

ebXML Adoption Update

November 2002

Executive Summary

The OASIS ebXML Awareness Team has brought together the information in this document in collaboration with OASIS member organizations and UN/CEFACT partners to give a wide-ranging picture of the adoption of ebXML today¹.

The original technical specification work on ebXML was completed and made public in May of 2001, and subsequent work is now continuing between OASIS and UN/CEFACT jointly on further developing and enhancing the original specifications.

Major vendors have developed ebXML support into their flagship products along with new vendors who are providing unique ebXML capabilities and implementations of the specifications. Key industry sectors and government entities are deploying new eBusiness applications that are serving as benchmarks in the adoption of ebXML globally.

Our aim with this document is to show decision makers how ebXML is developing today, and how they too can gain critical advantage for their businesses and partners by implementing ebXML both for their established systems and also to solve previously difficult business needs through the technology that ebXML provides.

No truly successful technology today is an island, so what is also important is to see how ebXML is adapting, evolving and growing through deployment into real world situations. Over 2,000 people contributed to the original ebXML development efforts, and now those continuing efforts are being augmented by projects showing how ebXML is being used in tandem with other technologies such as web services and XML as a whole. Seeing how industry groups and standards bodies are working to bring their vocabularies into alignment around ebXML is also the beginnings of a new level of interoperability that the industry as a whole has been seeking for more than a decade.

The projects and implementations described here are truly groundbreaking and exciting in how they are delivering on the promise of ebXML and advancing and improving eBusiness worldwide.

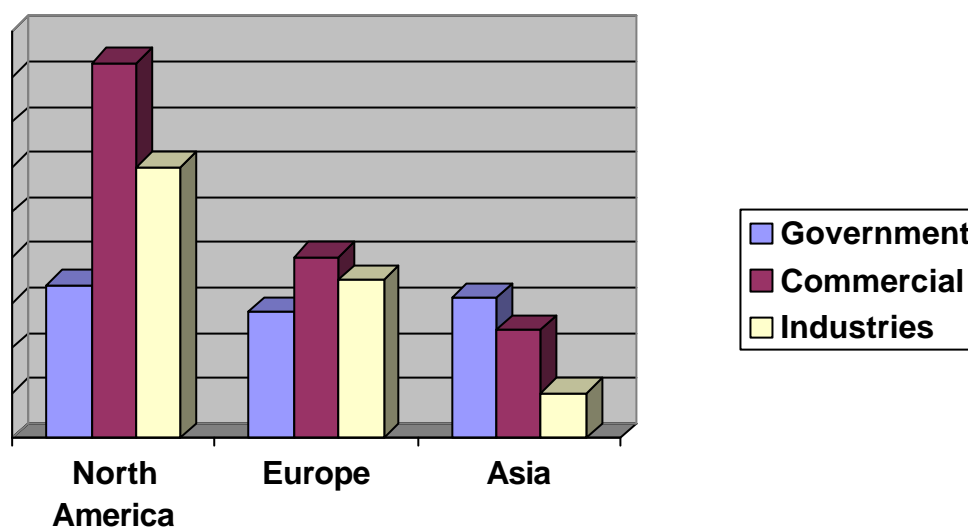
From: the OASIS ebXML Awareness Team; http://www.ebxml.org/ebxml_jmt

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The ebXML global landscape

To help see the complete picture we have organized the work on ebXML into three sections, North America, Europe and Asia-Pacific, and two categories arranged by Commercial and Government work. We have also tallied the industry groups who have endorsed ebXML as their approach, and then we have tabulated available vendor products from almost thirty companies worldwide, from the worlds' largest software companies through to small industry solution providers.

Figure 1 Comparison of ebXML adoption by region, number / size / scope of projects².



The information is correct as of November 2002. We plan to update this document on at least a quarterly basis.



North America

Traditionally this region is viewed as that which brought EDI into fruition. Today the volume of EDI adoption still exceeds that of any other region. While many people expect that based on this the use of ebXML here will be dominant too, actually Europe and Asia are matching this regions efforts in adopting ebXML. However, key industry sectors in which the US is dominant worldwide are once again leading with ebXML as they did with EDI and this can be expected to influence those sectors particularly.

Commercial

Key North American industry groups that have committed to utilizing ebXML with their existing vocabularies and standards include: OAG, AIAG, UCC/RosettaNet, GCI, DISA/X12, OTA, AIAG, Covisint, UIG, SWIFT, PIDX, and papi-Net.

