THE GILBANE REPORT™ ▲▲▲

E-CATALOGS: STRATEGIC ISSUES FOR SUPPLIERS

E-catalogs are at the center of e-commerce systems. Catalogs (we'll drop the cumbersome "e-") are where, for example, SKU data meets photographs, demographic data meets pricing rules, personalization information meets promotional rules, and configuration rules meet presentation. Catalogs are the environment where buyers and sellers transact. Catalogs are also where commerce meets complexity.

Most e-commerce implementations are still primitive and only work with an embarrassing amount of brute force. Content from internal systems is seldom more than partially integrated. Systems might have a finely-tuned connection to ERP pricing data but a "throw it over the wall" approach to marketing copy or shipping information, or vice versa. Integration of supplier information naturally lags even further behind.

Fully integrated e-business supply chains can't be achieved without suppliers being able to participate as full partners in catalog information and process integration. Because suppliers come in all sizes, their inclusion requires low to moderate levels of cost. Because most suppliers need to provide input to multiple catalogs, a certain amount of complexity is unavoidable. At the same time, suppliers *must* be proactively getting their content included into new and changing markets, and they need to do so in a way that leaves them in control of their business. This month we provide some guidance to suppliers faced with the need to build catalogs or provide their content to exchanges or buyer managed catalogs, but are stymied by the variety of options and unhelpful marketing literature.

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OVERVIEW — E-COMMERCE CONFUSION

The market for e-commerce software has changed dramatically in the last six months. Sellside component software vendors like BroadVision, InterWorld, and Vignette realized they were going to get squeezed by new types of competitors, including messaging, platform, database, and EAI vendors. Buyside suppliers like Ariba, Commerce One, and Clarus saw they had to expand beyond pure procurement as the competition from ERP vendors like SAP and Oracle became more of a threat. The very real danger was, and is, that they would be relegated to point solutions that would have to follow the lead of the handful of larger players that will emerge, would lose account control, and fail to meet the growth expectations their investors had been led to expect. It is only a slight simplification to say that most vendors decided that the way to deal with this was to become a complete solution provider with a "platform".

A direct result of this is that vendors now use positioning language that tells you almost nothing about what their real expertise and value is. Instead, it sounds like each is the only partner you need for e-business. The lack of specificity is necessary to avoid exposing what functionality they don't provide, and to make sure they don't alienate partners whose products have overlapping capabilities. And of course they all read Red Herring, Forrester, and the reports from Morgan Stanley, Goldman Sachs, Bear Stearns, *etc.* (who naturally read each other's material) so use similar language. The result is that it looks like there are easily over a hundred products that "solve your e-commerce problem". Anyone who follows software markets knows that even six major players in a market is too many. Even a savvy IT person or analyst who reads all the marketing literature with the usual amount of skepticism and persistence required can easily be defeated by the homogeneous buzzword-rich language everyone is using. Finding out exactly what a particular product does requires the skills of a Sherlock Holmes. In such an environment the utility of terms like "buyside", "sellside", "supplier-side", and "platform" can't be counted on.

Suppliers Suffer More

Nowhere is this more confusing than to suppliers in B2B markets. Why? simply because there are more variables. Suppliers who are in the middle of a true many-to-many butterfly model have the most difficult e-commerce problems to solve. Most companies are both buyers and sellers, but those with the biggest challenge are those who buy components that are incorporated in products they then sell (as opposed to simply buying office supplies for internal use). Very big suppliers are all over this, even if they don't quite know how to put all the pieces together. However, most suppliers can't afford either the IT resources or the risk of patching together multiple product technologies that may produce e-catalog content incompatible with a new buyer-or-exchange-owned catalog. Surprisingly, supplier issues have received short shrift until recently.

The confusion resulting from all the similar product descriptions is something we have to live with for a while. It should get a little better after the market consoli-

dates. In the meantime, to help you focus on the kinds of solutions to build, we'll look at the heart of any e-commerce solution, *i.e.*, the catalog, from the perspectives of suppliers.

WHAT IS AN E-CATALOG[1]?

There is not a simple answer to this. The term is being used in many different ways. Sometimes "e-catalog" refers to an abstract set of content, sometimes to a specific collection of product content, and sometimes to the presentation of product content.

One way to think of an e-catalog is as a database, or a view into a database, of product information combined with transaction information. A useful e-catalog can't really exist without transaction content. For example, a buyer can't complete a transaction without (at least potentially) changing the content of the catalog (*e.g.,* by purchasing the last available product). There also has to be transaction content available for order status checking. There may be separate systems involved but we expect them to appear separate less and less as we become accustomed to e-commerce.

An e-catalog is a dynamic database that at a point in time is instantiated for presentation to a potential buyer. The fact that the database is dynamic is obvious, but the full force of what this means is under-appreciated. Keeping customers happy means keeping your catalog up-to-date. But keeping your catalog up-to-date seems to impose impossible integration requirements if the information can change in seconds or less. It is even more challenging when configuration and personalization rules are applied to catalog content. (We would love to hear from any readers who have actually implemented such a catalog.) We don't want to discourage anyone – building an e-catalog with real-time integration of relevant systems is an appropriate target as long as you are realistic about what it involves, and what is practically achievable.

And how many do you need?

If you are a supplier you need at least one catalog. If you are small enough that you don't have the resources to develop your own e-catalog, there are e-catalog vendors who will take your paper catalog and create an e-catalog for you.

Many, if not most, suppliers will need their product information included in multiple catalogs. If your products have been in multiple paper-based catalogs or in multiple buyer or reseller databases in the past, you need to assume you will need *at least* as many output channels for your product content as before. Market maker exchanges don't reduce the number of catalogs; so far they are an additional channel requirement.

In spite of all the support for XML, by the time catalog content is all put together it is not necessarily something that can be easily integrated with other catalogs. One reason is the value-added proprietary software the catalog application vendors add. For example, Requisite and CardoNet compete partly on their catalog

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[1] We use the terms "catalog" and "e-catalog" interchangeably. Any B2B catalog being built today is by definition primarily an e-catalog. Even though the "e-" is redundant, it remains occasionally useful for emphasis and clarity.

searching software. Their value is in the catalog schema and *format* that facilitates their enhanced searching. Content aggregators, like ec-Content, provide value because of their product *content.* Either way, you need to consider the business reasons for choosing one over another even though the vendors naturally sell product features. One product's search might be sexier than another's, but that shouldn't sway you if the largest buyer or exchange in your market is using a different catalog format or if dynamic integration is a stronger requirement than improved searching. The design of a catalog vendor's schema is a compromise between rich and deep features on the one hand and breadth and integration flexibility on the other.

So what do you do? How do you support multiple e-catalogs and possibly a paper-based catalog as well? Ideally, you build your own master database/catalog that is rich and flexible enough to support whatever catalog output requirements you have now or might have in the future. Keep in mind you will have to make the same kinds of compromises catalog vendors do. The difference is that you can make decisions about which compromises are acceptable for your business. This requires not just XML support but an XML infrastructure/architecture that isn't limited to a single, or a small number of catalog schemas. This is the approach taken by vendors like SoftQuad and Poet.

So where one set of vendors looks at a catalog as a particular *schema*, another set looks at a catalog as a collection of particular *content*, a third set look at a catalog as a dynamic database *architecture*.

A key requirement of many e-catalogs is the ability to include configuration logic.

Catalogs, configurators, and complications

One of the earliest web catalog software applications, Saqarra, was actually a combination catalog/configurator that guided customers to configure, *e.g.,* a PC, that would work. There were built-in rules about which components needed to be paired, *etc.* These rules also worked with the Saqarra search facility. This is obviously a very useful and important function – something that should be included in all but the most basic e-catalog applications. However this creates a catalog content management problem, and a challenge for implementors.

The fact that e-catalogs can contain these kinds of rules complicates matters for suppliers looking to have products in multiple catalogs. The logic and tools for building these rules is proprietary to each e-catalog vendor, and the chance of identical configuration behavior is therefore small. Rule logic is significantly more difficult to share than descriptive product data. Even where two different e-catalogs can implement identical configuration rules, who is going to make sure it is done? How much will this cost? The burden is unavoidably on the supplier.

There is a category of vendors including Calico, Fire Pond, and Trilogy that focus specifically on the high-end of the configuration market for complex products (telecom switches, airplanes). Suppliers who need this level of configuration capability are faced with the challenge of integrating a configurator with a catalog. Given the real-time response required of e-catalogs the chaining together of multiple applications should be minimized whenever possible. The more applications strung together, the more cumbersome the solution, the slower the performance, and the more suspect the reliability. In some cases there will still be a need for special-purpose configurators designed, *e.g.,* only for salespeople. But these

shouldn't be built without careful consideration of the extra cost and maintenance. You can expect some configuration logic to be included in most e-catalog applications in the future.

