGovernment, and Web Services - more than 45 hosted initiatives in all.

A more in-depth review of the structure and activities of OASIS would uncover a number of other aspects that are strikingly different than can be found in other organizations. These include a number of formerly independent consortia that have merged into OASIS, and still continue to enjoy a semi-independent existence. Rather than being forced to merge into the existing committee structure of OASIS, these organizations now enjoy the best of both worlds - the services of the OASIS infrastructure and staff and the involvement of other OASIS members, as well as the continuation of their own technical agenda, websites, and process. Three such combinations have occurred in the last 12 months alone, with the LegalXML, UDDI and PKI Forum initiatives all opting to move in under the OASIS virtual roof.

As of this writing, the OASIS community includes seven websites, five of them supporting individual technical initiatives (www.cgmopen.org, www.xml.org, www.ebxml.org, www.pkiforum.org and www.uddi.org), one serving the entire OASIS community (www.oasis-open.org), and a seventh - "Cover Pages" (http://xml.coverpages.org/) - which OASIS provides "as a public resource to document and encourage the use of open standards that enhance the intelligibility, quality and longevity of digital information."

In short, OASIS is one of a small number of consortia that have achieved a permanence and reputation which few standard setting initiatives aspire to or attain. As is often the case, the path from formation to current instantiation has been no more straight than the course of technological evolution over the same time period.

Origins and Transition. OASIS was formed in 1993 as SGML Open, an international consortium of suppliers with products and services that supported the Standard Generalized Markup Language (ISO 8879). During its first five years, SGML Open sought to expand the market for SGML by driving demand through marketing and education, and enhancing interoperability (the latter by developing and building consensus for technical resolutions that could make SGML adoption faster, easier, and less expensive). For five years, that mission remained relevant, and OASIS operated as a typical technical initiative focused on a single business goal.

With the advent of XML (a streamlined, web-enabled application of SGML), however, the entire landscape of the marketplace began to change. At this point in the road, a consortium is typically faced with a number of alternatives, none of which is particularly attractive. It can declare victory (or defeat) and disband, it can struggle along while its membership declines, or it can determine whether there is an evolutionary path which would allow it to remain relevant and useful.

While consortia should know when to close the book on their existence, it is also true that the energy and cost of launching them is not insignificant. Accordingly, when a business/technological need evolves rather than disappears, it can make good sense for a consortium to evolve with the marketplace. OASIS accordingly opted to take the third path, but prudently decided to look farther down the road than a simple transition from promoting SGML adoption to promoting XML adoption. Instead, the organization decided to expand its scope so that it would not, once again, become tied to a single, "latest and greatest" technology, and focus on the greater business need that it had been created to serve. In harmony with this strategic decision, the organization adopted the name OASIS in 1998 - the Organization for the Advancement of Structured Information Standards.

The rapid acceptance that XML enjoyed in the marketplace also meant that there was less call for an organization dedicated to promotional and educational activities. As a result, OASIS turned its attention increasingly to the second leg of its historical mission: developing interoperability specifications to enable the application of standards, and particularly XML. In 2000, it revamped its technical process by introducing a new system tailored to favor openness and democracy over centralized control. The new process allowed members to more readily set the technical agenda for the Consortium based on their perception of the needs of the marketplace.

A Process of Ongoing Evolution. Having made the conversion from a single, language standard-centric focus to a mission that concerns itself with broader industry needs, OASIS embarked consciously on a path of ongoing evolution and recreation. With that freedom of outlook, it has come to view its mission as driving the global development, convergence and adoption of e-business standards. Along the way, it has become recognized as one of the important industry consortia that are leading the industry to adopt new ways of doing business, such as Web services.

The openness with which OASIS considers supporting new initiatives has played an important role in attracting "not invented here" processes to its banner, and the times have been propitious for bringing partners to its door. Over the past several years, XML and (more recently) Web services have spawned a plethora of independent trade organizations dedicated to developing domain-specific XML vocabularies and specifications. Other vendor-driven organizations have been formed to bring horizontal solutions to market quickly. With the protracted technology market economic slump, many of these initiatives have struggled to maintain their memberships, and suffered from lack of resources.