² The graph X-axis is a composite scale based on assigning a factor out of 10 to each ebXML project; each industry adopting ebXML is assigned a score of 5. The totals then reflect the relative activity by region and category.

The projects listed here³ are presented in order of those with most anticipated business scope and impact first, followed by those that are more technology development orientated second.

Projects:

Title / Sponsor	ebXML use ⁴	Summary	Technical	Schedule	Contact(s)	Link(s)
General Motors, AIAG	ebMS, CPPA, BPSS	New business system for Used Vehicles Purchasing	details	Pilot done; production in 2003	Sally Fuger, AIAG.	http://www.aiag.org
Electric Reliability Council of Texas, Inc (ERCOT)	ebMS	ERCOT replaced File Transfer Protocol (FTP) solution with ebMS. The software passed ERCOT certification testing and is moving into production (more).	details	Full production end of 2002.	Dick Brooks, Systrends Inc.	http://www.ercot.com/Participants/FTPReplacement/index.htm
UCC / ebXML Messaging Certification	ebMS	Sponsored by the UCC, this interoperability test uses the Drummond Group interoperability test and trademarked processes. The test will use ebMS v 2.0. (more)			Beth Morrow, DGI.	http://www.drummondgroup.com/html-v2/pr_10-01-02.html
Standards for Technology and Automotive Retail (STAR)	ebMS, BPSS, CPPA	Involves an implementation using ebMS 2.0 and is ongoing through efforts of OAGI, XMLGlobal, National Automobile Dealers Association (NADA) and many other automotive industry leaders.	details	Pilot completed; production early 2003	Bryan Baker, XML Global, and Tony Blazej, Open Applications Group.	http://www.starstandards.org/ and http://openapplications.org
TransCanada Pipelines	ebMS	In a partnership between Sun, their customer TransCanada Pipelines, and an integrator, the team for the Cortex Project is using a JAXM, the Sun ONE Message Queue to integrate ebXML and Web Services. (more)	details		Peter Kacandes, Sun Microsystems, Inc.	http://www.sun.com/software/sunone/wp-cortex.pdf

³ The list is representative, and is not intended to be exhaustive. New initiatives are added as the marketing team is updated on the specific details. To date over 50 projects have been identified.

⁴ For acronym descriptions see the Acronym section at the end of document

Title / Sponsor	ebXML use [†]	Summary	Technical	Schedule	Contact(s)	Link(s)
Open Applications Group	ebMS	Automotive Industry Action Group (AIAG) and OAGI: Conducting a pilot project using a Business Object Document and ebXML to prove Product Data Management (PDM) interoperability. (more)	details		Tony Blazej, Open Applications Group.	http://openapplications.org
Open Applications Group	Core Components	Identifying and defining CC as it relates to the OAG Business Object Documents (BODs).	details	First quarter 2003 deliverables.	Team lead: Garret Minakawa, Oracle	http://groups.yahoo.com/group/oag-general/
AIA Boeing Project	ebMS - CPPA - BPSS - Registry	Broad scoped phased effort that concentrates on the complexity of Boeing (and AIA) processes.	details		Sally Chan, The Boeing Company	
DISA Registry/Repository (DISA DRIVE)	Registry - CPPA	ebXML Registry demonstration project for XML standards developed by DISA partners.	details	Site is live, with testing / updates ongoing.	Alan Kotok, DISA.org	http://www.disa.org/DRIVE
WEDI/SNIP	CPPA - ebMS	Work Group for Electronic Data Interchange (WEDI) TM /Strategic National Implementation Process (SNIP) is working to support the automated discovery of health care partners for compliance with the Health Insurance Portability and Accountability Act (HIPAA).	Engaged in the development of an Electronic Trading Partner Agreement (eTPA) based on CPPA.		William Kammerer Email discussion information is available upon request.	http://www.wedi.org/
papi-Net Consortium	Registry - ebMS	The papiNet Consortium, the organization developing business data exchange specifications for the paper industry, to the industry groups announced support for ebXML. Its enveloping specifications explicitly endorse use of version 2.0c of the ebXML Message Service specifications.	papiNet payload in an ebXML message envelope using SOAP.		Alan Kotok, DISA.org	www.papinet.org ; http://www.papinet.org/agreement.asp?file=InteropGuidelines2R00.zip

Title / Sponsor	ebXML use ¹	Summary	Technical	Schedule	Contact(s)	Link(s)
Open Source ebXML Registry RI	Registry	This open source project is developing a reference implementation. The project at Source Forge is developing a client user interface. The client software, currently in alpha release, provides a user interface (UI) for graphically visualizing registry content.	Java based implementation libraries		Farrukh Najmi, Project Manager, Sun Microsystems, Inc.	http://ebxmlrr.sourceforge.net/
Covisint	ebMS	The automotive exchange has committed to implement the ebMS using the OAG BODs for business content in lieu of development of automotive industry XML standards.				Covisint.org

Government



Governments in North America have been in the vanguard of developing the systems to support eGov and government for the citizen. This is reflected in the activities of those governments in supporting and adopting ebXML and providing project and implementation support.