For now, the relationship between catalogs and configurators is murky. When in doubt, choose a solution that involves a single application rather than one that calls for integrating multiple.

STRATEGIC CONSIDERATIONS

If e-catalogs weren't so central to e-commerce it would be tempting to wait a bit to learn from the experience of others. Unfortunately, competitive pressures won't allow most of you that luxury. Because vendors are all struggling to position themselves as long term survivors you can't depend on them to provide the same level of guidance they would provide in a more mature, and for them secure, market. You have to assume they will continue to sound alike for a while longer. This makes it even more critical to understand the strategic issues and implementation approaches *before* you invest in a solution.

Content
Some solutions are better at handling certain types of content. For example, there is a big difference between managing: prices in a relational database or spreadsheet, marketing copy or images in a document management repository, and HTML files in a content management system.

Some solutions require you to give up more control of your content than others. There are benefits to full service solutions, but you need to consider the risks, whether legal or strategic, of giving the responsibility of managing different content types to a third party.

One of these risks deserves special attention because for all the talk about it in the B2C market it's import is underestimated in B2B markets. How content is presented is an important *branding* issue. Providing product content to market maker exchanges that present it in catalogs stripped of brand identity or look-and-feel may not matter, but is a decision you want to make yourself.

Product characteristics
Product complexity and rate of change are two of the most essential. For example, the more complex a product is the more important it is that sophisticated configuration rules be incorporated either by you, or by whoever manages the catalog. The more often product components or configurations change, the more important it is to have a rapid update capability.

Markets & customers
We could devote an entire issue to different industry requirements. Here we mention just a few questions to consider.

B2B vs. B2C. Fundamentally, these are architecturally closer than most people realize. For example, personalization and branding are important in B2B, and quick responses from businesses suppliers and further down the chain can be necessary for acceptable B2C commerce. However, do *not* assume that a successful B2C e-commerce solution will work in your B2B environment.

Sellside/buyside mix. What is the shape of the butterfly model appropriate for your business? Are you at the start of the product chain so your sellside "wing" is much larger than your buyside? Or do your suppliers outnumber your customers so your buyside wing is larger? Do you already have a buyside system in place that you need to integrate? Do your suppliers already have sellside systems in place you should integrate?

Customers. How much self-service do they want? How much will they tolerate? Who do they expect customer service from? What is their tolerance for separate organizations handling sales-related customer service and product-support-related customer service?

Media. Do you also need to deliver catalog content to the market in print or PDF? If so, how will you coordinate the content management and workflow processes with your e-catalog channels?

Integration
Which internal back-end systems does your catalog need to integrate with? Which of your supplier systems need to be integrated?

Which exchanges do you need to integrate with? Is there a variation in the integration requirements? Is there a dominant player? If so what procurement software do they use? Which catalog format do they use? Ditto for direct buyers.

Processes
There are a number of things that happen to e-catalog content between its creation and delivery to the buyer in a final catalog. For example, configuration rules (what is possible), procurement policy rules (what is allowed), personalization filters (what is desired), and presentation filters (brand and look and feel) all need to be applied by someone in some order.

Figure 1.
Various rules and filters modify e-catalog content. *Who* **applies these rules, as well as** *when* **and** *how* **they get applied are important considerations.**

Pricing rules

Configuration rules

e-catalog

Procurement rules

Personalization rules

Presentation & branding rules
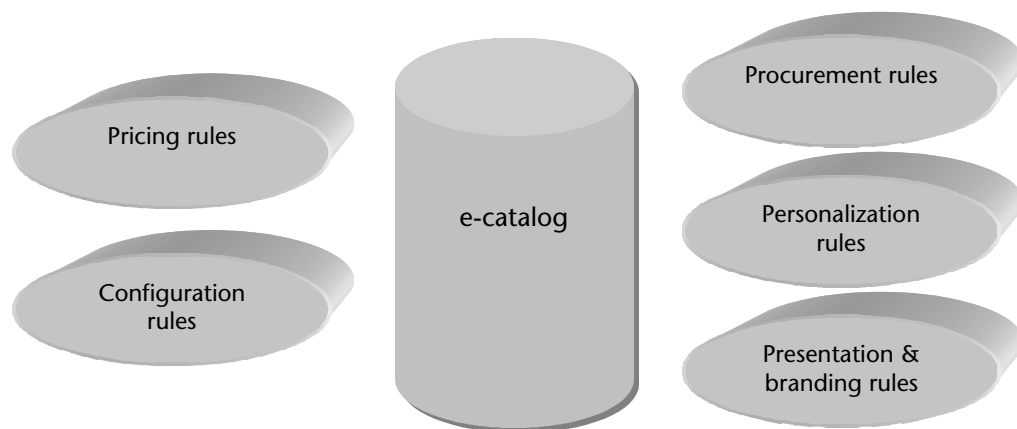
The ownership and order of these will be different depending on whether the final catalog is managed by you, a direct buyer, a catalog vendor, or an exchange. Mapping all these possibilities out will help you narrow down potential solutions.

Business goals
Your business is primarily defined by who your customers are and secondarily by who their customers are. In terms of an e-catalog strategy; who do you deliver your catalog content to? How do customers actually purchase? Is it through an exchange or direct from you after finding the product on an exchange? The specific nature of your relationship with your customers determines what kinds of e-catalog implementations make sense.

Yes, exchanges are changing a lot about the way business is done. But for most suppliers exchanges are simply another channel (for the sell-side of their business). Today, exchanges do not monopolize the relationship with the customer because they are not capable of it. As they mature they will need to provide more value than price transparency and will build stronger relationships with customers. You should be thinking now about how you want to relate to exchanges as this evolves.

E-CATALOG IMPLEMENTATION APPROACHES

Building the ideal e-catalog with real-time integration with all the relevant systems and processes may not be realistic yet. But, it is worthwhile to think about what such a system would look like. You don't want your architecture to preclude implementing such a system or components of such a system as they become feasible.

Once you have considered the issues we described in the previous section you are ready to think about the basic implementation approaches. You might decide to start talking to potential solution providers before you decide on an approach, but you shouldn't talk to them without first thinking about what kind of approach best fits your particular situation. Below, more or less in order of difficulty, we summarize the three basic approaches to consider.

1.) Build nothing - chuck that content over the wall
Give your content to an aggregator or catalog system vendor that will do all the work of converting your content for use with particular exchanges, procurement systems, or catalog schemas or formats.

Companies like Requisite and CardoNet will be happy to take your content and turn it into *their* e-catalog formats. You may have to pick more than one vendor if there are multiple exchanges in your industry that use different catalogs, but either way someone else is doing the work.

This has some obvious disadvantages. Giving someone else control of your product information (you may control the source information but they are the ones who modify and present it.) is always risky. Accuracy, branding, and how successful searches are, all depend on someone else. Also, think about how the update process will work.

"Today, exchanges do not monopolize the relationship with the customer because they are not capable of it. As they mature they will need to provide more value than price transparency and will build stronger relationships with customers."

2.) Build your own catalog

There are different ways to go about this depending on your size, resources, and what is happening in your market.

If you are in a market with a single dominant exchange or buyer, or a market where exchanges may not make sense and you are selling direct, you can optimize your own e-catalog to meet your needs, or the needs of the dominant exchange/buyer. It may make sense to largely copy a dominant player's solution if it does what you need. This could take the form of using the same catalog product, or using the same schema directly or as a starting point.

Theoretically, if you are a big enough to monopolize your market either alone or together with a competitor (one or more) you can design your own catalog schema and let buyers come to you and perhaps license your catalog. This is an unlikely option for most of you because of market forces and legal constraints, but we include it for completeness.

In either case there is quite an assortment of tools and products you can use. These range from SiteServer/Access/Front Page, to the catalog products like Saqarra, to e-commerce platforms.

An "e-commerce platform" could mean any number of things and is a judgment call for consultants and analysts to bang heads over these days. But whether you use application integration platforms from BEA or IBM, or e-commerce platforms like InterWorld or ATG, or content management/personalization platforms like BroadVision or Vignette, you will have access to additional tools and integration hooks to take advantage of. Keep in mind that some products were originally designed for other applications, such as content management, or specifically for the B2C market, and may not have all the features, *e.g.,* integration components, you need. With a platform you can then either build or buy component applications to run on top of the platform.

3.) Build a multi-catalog database

All solutions are going to involve XML, but this is the XML infrastructure solution. Rather than base your catalog on specific XML catalog schemas you design a master XML schema and build a repository from which you can extract content for all the appropriate exchange, procurement, and catalog schemas.

This is the ideal solution, but also the most difficult. A more practical version of this approach is to architect the most flexible dynamic content database you can and complement it with fine-tuned pipes to the catalog schemas most critical to your business. This puts you in a better position to adapt quickly and easily to new catalog schemas.