At the same time, the contrasting advantages of established organizations with full time staffs, international recognition and well-developed technical infrastructures have become increasingly obvious. Finally, there is an increasing sense in the industry that there are "too many consortia," each requiring its members to pay dues and fund travel expenses for member representatives, and raising concerns about the overall coherence of the standards produced by disparate organizations, all cohabitating in the same overall business area.

In response to this reality, OASIS introduced an innovative way to address the problems that these smaller, independent organizations were facing - a Member Section program that provides a way for groups to maintain a distinct identity while gaining access to OASIS infrastructure, global representation, resources, and expertise. Each Member Section is governed by its own Steering Committee, which reports directly to the OASIS Board of Directors. Participants in OASIS Member Sections are full OASIS members, and any OASIS member may contribute to the work of any Member Section. While a degree of independence in procedure is permitted to Member Sections, each operates under the overall OASIS Technical Committee Process. The result is a level of confidence in the industry in the resulting specifications, as well as a greater degree of both compatibility and coherence among more standards than would exist if each had been promulgated by a totally independent organization.

Going forward, OASIS remains open to combinations with additional independent organizations that are working towards the development, convergence and/or adoption of e-business standards. The

organizations with which it combines may represent not only specific technologies and topic areas, but perhaps finite geographic regions as well.

OASIS looks back on a number of other recent, evolutionary challenges which it has successfully met: an increase in both membership (50%) and technical activity (+100%) in 2002, despite the dismal technology sector economy; the growth of its public sector activities, which now account for 30 % of all OASIS work; its success in bringing industry-specific standards development organizations together on broad, universal projects such as ebXML and UBL; and major contributions in the areas of Web services (UDDI, WSRP, WSIA, Management Protocol, and others) and security (SAML, WS-Security, XACML, PKI, and others).

While undergoing the transformations of the last ten years, the composition of the OASIS membership (not surprisingly) evolved as well. The software developers that originally comprised the bulk of its following gave way to a more diverse mix of members, first with larger vendors and end users joining. Later, national and local government agencies and entities, academic institutions and industry groups became members. The consortium's geographic influence spread as well, from an initial foundation made up principally of North American and European members to one that includes broad participation from Asia and Australia as well.

New Initiatives. In addition to the ongoing process of launching new specifications working groups, OASIS has other plans that are intended to augment the effectiveness of specifications and standards in a broader context. As part of its commitment to develop interoperable, non-duplicative specifications, it has joined with other standards development organizations in the *Standards Registry Committee* (SRC), which develops metadata for standards work to describe member organizations' efforts, status and inter-relationships. Independently, OASIS will be building a registry of standards work, using the SRC format metadata to record the status of its own technical activities. The resulting resource will allow any interested party to view what OASIS is developing, as well as how each of its technical activities relates to the work of other organizations. After populating its new registry with its own data, OASIS plans to welcome the metadata of other standards groups, and encourage interoperation with the standards registries that other such groups they themselves create.

In a logically related initiative, the OASIS standards registry will also store a glossary of technical standards terms, in an effort to reduce the confusion in the marketplace among standards developers and implementers over the terminology used in the myriad specifications that are released globally every year. Currently the same term may be used in different ways in different specifications, impeding adoption and implementation. By storing the terminology and shared glossaries in a single location, participants of all organizations will have access to a central source of definitions, allowing language use to become more consistent, and enabling implementers to more readily understand specifications.

The Role of OASIS in the Global Standards Infrastructure. OASIS has sought to design and implement a technical process that enables it to develop and approve specifications much faster than traditional, centrally controlled standards organizations. At the same time, the openness of the OASIS policy encourages a broad range of input (from end-users, governments and technologists) during specification development, resulting in high quality specifications that gain faster and more widespread adoption and implementation. As a result, it has sought to position itself midway along the spectrum of standard setting organizations: nimble, but not closed to the opinions of anyone beyond its paid membership.