The projects listed here are presented in order of those with most anticipated business scope and impact within the government sector first, followed by those that are more technology development orientated second

Projects:

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
US Center for Disease Control (CDC)	ebMS	Using ebXML Messaging for transporting public health surveillance data. CDC is integrating and testing the messaging layer across various public health partners and the CDC.	Custom version of ebMS developed for project use.	Developed ebMS software, going to initial production in 2003.	Mark Conde, Architect.	www.cdc.gov/cic/functions-specs/function_1.htm
OAG /NIST- ebXML Test Bed	ebMS, BPSS, CPPA, IIC	Conducting collaborative interoperability, limited scope demonstrations relevant to OAG membership (1-automotive, 2-STAR), with tool and engineering assistance from NIST.	details	Initial test-bed is deployed and work is ongoing on extending content and functionality	Nenad Ivezić, NIST.gov	http://www.oagi.net/QuickPlace/b2btestbed/ (Login required)

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
OAG / NIST - ebXML Test Bed Registry	Registry	Provide a semantic registry of industry vocabularies, ebXML artefacts and validation of ebXML registry specifications; registry for support of OAG/NIST test-bed work	details		Tom Rhodes, NIST	http://www.NIST.gov
Canadian project using ebMS and BizTalk	Registry, ebMS	Canadian project was built to a smaller subset of the ebXML MHS to specifically make calls to an ebXML v 2.0 registry system.	Using ebXML to provide open bridge between proprietary systems.	Completed, April, 2002	Gerrie Abrahamson, PWGSC	http://www.stockquotes.com/integrator/newsrelease.asp?news=27187&ticker=XMLG&lang=EN
PWGSC Canada	Registry	Involves EDI transformation using ebXML approach via registry services .	Demonstrate ebXML technology able to process high-volume production data.	Funded, with initial phase of work commencing	David Webber, XML Global.	

Europe



The eBusiness landscape in Europe is defined today by the use of the UN/CEFACT EDIFACT messaging standards. As such Europe has seen since the inception of the ebXML work the vital needs for developing European implementations of ebXML around those technical specifications. Europe has also hosted a significant amount of the development work of ebXML, and is now the center of the continuing CEFACT eBusiness technical architecture based work.

The European Union has also recognized the vital role that ebXML can play in standardizing interchanges between member countries and as such is aggressively promoting a number of initiatives. Allied with this has been the early work of the European eBusiness standards bodies themselves in facilitating pilot projects to demonstrate using EDIFACT payloads with ebXML components.

With the significant focus of the EU itself on ebXML, this has now been reflected in commercial initiatives that are underway specifically for applications within Europe. There is also significant commercial cooperation and adoption of XML based specifications between North America and Europe, examples include SWIFT intra-banking, OTA travel specifications, and UCC and EAN all of whom are also embracing ebXML technologies.

Commercial

Significant European electronic business standards groups and associations that have committed to utilizing ebXML with their existing vocabularies and standards include: EAN, CEN / EBES, The e-Centre and SWIFT.

Projects

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
European Steel 24-7 Marketplace	ebMS	Steel 24-7, the European steel marketplace owned by three of the worlds largest steel companies, Arcelor, Corus and Thyssen-Krupp, is using ebMS as the preferred transport protocol to communicate with trading partners. Pilots and tests are also underway using ebMS, both for XML and EDIFACT message interchange.	details	Currently using ebMS V1.0, will upgrade to ebMS V2.0 in 2003.	Anders Tholén, Ferrologic.com	http://www.steel24-7.com
EAN International	ebMS, BPSS, CCSD.	Is actively assisting in the development of a deployment guide for the use of ebXML Messaging Service within the framework of the EAN.UCC XML System including BPSS, CPPA, Core Components, and CCSD. Conducting an example on development of CC and BIE within CCSD (aggregates). EAN International has developed a process suite called 'Simpl-eb', in July 2001.	details	Development in progress	Frederico Franciosi, EAN International.	lists.oasis-open.org/archives/announce/200009/msg00009.html
European Transmission System Operators (ETSO)	CCSD	As a European organization of electric power transmission operators, the ETSO is building a data dictionary that supports ebXML Core Components, the feature that provides semantic interoperability.	details	Development in progress	Alan Kotok, DISA.org	http://www.edi.etso-net.org/role-model-cc-eic/core-components.pdf