To the extent that families of schemas and frameworks developed by RosettaNet, XML.org, BizTalk, or others meet your requirements, you should take advantage of them as much as possible. But it is not currently safe to bet that any of these will completely meet your needs.

–Frank Gilbane

INDUSTRY NEWS

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SYNCML RELEASES FIRST SPECIFICATION & REFERENCE TOOLKIT
5/31/00

SyncML, the initiative founded by mobile technology industry companies Ericsson, IBM, Lotus, Motorola, Nokia, Psion, Palm, Inc. and Starfish Software, has released its first specification and reference toolkit. Delivered months ahead of schedule, the Specifications and Reference Toolkit source code are available in the Supporter area of the SyncML Website located at www.syncml.org. With the immediate availability of the first set of released SyncML specifications and development code, Supporters can deliver feedback directly to the SyncML initiative and start product development work. Bringing SyncML-based products one step closer to the public, the specifications include a full description of the XML based SyncML format, and a first look at the SyncML synchronization protocol. The toolkit will also include information on using SyncML over HTTP, WAP and OBEX. Since the announcement of its formation in February 2000, nearly 200 companies have announced their support for SyncML. The goals of the initiative are to develop a universal synchronization standard for the mobile computing industry. SyncML compliant products will be able to exchange information seamlessly across a wide range of operating platforms and communications technologies. Supporters of the initiative now include the founding eight companies and organizations such as Symbian, Excite@Home, PUMATECH, fusionOne, Xircom, and BT Cellnet. A complete list of the Supporters can be found on the Website. www.syncml.org

NEWMARKET'S MEETINGBROKER.COM DELIVERS XML SCHEMA FOR BIZTALK
5/31/00

Newmarket International, Inc. announced the submission of a complete, end-to-end XML schema for MeetingBroker.com, its new Web-based service that facilitates the open exchange of sales information among meeting planners, site selection or e-RFP sites, hotels, and destinations. The schema will work with the BizTalk Framework, an e-commerce framework that provides a set of implementation guidelines that facilitate open integration using Internet standards. MeetingBroker.com translates leads sent from e-RFP sites and deposits them directly into sales automation applications installed at individual hotels and destinations. MeetingBroker.com employs an open bi-directional architecture based on XML. In 1999, the HITIS (Hospitality Industry Technology Integration Standards) Advisory Committee and the OTA (OpenTravel Alliance) endorsed XML as the primary standard for platform mapping. The MeetingBroker.com schema utilizes XML and is available on the BizTalk web site at: www.biztalk.org, www.newsoft.com

LUTRIS ANNOUNCES PROFESSIONAL VERSION OF ENHYDRA JAVA/XML OPEN SOURCE APPLICATION SERVER
5/30/00

Lutris Technologies, Inc. announced Lutris Enhydra Professional 3.0, the latest Lutris-certified and supported version of the Open Source Enhydra Java/XML application server. The product includes an integrated suite of development and deployment tools for consultants, system integrators and corporate IT departments building Internet and wireless applications. Lutris Enhydra Professional 3.0 is the latest addition to the Lutris product family, which includes Lutris Enhydra Standard currently available from Lutris, and Lutris Enhydra Enterprise scheduled for release in the fall. The professional version includes an integrated suite of tools that speed overall development and deployment of Enhydra applications, enhanced support for development of wireless applications, comprehensive documentation, and additional customer support. Lutris Enhydra Professional 3.0 supports wireless development with the inclusion of a wireless development tutorial, and a wireless development kit that includes versions of the YoSpace WML browser–an all Java Nokia phone emulator, and the WAPtor WML editor. Using these tools, developers can build applications that transparently support varied devices such as PCs, phones, PDAs, and kiosks. Integrated development and deployment technologies include InstantDB, Inprise's JBuilder Foundation 3.5, and PostgresSQL 6.5.3. InstantDB, an Open Source all Java relational database provides developers with the convenience of an easy to install, standards-based development database. The comprehensive set of award-winning development tools in JBuilder Foundation 3.5 offer developers an integrated environment from which to develop their entire application.

Forte for Java Community Edition 1.0 from Sun is also included on the product CD. Pricing for Lutris Enhydra Professional 3.0 has not yet been announced. The product is scheduled for release next month. www.lutris.com

QUADRALAY ANNOUNCES WEBWORKS PUBLISHER PROFESSIONAL 6.0
5/30/00

Quadralay Corporation announced the general availability of WebWorks Publisher Professional Edition 6.0. WebWorks Publisher Professional automates the conversion of FrameMaker documents for online delivery. WebWorks Publisher Professional, an upgrade to Quadralay's WebWorks Publisher 2000 product, adds support for XML and XHTML. It also introduces WebWorks Help 2.0, a fully-XML-based online help system. WebWorks Publisher Professional provides a set of simple-to-use functions for mapping FrameMaker documents and converting their content and graphics into a selection of online delivery formats. WebWorks Publisher Professional creates online output that is immediately usable, with no editing or post-processing required. WebWorks Publisher Professional also provides comprehensive template creation, re-purposing and customization capabilities. WebWorks Publisher Professional scales to accommodate any size of enterprise online publishing project. Its collapsible tree views now afford project management and structural flexibility because they provide the ability to manage any number and size of books within the scope of a single project. In addition, they allow enterprise-wide projects that blend FrameMaker-based documents with other formats such as Microsoft Word, and other publishing tools such as Robohelp. WebWorks Publisher Professional is priced at $995 for Windows platforms and $1,295 for UNIX platforms. Pricing for shared UNIX systems and international versions and for upgrading from WebWorks Publisher 2000 or WebWorks Publisher Standard Edition, a version shipped with Adobe FrameMaker 6.0, is available from Quadralay. Quadralay also offers a full set of training, consulting, technical support and template customization services. www.webworks.com

ARBORTEXT ANNOUNCES LAUNCH OF NEWEST E-CONTENT SOFTWARE
5/30/00

Arbortext, Inc. announced the launch of Epic 4.0. Principal among Epic's enhancements is the introduction Epic E-Content Engine (E3), a server-side system that enables e-businesses to attract and retain more customers by providing more personalized, dynamic and easily searchable content for improved pre-sale and post-sale interactions. In addition, Epic 4.0 adds compatibility with Oracle 8iFS to the list of repositories that Arbortext supports. E3 forms the centerpiece of a Web-based system to assemble, process and personalize business-critical content for delivery to the Web, print, wireless devices and other media. Running under a Web server, E3 offers powerful content processing capabilities that can be triggered through commands sent over the Web. Developers can write processing routines in a choice of several programming and scripting languages including C, C++, Java, TCL and Perl. Developers gain access to E3's capabilities through its support for the Web-standard Document Object Model (DOM) Application Programming Interface (API). E3 can convert Microsoft Word, Adobe FrameMaker and Interleaf content to XML through the Epic Interchange option. In addition, E3 can capture XML from Web forms with the Forms Engine option. E3 is capable of transforming XML for many different purposes, including HTML for Web browsers, WML for cellular phones, Open Electronic Book (OEB) for eBooks, PostScript and PDF. Through stylesheets based on XSL E3 adapts content to the capabilities and limitations of each device. For example, customers can control the size and font of text, the amount of text that fits in a single page, and the format of an automatically generated table of contents. Available as a new standard feature of Epic Architect, graphical DTD development for XML DTDs is the starting point for quick development of a DTD. This feature, along with Arbortext's free-form editing, enables rapid prototyping and helps reduce development time substantially compared to traditional DTD development. Epic 4.0 adds DOM Level 2 core support to existing DOM Level 1 support along with Range interface. Epic Editor, Epic Editor LE and E3 may be programmed using C, C++, Java, Perl, TCL and Arbortext Command Language (ACL). Epic Editor's "Tag Alias" feature lets customer present alternate tag names to authors,

which allows authors working in different language to create content based on the same DTD. With this release, all versions of Arbortext software support 16-bit Unicode. Epic 4.0 will ship in July 2000. All Arbortext customers on maintenance are eligible to receive the Epic 4.0 upgrade at no charge. www.arbortext.com