As is the case with most standard setting organizations, OASIS maintains liaison relationships with many other groups. At the same time, it enjoys more formal relationships with a number of the internationally recognized "de jure" standard setting organizations, as well as the credibility which recognition by these organizations conveys. These relationships include:

- *a Memorandum of Understanding on Electronic Business* with the four formal international standards development organizations - the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO), the International Telecommunication Union (ITU), and the United Nations Economic Commission for Europe (UN/ECE).

- *co-sponsorship of ebXML with UN/CEFACT, the United Nations Centre for Trade Facilitation and Electronic Business* (ebXML is a modular suite of specifications that enables enterprises of any size and in any geographical location to conduct business over the Internet).
- *Class A Liaison membership of ISO TC154, ISO/IEC JTC1 SCER and SC6.*
- *recognition as an A.4 and A.5 Contributor by ITU-T.*

Looking Forward. OASIS is better positioned than many consortia to meet the challenges of the future, given its recent strong growth and the length of time that its leaders have been associated with the organization (combined, its four senior managers have over 20 years history with the organization). Nevertheless, as it looks forward to its next ten years, OASIS does not have far to look to see new challenges. It identifies the following as near term issues: supporting the rapid growth of a burgeoning technical agenda; balancing the needs of disparate constituencies (technologists, end-users and governments) in a positive environment where different views can be heard and respected; and supporting a multi-lingual global community.

When asked about the interplay between OASIS' mission and the burgeoning Open Source movement, the response of Carol Geyer, the OASIS Director of Communications, was intriguing: "Currently we do not see the advent of Open Source software impacting our activities. If anything, it is the broad adoption of OASIS work (e.g., ebXML, SAML, etc.) which drives new Open Source software development." OASIS does recognize a growing concern over intellectual property policies and how they affect the entire standards development community. Currently, the OASIS IPR policy takes a flexible approach, allowing the adoption of specifications that do, as well as specifications which do not, require the payment of royalties to implement (all specifications must otherwise be available on reasonable and non-discriminatory terms).

In a departure from the technical language of standard setting, Geyer summarizes part of the philosophy underlying the successful evolution of OASIS: "There is strong precedent supporting our structure as the right means to meet the needs of the marketplace. Throughout history, humans have strived for unity in economic affairs while still seeking to retain local autonomy (language, culture, etc.). By enabling groups to come together in an organic fashion to address universal challenges while preserving local control of their own accomplishments, OASIS creates a global environment that empowers individuals to work openly to advance the common good for mutual benefit." With an outlook that seeks to appeal to human nature rather than work against it, OASIS seems well poised to serve its industry for another ten years.

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OASIS At a Glance:

Date of formation	1993
Number of current members	More than 2,000 participants representing over 300+ member companies, plus individuals
Number of classes of membership	Three - Sponsors, Contributors and Individuals (including a special category for non-profit groups, academic and local government agencies)
Number of countries represented by current members	Over 100
Number of hosted initiatives	More than 45
Number of issued standards or specifications:	OASIS Open Standards (those that have been approved by the OASIS membership at-large) include: ebXML CPPA V 2.0ebXML MSG V 2.0ebXML RIM V 2.0ebXML RS V 2.0DocBook V 4.1DSML V 2.0SAML V 1.0
Supported websites:	http://www.oasis-open.orghttp://www.xml.org

	http://xml.coverpages.org
	http://www.ebxml.org
	http://www.legalxml.org
	http://www.uddi.org
	http://www.cgmopen.org
Companies currently represented on the OASIS board	BEA Systems Intel Corporation Hewlett Packard Microsoft Sun Microsystems The Federal Reserve System IBM Corporation
President and CEO	Patrick Gannon
Vice President	Karl Best
Director of Communications	Carol Geyer
Director of Membership	Scott McGrath
Total staff	12