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
European ebXML Interoperability Pilot	ebMS - simple CPPA - simple IIC - some BPSS	This group of 10 or more participants are defining interoperability tests for rollout in mid-2003 for demonstrating ebMS interoperability from core to extended or advanced functions. They also intend to include tests for a real-world business scenario being developed by one of its sub-teams.	Sponsored by OASIS and CEN-ISSS (eBES)		Pim Van der Eijk from OASIS (their European Consultant)	
Dimon Software, Iceland	ebMS with EDIFACT transactions	Iceland secretary of Industry and Trade, Valgerdur Sverrisdottir, opened the SARIS conference on e-Business on April 17th. One of the main focus areas at this conference is the rapid emergence of business messaging using the UN specified ebXML framework.	details	In production	Rúnar Júlíusson	http://www.dimonsoftware.com

Government / EU

Governments in Europe and the European Union (EU) itself have been tracking and supporting the ebXML development. Now significant programs are being funded and the following table shows the scope of these efforts today.

The projects listed here are presented in order of those with most anticipated business scope and impact within the government sector first, followed by those that are more technology development orientated second.

Projects

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
Single European Electronic Market (SEEM), IST: ADAPT	All aspects	Using ebXML as a baseline focused on SME using XML representations.	Study	.		
Single European Electronic Market (SEEM) - Netherlands OpenXchange	ebMS - CPPA - BPSS	The full OpenXchange runtime engine and associated components automatically use the CPPA and include a transaction manager for BPSS.	details	Collaborative government and private industry project for 2003	Fred vanBlommestein, Berenschot.com	

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
SEEM: eBip	BPSS, and ebMS	Tile marketplace is part of Cluster for Electronic Commerce in Europe C-ECOM.	Start ebXML-conform marketplace interface and BPSS for the tile industry.			
SEEM: OPUS	Registry	Provide capability to maintain a unified Pan-European registry of healthcare related products using ebXML.	Joint effort between Greece, Italy and Belgium			
SEEM: REGNET	Study	REGNET aims to set up a Network of Cultural Service Centres through Europe that will provide IT-services dedicated to cultural heritage organisations (e.g. Museums, Library, art galleries, etc.).				
SEEM: SCOOP	Planning	A system that supports cooperative planning in worldwide manufacturing and service networks, implemented for textile/garment and printing industries.				
Tambag's METU-CENG ebXML Registry/Repository	Registry	A student implementation based on the RS and RIM 1.0.			Yusuf Tambag, ceng.metu.edu.tr	www.ceng.metu.edu.tr/~e102830/ebXML
Software Research and Development Center (SRDC) - Middle East Technical University (METU), Ankara, Turkey	ebMS	METU-SRDC is currently working on an automated generation of a CPA from two CPPs; as well as using RosettaNet PIPs as ebXML BPSs.	details			www.srdc.metu.edu.tr
Open ebXML Laboratory	Registry, ebMS and CPPA at a minimum	This open source implementation supports the primary architectural components and an ebXML GUI workbench.	details		Anders Tell, Toolsmiths.se	www.openebxmlab.org

Asia-Pacific



This region has always had special needs that traditional ASCII based EDI transactions struggled to fulfil. Therefore Asia has been one of the early adopters of XML based technologies to solve the challenges of their business needs.

This has been particularly true of government-sponsored research through the NTT in Japan, and this has led to adoption projects in Korea, China, Taiwan and Australia with XML as the region works to develop coherent commerce components.

Commercial

Traditionally the region has followed key North American industry groups who are major customers of products from the region, and particularly the automotive and electronics industries.

The RosettaNet initiative within the electronics industry has been a focus for the region, and that standard work is now being continued under UCC. Therefore the UCC is taking prior RosettaNet work and now migrating that to the equivalent ebXML technologies. Thus ebXML requirements are coming to the fore across Asia as the following commercial project details show.

Characteristically government work is matching commercial work within Asia as local governments look to assist their own industries gain advantage with ebXML technologies. Australia has a long history of promoting EDI and specifically UN/EDIFACT based systems for their export markets and this is being reflected in Australian initiatives around ebXML.