IBM POSTS XML MESSAGING & INTELLIGENT AGENT TECHNOLOGIES ON ALPHAWORKS
5/24/00

IBM alphaWorks has posted two new Java tools in XML messaging and intelligent software for developer feedback – SOAP for Java Q and ABLE – as part of IBM's ongoing efforts to promote open standards on the Internet. SOAP for Java Q XML-based messaging technology has better synergy with other Internet standards than its predecessor. ABLE provides a framework and graphical editor for constructing intelligent software agents in Java. The SOAP specification defines a simple, Internet-friendly way of using XML to send messages and to access services. SOAP is important to e-business because it provides a flexible, natural way of building applications of which pieces are distributed across networks. With XML and SOAP, each business can choose its own internal implementation technology, such as Enterprise JavaBeans, Microsoft's Component Object Model (COM), or traditional languages such as COBOL. In addition to HTTP, SOAP services can now be accessed through a variety of message transports. For example, bindings could be defined to IBM's MQseries, or to electronic mail messages (SMTP). SOAP data representations and structures have been aligned with the proposed W3C XML Schema language, and it is now possible to apply those encodings in a much broader range of message patterns (e.g., streaming, one-way, multicast, etc). Using SOAP, any business can access a service, such as a parts catalog, or send a purchase order, to or from any other business. SOAP makes it easy to bind to the programming language or object system of the developer's choice. SOAP's built-in support for Remote Procedure Calls (RPC) also makes it easy to invoke methods on remote objects, using XML and HTTP, so developers can use SOAP to create distributed systems within their own organizations. This posting on alphaWorks is in Java, and is designed to work well with Websphere and other servlet-based systems. IBM and Tivoli's ABLE is an agent construction toolkit based on the JavaBean architecture. Targeted to the needs of Java application developers, academicians and researchers working on intelligent agent software, ABLE provides an extendable library of JavaBean software components, called AbleBeans, that includes inferencing and learning algorithms. ABLE's graphical Agent Editor allows users to quickly construct and test intelligent agents. The library of reusable AbleBeans provides forward and backward chaining inferencing, fuzzy reasoning, genetic search algorithms, and neural network learning capabilities. Application developers can focus on the unique requirements of their application and use the intelligent AbleBean components to create solutions. ABLE is designed to allow Java application developers to easily construct hybrid intelligent agents out of IBM and third-party software components. ABLE provides a flexible mechanism for integrating software agents with Java client and web applications. www.alphaWorks.ibm.com

SOAP seems to be gaining momentum. It was relatively uncontroversial when first announced, and now all kinds of vendors, including Microsoft, are anxious to talk about their contribution to it.

POET ANNOUNCES MAJOR UPGRADE TO ECATALOG SUITE
5/23/00

POET Software announced a third major release of its popular B2B eCatalog management solution. Targeted specifically for the emerging class of eSuppliers, POET eCatalog Suite Supplier Resident Edition is a comprehensive supply-side solution for creating, managing, and distributing custom eCatalogs to customers, eProcurement networks and eMarketplaces. The release of POET eCatalog Suite Supplier Resident Edition expands catalog management with a browser based interface for online access by buyers to manage their eCatalog requirements, an expanded schema for multi-supplier aggregation, and complete scheduling capabilities across POET eCS' range of functions. For suppliers using SAP's R/3, tailored data extraction has also been added. POET eCS supports all major eCatalog exchange formats as well as data export to websites and print catalog applications. Using POET eCS, suppliers import content to a central eCS data repository, or "master catalog" of products. Buyer profiles store each recipient's preferred catalog content, contract pricing, and preferred commodity codification system, which are customized to reflect the supplier's specific attribute, media, and industry requirements. A powerful transformation engine creates custom eCatalogs in all major catalog formats, including xCBL, cXML, and BME-CAT. For other XML and flat file formats, the Catalog Developer's Kit (CDK) facilitates rapid creation, customization and deployment to ensure all customer requirements are met. With POET eCS, each eCatalog is customized for the user, destina-

tion, and protocol. POET eCS Supplier Resident Edition will be available in mid- June with pricing starting at $60,000. www.poet.com

WEBMETHODS TO ACQUIRE ACTIVE SOFTWARE
5/22/00

webMethods, Inc. announced it has signed a definitive agreement to acquire Active Software, Inc. in an all-stock transaction. This acquisition brings together two vendors whose software solutions address the integration requirements of global companies and industry trading exchanges, both within the enterprise and across B2B trading networks. The companies expect that the transaction will close during the third quarter of 2000, pending completion of customary closing conditions and receipt of Active Software and webMethods stockholder and required government approvals. Under the terms of the agreement, Active Software's stockholders will receive 0.527 of a share of webMethods common stock in exchange for each share of Active Software common stock. The transaction, valued at approximately $1.3 billion based upon the Friday, May 19, 2000 closing price of webMethods common stock, is expected to be accounted for as a pooling-of-interests. Approximately 13.6 million shares of webMethods stock will be exchanged for all outstanding shares of Active Software. webMethods was advised by Morgan Stanley Dean Witter, and Active Software was advised by Goldman, Sachs & Co. and Thomas Weisel Partners. Until now, companies have been forced to adopt separate solutions for uniting internal business processes, and then sharing and integrating these processes with external trading partners, either directly or via B2B marketplaces and trading exchanges. Upon completion of the acquisition, Active Software's products and operations will be combined with webMethods. Phillip Merrick will continue in his role as president, CEO and chairman of webMethods, with Jim Green, Active Software's CEO, joining the team in the role of CTO and executive vice president, product development. Green will also join the webMethods Board of Directors. Other members of the Active Software management team will join the web-Methods management team. Active Software's Santa Clara, Calif. offices will become the West Coast headquarters of webMethods. The combined companies will have nearly 600 employees worldwide. www.webmethods.com, www.activesw.com

VIGNETTE TO ACQUIRE ONDISPLAY
5/22/00

Vignette Corporation and OnDisplay, Inc. announced that they have signed a definitive merger agreement under which Vignette will issue 1.58 shares of its stock for each outstanding share of OnDisplay. The combination of Vignette's V/5 suite and OnDisplay's XML-based business-to-business infrastructure products will create a comprehensive offering for companies building businesses online. OnDisplay's B2B infrastructure products enable organizations to integrate more closely with their customers, suppliers and business partners through the real-time exchange of information and transactions. OnDisplay's XML technology allows critical business information – such as purchase orders, inventory status checks, invoices and product catalog data – to be integrated, aggregated and exchanged between multiple suppliers and distribution partners quickly and efficiently. This functionality increases a business's online selling effectiveness and extends its trading networks to suppliers and vertical marketplaces through secure, guaranteed online connections. Together, Vignette and OnDisplay will offer eBusiness applications that power automated cross-enterprise transactions and highly personalized end-user interaction. B2B commerce requires automation of business transactions between trading partners and integration of back-office systems with Web-based commerce systems. For example, purchase orders implemented as cXML based transactions or connections to ERP systems using standard XML interfaces will increasingly be required for online marketplaces and the companies who wish to participate in them. Combining the business process automation capabilities of OnDisplay with the real-time personalization, analysis and content management capabilities of Vignette's V/5 eBusiness platform will enable companies to tightly coordinate their suppliers and distributors to create true "collaborative" commerce. With the acquisition, Vignette will have approximately 2,000 employees, 870 customers and global operations – from the U.S. to South America, Europe, Asia and Australia. In a stock-for-stock, tax-free transaction, each outstanding share of OnDisplay will be exchanged for 1.58 shares of Vignette. Based on fully diluted shares outstanding and both companies' closing price as of Friday,

May 19, this transaction represents a purchase price of approximately $1.7 billion. Vignette will account for the transaction using purchase accounting and expects to close the transaction in the third quarter, subject to approval by OnDisplay's stockholders and other customary closing conditions. www.vignette.com, www.ondisplay.com

This is an important move for Vignette. There is a bit of a rush among vendors to provide more pieces of e-commerce solutions. Customers are increasingly reluctant to deal with a large number of overlapping applications from vendors who may not compete directly from a functional point of view, but do compete for account control and market mindshare. Vignette is making a platform play.

MARKET-TOUCH ADDS XML TO UPDATE
5/22/00

Market-Touch Corporation announced the latest release of its hosted Web solution, Market-Touch version 2.5. Market-Touch Corporation integrates XML technology with its DataGem Server to fully enable personalized, 1-to-1 marketing and sales collateral creation. The latest version of its software includes simplified content management features, usability enhancements, and improved Internet performance. With the introduction of the Data-Gem XML Tag Language, marketing departments can now empower their sales forces with automatically generated, personalized documents that are consistent with the look and feel of any collateral they have traditionally used. When a sales representative generates a dynamic document, Market-Touch retrieves relevant information from the DataGem Server and structures and formats it according to the rules in the XML template. The result is a professionally written, corporate-standard document that conveys exactly the right message for each and every prospect. Prior to version 2.5, Market-Touch provided ten templates for dynamic documents. Now, customers can create any number of document templates. As a hosted Web application, all enhancements to Market-Touch 2.5 are free to current customers, and do not require upgrades, updates, or customer-side IT or administrative support. Using the Market-Touch SMART implementation methodology, new customers can be up and running in as few as 3 weeks. Market-Touch 2.5 includes mobile support for the Palm VII Connected Organizer and integration with leading SFA solutions. www.market-touch.com

OVERDRIVE, MICROSOFT ANNOUNCE AUTHORING TOOLS FOR MICROSOFT READER
5/22/00

OverDrive Inc. and Microsoft Corp. announced a comprehensive set of authoring tools and services to enable publishers to easily create eBook titles based on Microsoft Reader with ClearType display technology. A beta version of the initial product, ReaderWorks Standard – which enables individuals to convert content from Microsoft Word, HTML, ASCII, OEB or image files into Microsoft Reader format – is available via free download from the ReaderWorks Web site. Through its ReaderWorks family of products, OverDrive offers publishers tools and services to join the eBook revolution. Individual authors, as well as large-scale production houses and datacenters, are able to easily and economically build eBook titles and repositories for Microsoft Reader. ReaderWorks Standard is a free Microsoft Windows-based application that enables users to build and customize Microsoft Reader-enabled eBooks from Word documents and HTML, ASCII, images or Open eBook Specification files. ReaderWorks Publisher is an upgrade that prepares Microsoft Reader-compatible titles for sale and distribution by eBookstores. With ReaderWorks Publisher, eBook authors can answer a few questions about their title and create XML files that contain marketing and copyright protection data in ONIX, XrML and Microsoft Digital Rights Management architecture. ReaderWorks Software Developers Kit includes developer's tools for integrating the automated production of eBooks in Microsoft Reader format. ReaderWorks SDK also permits software applications to add "save as Reader" support. ReaderWorks Professional is a suite of eBook conversion and quality control tools for volume producers of LIT files (Reader format) in a batch environment. OverDrive and its network of VARs offer publishers a range of education, training and conversion services, including turnkey systems. The ReaderWorks Standard beta version is available free of charge at www.readerworks.com. The other products in the ReaderWorks suite are expected to be commercially available within the next 90 days; pricing has not yet been announced. www.overdrive.com

We're still skeptical that e-books will have a significant affect on the commercial publishing market anytime soon (long term, definitely). However, there is not only increased activity among technology developers, but also a rapidly growing interest from the big commercial publishers.

WORLDWEB.NET ANNOUNCES EXPRESSROOM I/O

5/22/00

Worldweb.net announced their third generation content management solution, Expressroom I/O, which enables content to be entered from and delivered to multiple formats and devices. Because of its XML and Java-based open architecture, Expressroom I/O expands content management beyond just managing and delivering content on the Web. It enables syndicated content, live news feeds, and legacy information to be managed and delivered to multiple sources including web pages, cell phones, and other wireless devices. Expressroom I/O provides a reliable and scalable foundation for obtaining and creating content from multiple sources. Expressroom is then able to manage the interaction and deliver the content across fixed and wireless communication channels such as those using Wireless Markup Language (WML). Expressroom I/O uses XML to provide a highly sophisticated content management solution that is targeted to both web professionals and everyday users. It is designed to create, manage, deploy and deliver web content. Non-technical contributors effectively control content input and design/layout issues by using Graphical User Interfaces that provide a collaborative environment for managing XML-described site components. Content input and design/layout issues are separated from web site administration in Expressroom I/O, empowering non-technical end-users with the ability to make real-time content changes 'on the fly'. Expressroom site components are managed within a versioned, access-controlled, and XML-aware asset manager. It is then deployed to a page server that performs just-in-time transformation of XML-described content into any delivery format needed. By fully separating the web site development environment from the deployment environment, Expressroom I/O supports distributed content delivery for thousands of users and millions of page views. Newly supported inputs and outputs of Expressroom I/O include: WML, Kinecta Syndication Server. ScreamingMedia, QuarkXpress, and Oracle 8 and 8i databases. Expressroom I/O will be available at the end of Q2, 2000. Expressroom is sold on a monthly or annual subscription basis. www.worldweb.net

BOOKFACE TO PROVIDE SECURE DELIVERY FOR ONLINE CONTENT

5/22/00

In response to growing demand for quality content over the Internet, Bookface, Inc., announced its development of proprietary technology to deliver valuable content online securely. The Bookface delivery solution offers content providers a secure method for publishing their content directly on the Internet, enabling them to reach the entire Internet audience while protecting the integrity of their work and gaining appropriate credit and compensation. Internet users also benefit by being able to access content directly from their browser – without installing software or buying special hardware. Prior to Bookface, utilizing the simplicity and installed base of the Internet for displaying digital content was hindered by piracy. Websites either posted warning notices to reduce copying, alteration, and unauthorized redistribution, or packaged their content into secure files for delivery. File downloads represent an extra step that reduce convenience – online delivery allows content creators to place secure content on the web, so that users will not need to interrupt their reading to download. Slow modems and firewalls may also prevent downloads and installation of files or reader software. The Bookface protected, yet direct, avenue for delivering content also has the advantages of a centralized delivery system. Since content is served from one central location, publishers can easily control or limit access and track usage. The Bookface delivery solution will work flexibly with any business model. Content providers can charge access fees, subscriptions, per use charges, or leverage ad revenues to gain compensation from their content. Bookface technology will first be applied to their own web destination, www.Bookface.com. This website will deliver the ultimate reading experience to Internet users – actually opening books online. Regardless of whether they are logging in from a Mac, Windows, or Unix machine, Internet users will be able to read whole books via the site. Targeted towards providing a new marketing and distribution channel for the U.S. trade book market, the branded web destination will be launched in the summer of 2000. www.Bookface.com

VOICEXML FORUM SUBMIT VOICEXML 1.0 TO W3C
5/22/00

The VoiceXML Forum announced that the W3C has acknowledged the submission of Version 1.0 of the VoiceXML specification. At its May 10-12 meetings in Paris, the W3C's Voice Browser Working Group agreed to adopt VoiceXML 1.0 as the basis for the development of a W3C dialog markup language. The Forum's founding members, AT&T, IBM, Lucent Technologies, and Motorola made the W3C submission. Acknowledgement by the W3C will help to accelerate and expand the reach of the Internet through voice-enabled Web content and services. The VoiceXML Forum will host the next meeting of the W3C Voice Browser Working Group in September 2000. Since the release of VoiceXML 1.0 in March 2000, the Forum has nearly doubled its supporter membership to more than 150 companies. Based on XML, Version 1.0 of the VoiceXML specification provides a high-level programming interface to speech and telephony resources for application developers, service providers and equipment manufacturers. Standardization of VoiceXML will: simplify creation and delivery of Web-based, personalized interactive voice-response services; enable phone and voice access to integrated call center databases, information and services on Web sites, and company intranets; and help enable new voice-capable devices and appliances. More information about VoiceXML can be obtained at www.w3.org/Submission/2000/04/ or www.voicexml.org. The complete W3C Note, Voice eXtensible Markup Language (VoiceXML) version 1.0, can be obtained directly at www.w3.org/TR/2000/NOTE-voicexml-20000505/.

It is definitely time for this kind of a standard, and we are glad to see the W3C involved. We hope the standard will get the vendor participation it needs, and that the U.S. centric founding membership makes sure others, especially the Scandinavians, are involved.

EHELP CORPORATION & INFORMIX PARTNER TO SUPPORT ALURE
5/22/00

Informix Corporation and eHelp Corporation announced a partnership in a joint effort to support the ALURe specification. ALURe, the Aggregation and Logging of User Requests, is an open implementation of XML that tracks and reports usage patterns in Help and customer assistance systems

on Web sites. Led by eHelp, the ALURe Partner Program is designed to bring industry leaders together with a shared interest in promoting user assistance standards for the Web. The open ALURe specification defines how companies identify, track and modify trouble areas on their Web sites. By adopting this specification, companies can easily obtain valuable feedback and usability data about their site when using data mining, analysis and reporting tools. The ALURe specification and Informix Object Translator are for capturing and analyzing critical customer care information to improve customer service on the Web. Informix Object Translator, a data integration tool for mapping the relationships of XML objects to the Informix Foundation.2000 database server provides two-way transparent mapping between the ALURe XML model and the data collection model in the database. Informix Object Translator generates Java components to handle ALURe XML documents, making it easy to integrate ALURe transcripts with common business analysis tools. Any data mining and analysis tool that recognizes XML can use data gathered through ALURe. Adopting the ALURe standard allows developers to make continual Web site improvements that ALURe data point to, and alleviates the need to implement data gathering and reporting technologies into their online User Assistance Systems. www.alurexml.org, www.ehelp.com, www.informix.com