Projects

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
VENCorp - Victorian Energy Networks Corporation	ebMS	VENCorp have just gone live with an industry wide B2B implementation using the ebXML messaging infrastructure, carrying an aseXML document as the payload. The aseXML is the Australian energy industries data description language.	details	In production handling up to 100,000 transactions daily.	Neil Belford Architect, FRC B2B System VENCorp	http://www.vencorp.com.au

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
Australian Distributed Grid	Aspects from ebMS, Registry, BPSS, CCSD, with a new peer architecture.	Through Tradegate ECA and GTD Technologies Pty Limited, this project is loosely based on existing ebXML work such as BPSS, UDDI, Core Components, Message Handling services and also a significant influence from X.500/LDAP. The project uses a distributed computer grid for dialup, broadband and wireless connections.	Peer-to-peer environment developed with use made of some aspects of ebXML (note: not ebMS compatible at the communications layer).	A first demonstration was made on 20 August 2002.	David Lyon, Australia.	
Korea Trade Network (KTNET)	Registry, ebMS and CPPA	Provides an ebXML Registry service to support eTrade in Korea. The registry will serve the GXMLHub project and in Pan-Asia.	details	First phase online	Ho-beom Jang, Application Team Manager, 82-2-6000-2745	www.GXMLHub.com/english/index.html
Japanese Kasumi Project and Electronic Commerce Promotion Council of Japan (ECOM)	ebMS - with optional CPPA - IIC	Using ebMS and the BPSS as a basis to develop a next generation EDI system named JEITA-Collaborative EDI (Japanese Electronics and Information Technology Industries Association).	They are developing a set of test cases, plans and framework for interoperability (and coordinating with IIC).		Yukinori Saito, ECOM.com	

Government

Governments in Asia have traditionally worked closely with their commercial sector. Examples include governments like Singapore and Malaysia who have devoted significant resources to creating digital technology facing economies as their competitive advantage.

The projects listed here are presented in order of those with most anticipated business scope and impact within the government sector first, followed by those that are more technology development orientated second.

Projects

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
Australian National Office of the Information Economy (NOIE)	Registry	Committed to ebXML at their Interoperability and eBusiness summit in April 2002.	.	Request for information for registry and registry authority released in July 2002. This project is in its initial stages.	Victor Pawley, NOIE	www.evision.com.au and www.noie.gov.au
Australian National Office of the Information Economy (NOIE)	SME deployments	Has a committee to define and address capabilities that will support small business use of ebXML, such as integration of ebXML into business applications like Quickbooks.	This first phase is to define the business requirements, and then engage business to work toward solutions. This committee is in its initial stages.		Victor Pawley, NOIE	www.noie.gov.au
Center for eCommerce Infrastructure Development (CECID) at the University of Hong Kong	Registry, CCSD	An open source implementation of ebXML Registry 2.0 hosted by CECID. CECID effort is based on the Source Forge RR effort, where many of the CECID contributed. CECID is acting as a test registry. The team also needed to customize or create vocabularies to define the documents exchanged between enterprise clients.	details	First deployment completed online	Thomas Lee, cecid.hku.hk	www.cecid.hku.hk/Release/PR09APR2002.html
Distributed Systems Technology Centre (DSTC)	Architecture	The Elemental Project seeks to extend the ebXML meta-model (research of enterprise modelling languages and methodologies).	details		Dr Zoran Milosevic dstc.edu.au	http://www.dstc.edu.au/Research/elemental-ov.html

Title / Sponsor	ebXML use	Summary	Technical	Schedule	Contact(s)	Link(s)
Korean Institute for Electronic Commerce (KIEC)	Registry	Headed by Jasmine Jang, the team has developed a flexible architecture to support a distributed national and other information registries. KIEC has 116 online vendors (http://www.ecom.or.jp/ecom_e/latest/ecomjournal_no4/ecomjournal_e04.pdf).			Jasmine Jang, KEIC	lists.oasis-open.org/archives/ebxml-cppa/200205/ppt00002.ppt
Taiwan ebXML Registry and Repository (XR2)		The NII Enterprise Promotion Association's portal supports the Taiwanese XML community. This is an ebXML registry based on RIM 1.0. The Department of Industrial Technology, Ministry of Economic Affairs supports this effort in Taiwan.				
FreebXML		The Steering Committee of freebXML announced the launch of a new initiative that aims to foster the development and adoption of ebXML and related technologies. Pronounced as "Free b X M L" freebXML is an international effort comprising of founding members from technology firms, government organizations, standardization bodies, and academic institutions.	details	Website launched and two source code projects are available (more)	Thomas Lee, cecid.hku.hk	http://www.freebxml.org/



Commercial ebXML Products

The table here provides details of commercially available products and services from vendors that support the ebXML specifications⁵. These are categorized under broad groupings that reflect the marketplace the products are targeted at. Links are provided to the individual vendors websites.