RATIONAL & COMMERCE ONE COLLABORATE
5/18/00

Rational Software and Commerce One, Inc. announced a UML (Unified Modeling Language) for XML schema mapping specification. The Rational Software and Commerce One joint collaboration provides a standard method to dramatically reduce the development time and increase the quality of schema-based, XML e-commerce applications. UML is poised to become the industry-standard language for specifying, visualizing, constructing, and documenting software systems. XML schema is emerging as a W3C recommendation for the definition of XML and is believed to provide a safer and more reliable way to define XML messages for use in e-commerce systems. By adding mechanisms for strong data validation, inheritance and other object-oriented structures not present in the DTD, developers can have a more efficient way to visually model e-business solutions. The UML profile announced today would provide developers with a systematic, graphical methodology for creating XML schemas. The UML for XML Schema Mapping Specification is available at Commerce One's Web site at

www.commerceone.com/xml/sox/index.html
and Rational's Web site at
www.rational.com/uml/index.jtmpl

WEBMETHODS TO EMBED B2BI IN TRADEMATRIX MARKETPLACE
5/18/00

webMethods, Inc. announced that i2 Technologies, Inc. has selected webMethods for integrating participating companies' systems with i2 TradeMatrix marketplace solutions. In this arrangement, i2 will resell and market webMethods B2B as the B2Bi solution to companies interested in integrating with i2's TradeMatrix. webMethods B2B will be embedded in TradeMatrix to provide TradeMatrix marketplaces with a comprehensive business solution that enables companies to deploy business-to-business portals. webMethods B2B will allow the secure integration of a company's in-house planning and execution systems, across Internet firewalls, with TradeMatrix marketplace solutions. This automatic system-to-system integration will allow participating companies and their trading partners to achieve integrated business workflows. Through this partnership, TradeMatrix customers will benefit from webMethods' rapid development and deployment capabilities. www.i2.com, www.webMethods.com

MICROSOFT UNVEILS LATEST VERSION OF XML PARSER
5/17/00

Microsoft Corp. announced the newest version of its MSXML parser with built-in support for version 2.0 of the Simple API for XML (SAX2). The decision to implement the SAX2 programming interface, rather than develop a new one, is a reflection of Microsoft's commitment to deliver the features its customers demand. SAX2 is designed to enable faster and more efficient processing of XML by allowing programs to read, review and process XML files without having to load the entire document into memory. The latest version of the MSXML parser, the third in a series of XML parser technology previews Microsoft began releasing in January 2000, provides another programming interface for building Web-based distributed applications based on standard XML messages. These releases allow Microsoft to achieve its goal of providing new features and updated support for standards in "Web time." In addition to the new SAX2 support, this release also adds more support for XSLT and Xpath. Development of SAX began in December 1997; its first release was in May 1998. SAX was a collaborative effort developed entirely by the members of

the XML-DEV mailing list. The SAX interface is free for commercial and noncommercial use. Although the list of contributors credits over 80 people, including some of the original developers of XML, David Megginson of Megginson Technologies Ltd. (www.megginson.com/) is considered to be the primary developer and maintainer of SAX. SAX 2.0 was released on May 5, 2000. The new release is available for immediate download at http://msdn.microsoft.com/xml/

LATEST RELEASE OF INTERWOVEN TEAMSITE DELIVERS MULTI-LINGUAL CAPABILITY
5/17/00

Interwoven, Inc. announced the availability of the latest version of TeamSite, which now serves the needs of content developers in Europe and Asia by allowing easy content entry for languages based on both single-byte and multi-byte characters such as French, German and Japanese. This means faster time-to-Web and reduced development costs for multi-lingual sites. With the latest version of Interwoven TeamSite software and XML-based TeamSite Templating, non-technical users can easily enter content and metadata on content for multiple languages. This makes it easier for organizations to extend the responsibility for content development and management throughout the global organization. Because metadata can also be in the local language, content can be more easily syndicated across multiple sites and can be easily searched and shared with other applications. Development costs associated with multi-lingual sites will also be reduced because local teams are now empowered to manage content in local languages. The entire task-based workflow process, from content development, to quality assurance, and approval through deployment can now be directed in local languages, which reduces the cost and decreases the time required to manage content. The latest version of TeamSite Templating now has improved database integration and content re-use functionality. TeamSite Templating enables content reuse by separating content from presentation, which allows content creators to more easily contribute without having to worry about the details of presentation. This release extends TeamSite Templating's XML-based architecture by providing the ability to "nest" page components which extends content reuse capabilities. The TeamSite Templating page generation engine combines content elements and Interwoven OpenDeploy can then be used to automatically deploy these pages

to the production environment including application servers for dynamic delivery. TeamSite 4.2.1 is available immediately.
www.interwoven.com/products/teamsite

This is an example of what we need to see a lot more of. After-the-fact-translation is not a sufficient multilingual strategy. We need tools that support the creation and management of multi-lingual content – tools integrated earlier on in the process.

ORACLE SHIPS INTERNET FILE SYSTEM
5/16/00

Oracle Corp. announced availability of Oracle Internet File System (iFS), which combines the simplicity of the Windows file system with the powerful information management features of Oracle8i. Now with iFS, companies can easily manage all their content in a single repository, content which is currently scattered across PC desktops, document management systems and web sites. This innovation yields tremendous gains in efficiencies for e-Businesses faced with the mounting problem of managing the variety and high-volume of content – not just data – being generated by the Internet, business-to-business exchanges, e-commerce and enterprise portals. In spite of the proliferation of the Internet and tremendous innovation within the software industry, the file system has been virtually unchanged in the past 20 years. Oracle iFS is a file system designed for the Internet. It brings order to today's document chaos, supporting the storage and management of over 150 different file types, including documents created using XML. Independent software vendors (ISVs), especially XML and image document management application vendors, are embracing iFS as a means to innovate their applications rapidly—delivering advances in functionality which were for all intents and purposes impossible to achieve under the primitive architectural constraints of the Windows file system. The availability of Oracle iFS marks a number of software innovations. Firstly, iFS breaks the link between the file system and operating system. iFS frees files from the operating system so that they can be accessed from any popular computer in much the same way that the Web browser freed applications. iFS delivers long overdue files system features such as versioning, check-in, check-out and advanced searching. Secondly, Oracle is first to provide native XML support in the file system, providing companies with the first secure and

scalable means of managing high-volumes of XML files. Thirdly, Oracle is the first to offer completely open Java APIs to the file system allowing ISVs and developers to add, modify or override iFS's default features. Oracle iFS includes: Drag and drop filing, Management of over 150 file types, Browser-based access from any operating system, Advanced search and version control, and an iFS Developers Kit. With general availability of Oracle iFS, comes availability of iFS-based services from Oracle. Oracle Consulting now offers Oracle iFS Quick Start for rapid implement iFS and Oracle8i in five business days or less. Oracle University will be offering two Oracle iFS courses in Summer 2000: "Oracle iFS Administration" and "Developing Applications with Oracle iFS." Oracle iFS is generally available worldwide and is free with Oracle8i. iFS is available for immediate download to developers at Oracle Technology Network (OTN). www.oracle.com

We are very curious to see how this fares. We have pushed for the convergence of database and file system capability since the early days of "compound document architectures" (remember those?). The problem has always been one of transition (as Microsoft has argued).

ARBORTEXT TO PROVIDE XML CONTENT MANAGEMENT SOFTWARE BASED ON ORACLE iFS
5/16/00

Arbortext, Inc. announced the availability of Arbortext's Epic Editor and Epic Editor LE now with new support for Oracle Internet File System (iFS). Customers can use the combination of Arbortext's technology and Oracle iFS as a content repository, allowing companies to deliver more personalized, dynamic and easily searchable content for e-publishing, e-commerce and B2B e-marketplaces. The combination of Arbortext's industry-leading XML technology and Oracle Internet File System means that customers now have access to a complete XML content management solution. Arbortext's Epic Editor and Epic Editor LE support Oracle iFS through the addition of both server-side and client-side components and will be available July 2000. Arbortext's pricing for the Repository Adapter to connect Epic Editor and Epic Editor LE to Oracle iFS starts at $400 per user.
www.arbortext.com

ARTESIA TO OFFER ORACLE INTERNET FILE SYSTEM FOR TEAMS
5/16/00

Artesia Technologies announced its plans to support Oracle Corporation's Internet File System (iFS) within Artesia's TEAMS software. Users of Artesia Technologies' digital asset management solution will be able to utilize iFS to migrate streaming media into the Oracle 8i database, to gain added transactional control over heterogeneous rich media content, and to enact a single backup and recovery scheme for all content. Artesia Technologies' customers will benefit from iFS and its automatic XML parsing, as it extends TEAMS' support for the XML family of functions for extensible metadata handling, information exchange, and structured content management. Artesia Technologies' customers using Oracle iFS will also continue to benefit from TEAMS support for both file system-based as well as in-line storage. www.artesiatech.com

INTELISYS PARTNERS WITH MERCADO TO OFFER MULTI-CATALOG SEARCH
5/15/00

Intelisys Electronic Commerce Inc. and Mercado Software announced an e-marketplace infrastructure that enables intuitive search across multi-supplier catalogs without the need for supplier data normalization. Mercado Software's IntuiFind technology enables the normalization of multiple suppliers' data into a single virtually aggregated catalog, relieving suppliers and trading exchange sponsors from the expensive and lengthy rationalization process. This supplier-managed content process allows suppliers to quickly and easily post their products to the trading exchange. IntuiFind provides user-friendly interaction, allowing users to easily browse comprehensive offerings, compare items and instantly make purchases from any of the participating suppliers. Mercado Software's IntuiFind technology will be integrated into all Intelisys-Powered communities. Mercado Software's IntuiFind complements Intelisys ConnectTrade for electronic marketplaces because it is uniquely suited to searching complex, multi-supplier environments. IntuiFind helps customers find exactly what they want regardless of spelling, terminology or how products are categorized. By using a series of knowledge banks and linguistic tools, the software allows free-form text queries that are correlated with all product information stored in a database or across multiple data sources. www.mercado.com, www.intelisys.com

This is one approach to a problem we discuss in the main article this month. It could be useful, but notice that "multi" does not necessarily mean "any". Also, see our discussion on content control.

SOFTLOCK.COM ACQUIRES CHILI PEPPER, INC.
5/15/00

SoftLock.com, Inc. announced that it has acquired Chili Pepper, Inc., an advertising agency and consulting firm. The acquisition enables SoftLock.com to leverage Chili Pepper's online marketing expertise to further expand SoftLock.com's existing eMerchandising capabilities. SoftLock.com will capitalize on Chili Pepper's expertise in strategic brand consulting, direct marketing, consumer research, media buying and creative services, intensifying SoftLock.com's position as a market maker for premium content. The integration of Chili Pepper's marketing services with SoftLock.com's existing services, digital rights management and commerce-enabled distribution, positions SoftLock.com to be a comprehensive solution for publishers of premium content. Packaging, positioning and promoting digital goods online requires highly targeted direct marketing expertise. The SoftLock.com market making approach allows customers to merchandise their premium digital goods to highly targeted consumer segments quickly and efficiently. SoftLock.com's patented combination of technology and services provide a comprehensive solution to marketing valuable digital goods, combining content security, targeted content merchandising and a complete multi-channel eCommerce distribution system. The combination of SoftLock.com and Chili Pepper teams will result in a strategic fusion that increases the bandwidth of the total organization and further differentiates SoftLock.com as a market maker for premium content versus its technology-based, security-focused competitors. www.softlock.com

eXCELON INTRODUCES PORTAL SERVER
5/15/00

eXcelon Corporation introduced two new products that lower the barrier to participate in B2B eCommerce and create information-rich B2B portals. eXcelon's B2B Portal Server is a new platform that automatically collects and publishes business content from anywhere in a partner network to a central, interactive eBusiness site. Xpress, part of the

eXcelon B2B Integration Server product family, is new B2B technology that quickly connects an organization to thousands of partners to create cross-organization business processes that increase revenue, improve operational efficiency and allow end-to-end visibility and control of business operations. To provide a central location for products, services and information stored in a partner network, organizations can deploy eXcelon's new B2B Portal Server. The Portal Server aggregates, manages and publishes content from the partner network to create highly interactive, personalized eBusiness sites that connect partners to live business information. Highly customizable, the Portal Server enables organizations to create a central, customizable location for viewing anything from product catalogs to more industry-specific content such as insurance policies and financial records. Based on XML technology, the Portal Server quickly integrates with a B2B network, providing a central viewing point for critical business data. With its data aggregation, search and personalization capabilities, users across the entire partner network gain increased efficiency, the means to make better business decisions and the ability to collaborate with partners all over the world. By providing partners with multiple levels of integration with the hub organization, eXcelon Xpress enables partners of all sizes and technical ability to integrate with a partner network with little or no investment in additional technology. When installed at the hub organization, as part of eXcelon's B2B Integration Server, Xpress enables partners to log into the partner network with only a browser or handheld device. With the browser, partners can submit sales forecasts, initiate purchase orders and participate in any cross-business processes defined by the partner network. This option requires no technology investment from partners. For partners that would like to increase their level of integration and automation with the hub organization, Xpress can be installed on the partner side. eXcelon Xpress and the B2B Portal Server are available now for Windows NT and Solaris. The B2BPS is expected to be available for AIX and HP-UX in Q2 2000.
www.exceloncorp.com

IONA & OTHERS SUBMIT SOAP SPECIFICATION TO W3C
5/11/00

IONA Technologies announced that the W3C has acknowledged its submission of the latest version of the Simple Object Access Protocol (SOAP) specification. IONA was joined by Ariba, Commerce One, Compaq, DevelopMentor, Hewlett-Packard, IBM, Lotus Development Corp, Microsoft, SAP and UserLand Software (most of whom had their own

similarly worded press release) in submitting the specification and proposing the formation of a working group in the area of XML-based protocols. SOAP is an XML-based interoperability protocol that links applications and services together via the Internet, regardless of operating system, object model or programming language. IONA's iPortal Suite is a platform for integrating software applications and transforming them into B2B enterprise portals, which are unified points of access connecting an organization's corporate business to the web. The iPortal Suite's support for SOAP facilitates direct B2B interaction by enabling organizations to connect their enterprise portals to the e-business systems of their customers, suppliers and partners. IONA will continue to collaborate with the other submitters on the development and enhancement of SOAP to help it become the industry-standard mechanism that enables organizations to define enterprise portal services and transparently connect them with other enterprise portals. IONA is also developing SOAP mappings for CORBA.
www.iona.com

BASIS ANNOUNCES CHINESE MORPHOLOGICAL ANALYZER
5/10/00

Basis Technology announced the release of its Chinese Morphological Analyzer (CMA), an accurate segmentation engine for search and retrieval of Chinese text. Chinese Morphological Analyzer combines dictionary-retrieval technology with syntactic analysis to yield accurate text segmentation results for both the simplified and traditional written forms of the language. CMA boasts a comprehensive online Chinese dictionary of nearly 1,000,000 headwords, incorporating phonological, lexical and grammatical attributes. This information is used by CMA algorithms to segment and accurately disambiguate Chinese text using contextual clues combined with syntactic analysis. Morphological analysis of the Chinese language is an inherently complex problem. Chinese is written without explicit word boundaries, and it lacks the script transition cues of Japanese and Korean scripts. Furthermore, each character can potentially function as an isolated word (free morpheme) or part of a compound word (bound morpheme) or phrase. For these reasons, maintaining online forms and databases, and facilitating effective search and retrieval, are particularly difficult in the Chinese language. Chinese Morphological Analyzer is written in portable ANSI C++ and has a pure Unicode (UCS2) internal architecture that handles every major Chinese encoding format. Chinese Morphological Analyzer is licensed as a royalty-free software development kit (SDK) or as a source code distribu-

tion on all major platforms, including Win32, Solaris, HP-UX, Digital UNIX and Linux. www.basistech.com

S.W.I.F.T. & FIX TO CO-OPERATE ON SECURITIES STANDARDS
5/10/00

S.W.I.F.T. and FIX Protocol Limited (FPL) today announced that they are working with eight leading European Exchanges to define standards to harmonize access to the Pan European virtual blue chip market, planned to go live in November 2000. The European Exchanges who are involved include Amsterdam, Brussels, Frankfurt, London, Milan, Madrid, Paris and Zurich. While the recent mergers between some of these exchanges may reduce the numbers of parties involved, their CEO's are committed to supporting this initiative and explicitly endorse the FIX-S.W.I.F.T. collaboration. The initial output will be a Common Interface Specification for trade orders and notice of executions based on current FIX 4.2 Protocol specification. FPL is providing the technical expertise surrounding the business flows, whilst S.W.I.F.T. is providing their standard expertise and methodologies to facilitate and expedite the development process. All the business elements will be added to the ISO 15022 Data Field Dictionary, for which S.W.I.F.T. is the Registration Authority. Functionally equivalent S.W.I.F.T. messages will also be provided within the Common Interface Specification. Direct collaboration between S.W.I.F.T. and FPL will give rise to convergence and interoperability of message standards. The initiative will also result in the common deployment of the ISO 15022 Data Filed Dictionary, which will pave the way towards straight through processing as both protocols adopt XML. F.I.X., the Financial Information eXchange, is a messaging protocol, which is the de facto standard for pre trade and trade messaging in the global equity markets. FIX is administered by FIX Protocol Limited, whose members are exclusively drawn from the Investment Management and Broker Dealer communities globally. FPL is committed to promulgating standards in order to achieve the industry's goal of Straight through processing. As part of this aim FPL has developed an XML grammar for FIX. www.swift.com