Table 1. Available commercial ebXML Products and Services.

Company	Category	ebXML	Website
BEA	eBusiness integration	ebMS, BPSS	http://edocs.bea.com/wli/docs70/ebxml/
Bind Systems	Modelling / BPM	BPSS, CPPA, UMM	http://www.bindsys.com
BitDeamons Ltd	Messaging	ebMS	http://www.bitdaemons.com
Briyante	Messaging	ebMS	http://www.briyante.com
bTrade	eBusiness Services	ebMS	http://www.btrade.com
Component-X	Java Components	ebMS	http://www.enterprise-component.com
Cyclone Commerce	eBusiness integration	ebMS	http://www.cyclonecommerce.com
Dealersphere	Automotive industry	ebMS	http://www.sun.com
Dimon Software	Messaging	ebMS	http://www.dimonsoftware.com
Drake Certivo	Education services, Certification	ebXML teaching and training	http://www.certivo.net
Drummond Group	Certification	ebXML compliance	http://www.drummondgroup.com/
eXcelon Corporation	BPM	ebMS, BPSS	http://www.exln.com/products/bpm
Fujitsu Limited	Application Server	ebMS, CPPA, BPSS	http://interstage.fujitsu.com
HanMaek IT	Messaging	ebMS	http://rnd.hmit.co.kr/ebMS/

⁵ This list is assembled from currently available products that have been commercially announced, from OASIS member companies, and from media sources. It is intended to be illustrative only; companies are listed in alphabetic order by company name. Listing here is not any certification or endorsement of the companies or products themselves.

Company	Category	ebXML	Website
IONA	eBusiness integration	ebMS	http://www.iona.com
IPNet Solutions Inc.	eBusiness Services	ebMS	http://www.ipnetsolutions.com
iWay Software	eBusiness integration	ebMS, BPSS	http://www.iwaysoftware.com
Killdara Corp	Messaging	ebMS	http://killdara.com/products/vitiris.htm
Mercator	eBusiness integration	ebMS	http://www.mercator.com
Oracle	Application Server	ebMS	http://otn.oracle.com/products/ias/9ias_twp.pdf
SeeBeyond	eBusiness integration	ebMS	http://www.seebeyond.com
Sun Microsystems	Network computing	ebMS, Registry	http://www.sun.com
Sybase Inc	eBusiness integration	ebMS, BPSS, CPPA	http://www.sybase.com
Sterling Commerce	eBusiness services	ebMS	http://sterlingcommerce.com
TIBCO Software Inc	eBusiness integration	ebMS	http://www.TIBCO.com/products/exchange.html
Vitria	eBusiness integration	ebMS	http://www.vitria.com/products/standards/?st=ebxml
WebMethods	eBusiness integration	ebMS	http://www.webmethods.com
XENI	eBusiness integration	Registry	http://xeni.co.kr
XML Global Technologies	eBusiness integration	ebMS, BPSS, CPPA, Registry	http://www.XMLGlobal.com
Zenaptix	BPM	BPSS, ebMS	http://zenaptix.com

Common ebXML Acronyms

Like any technology sector ebXML has its own set of terms and usage. The following table serves as a guide.

Term	Description
ebMS	ebXML Messaging Services – component that implements the messaging interchange specifications.
CPP	Collaboration Protocol Profile – used with messaging services to configure access to an ebMS system.
CPPA	Collaboration Protocol Profile and Agreement; OASIS TC (technical committee) defining standards for business agreements for interchanges. http://www.oasis-open.org/committees/ebxml-cppa/
CCSD	Core Component Supplemental Documents
BPSS	Business Process Specification Schema; defines a business process in achieve a physical business interchange between parties
Registry	An ebXML Registry component conforming to the OASIS ebXML Registry specifications.
IIC	Implementation, Interoperability and Conformance; OASIS TC (technical committee) defining test suites for ebMS components.
Core Component	Conceptual term for nouns and collections of nouns (BIEs – business information entities) that represent primitive business units of information.
SME	Small to Medium Enterprise; US Government term for a small business (under 500 employees).
ebXML	Electronic Business XML

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