LUTRIS ENHYDRA STANDARD 3.0 APPLICATION SERVER SHIPPING
5/10/00

Lutris Technologies Inc. announced the immediate availability of Lutris Enhydra Standard 3.0. Priced at $99, it is a supported and certified version of the Open Source Java/XML application server. The combination of Open Source software and commercial support and services provides the control and flexibility of an Open Source solution, plus the security of commercial support, training, and documentation. Lutris Enhydra Standard 3.0 provides an affordable option to corporate departments, small companies, consultants, and system integrators who have been priced out of the application server market and who have been unable to build high-end, data driven Internet applications that require the support of an application server. Several enhancements and improvements have been implemented in Lutris Enhydra Standard 3.0, including full support for building wireless applications for delivery on cell phones and PDAs. A new feature, Enhydra Director, which distributes user loads across multiple servers, significantly increases the product's scalability. Lutris Enhydra Standard 3.0 is covered by the same Open Source licensing terms as the downloadable version, available at www.enhydra.org. Customers will continue to have complete access to source code, as well as the ability to deploy Enhydra applications with no licensing or royalty fees. Priced at $99, Lutris Enhydra Standard 3.0 is available immediately for purchase from Lutris. Lutris' customer support options are available to customers who purchase and register Lutris Enhydra Standard 3.0. Registration entitles users to 15 days of free online installation support and access to the Lutris Knowledgebase. Customers may purchase incident-based support packages directly from Lutris online. Single-incident support is priced at $250 per-incident. Six- and 12-incident packages are also available for purchase, priced at $1,250 and $2,250, respectively. Customized support packages are also available. www.lutris.com

XMLSOLUTIONS ANNOUNCES VOCABULARY BUILDER FOR E-BUSINESS
5/10/00

XMLSolutions Corporation announced the immediate availability of Vocabulary Builder for E- Business. Vocabulary Builder is a program designed to bridge a company's existing business vocabulary to today's e-commerce language while maintaining contextual definitions on both ends. XMLSolutions' Vocabulary Builder allows companies to conduct business using the same syntax it has always used by XML-izing existing business vocabulary, semantics unchanged, so that the company can communicate electronically. Vocabulary Builder extends business operations across the Internet without revolutionizing core business processes. XMLSolutions utilizes Schema Central and their META-X Methodology to identify corporate metadata crucial to the successful implementation of Enterprise Application Integration (EAI) and e-business initiatives. The Vocabulary Builder program pinpoints strategic business information and executes a crucial step in developing e-commerce solutions. Creating DTDs that represent key business information is a primary function of Vocabulary Builder. www.xmls.com

Sounds useful, but remember that keeping-up with vocabularies is an ongoing and never-ending process.

CANTO INTRODUCES CUMULUS 5 - ENTERPRISE EDITION
5/9/00

Canto announced Cumulus 5 - Enterprise Edition, designed to manage and archive all types of digital assets used in production, publishing, communication, and other workflows. The release of the Enterprise Edition completes the Cumulus product line, which also includes a Single User Edition and a Workgroup Edition. Varying Options exist for the different Editions. The Enterprise Edition embraces and extends the success of the Workgroup Edition. It offers the most complete set of functionality and benefits. Cumulus 5 - Enterprise Edition will be available this month to a number of pre-selected customer sites. Broad availability through System Integrators and Solution Partners will follow in Q3/00. The "starter kit" of the Enterprise Edition is priced at US$33,000 and includes the server application and 20 concurrent client licenses. It also includes the Cumulus Internet Client, the Browser,

the Vault and URL AssetStore Options, and five days of technical service. Additional client licenses are available for US$400 per client. Additional service days are available at US$1,500. The Oracle Connect Module will be announced separately. Maintenance contracts and the Cumulus SDK will be offered separately. The Cumulus 5 - Enterprise Edition is a fully cross-platform solution. The server software will be available for Solaris, Linux, Windows 2000 and MacOS X. The client software is available for MacOS and Windows. It also includes Internet access through standard Web Browsers. www.canto.com

IRONSIDE & COMMERCE ONE TO DELIVER SELLER/BUYER INTEGRATION
5/9/00

Ironside Technologies Inc. announced that they have reached agreement-in-principle with Commerce One, Inc. for the purpose of real-time seller/buyer connectivity. Commerce One and Ironside expect to finalize terms and execute definitive agreements by summer 2000. Ironside intends to integrate its Ironworks sell-side product suite and Ironside Network service offering into Commerce One MarketSite and Global Trading Web solutions. Ironside expects to support Commerce One's xCBL transactions within the Ironworks product suite and the Ironside Network service. XCBL is expected to provide Ironside Powered suppliers access to an extensive worldwide business-buyer community. The Ironworks 4.0 product suite will provide integration capability to the Commerce One MarketSite Global Trading Portal, as well as individual trading exchanges running on the MarketSite Portal Solution. Additionally, the Ironside Network "real-time exchange to the exchanges" is expected to provide suppliers on-demand real-time integration into the entire MarketSite community of exchanges. In addition, Ironside and Commerce One expect to collaborate to streamline and simplify content management functions, working together to homogenize supplier catalog information and automate content management functions. www.ironside.com, www.commerceone.com

"Real-time integration" is what we need all right, and the more many-to-many the better, even if it is not any-to-any.

ADXML.ORG GOES LIVE WITH XML SCHEMA FOR B2B ADVERTISING DATA EXCHANGE
5/9/00

adXML.org announced the successful transmittal of the first live digital insertion order "written" in the adXML vocabulary. Having launched its first beta in February of this year, adXML.org is this week proposing a 1.0 release of the online DTD section of the adXML specification. adXML.org's end-of-year goal is to include all media types in its final release. The first digital insertion order was transmitted by Mediaplex, Inc. and received on the publisher side by L90, Inc. Utilizing the adXML vocabulary, the order described all data specifications for the placement of an online campaign for a automobile advertiser. Mediaplex performed the campaign planning, buying and ad-serving functions on behalf of its client, Critical Mass, an interactive advertising agency. adXML.org was launched in December 1999 as a vendor-independent initiative to develop business practices and infrastructure standards for the full automation of the exchange of commerce and content data among all sectors of the advertising industry. Now composed of more than 140 participating companies, adXML.org has defined nine subcommittees representing traditional media including print, TV, radio and outdoor, as well as new media including online, e-mail, set-top box/broadband and the wireless market. www.adxml.org

INTRANET SOLUTIONS ANNOUNCES AVAILABILITY OF NEW CONTENT ASSEMBLY MODULE
5/8/00

IntraNet Solutions, Inc. announced the availability of Xpedio Merge. As an add-on to Xpedio Content Management System, Xpedio Merge features a component-based publishing module for assembling complex publications from a variety of managed source content. Xpedio Merge facilitates dynamic assembly and personalization of complex publications that allows multiple authors to use components managed in the Xpedio Content Server to create Web viewable and printable publications. Applications for this software include sales and marketing materials, personalized training manuals and responses to complex RFPs. Xpedio Merge relies on the content management capabilities of the Xpedio Content Server to ensure that the appropriate version of content is being used. A user-defined template pulls the required content from the Content Server, automatically merges them, inserts pagination and routes the completed document to the specified location for viewing or printing. Watermarking and mail merge capabilities can be used for greater customization. Xpedio Merge is available now with list pricing starting at $50,000 USD for Windows NT and UNIX platforms. www.intranetsolutions.com

SOFTWARE AG LAUNCHES NATIVE XML DATABASE IN US
5/8/00

Software AG USA has begun selling Tamino to U.S. companies. A native XML information server, Tamino is part of a full suite of native XML products coming from Software AG. Tamino provides a complete Web-enabled data management system for data exchange and application integration. Unlike relational databases, Tamino stores, retrieves and exchanges data in XML as its natural format, without the need for conversion to other formats. All of Software AG's products and services are specifically geared to the requirements of B2B solutions and work well to integrate front-and-back-office solutions, allowing e-business services to function as an integral part of a company's overall business. Tamino leverages the main benefit of XML: the dramatic increase in interoperability of data among applications. Using Tamino, data structures of any kind can be expressed in XML format and stored and treated as XML objects. XML data without a previously defined structure is also accepted and stored, unlike the classical database systems that require explicit structuring. Software AG's database technologies, including field compression and record caching, as well as high volume capabilities, provide an XML-based data management system capable of handling large volumes of data for high throughput which can manage concurrent user requests very efficiently for high performance. Tamino also supports single-sign-on, industry-standard security systems and existing methods of encryption (such as RACF, NTLM, Kerberos, and SSL), integrating security concepts at different lTamino is available immediately for Windows NT. A version for Unix will be available during second quarter 2000, with versions for Linux and IBM mainframes following later in the year. Tamino is designed to minimize the total cost of ownership, with prices starting at $25,000 per processor. www.softwareagusa.com

DELANO ANNOUNCES XML SUPPORT FOR B2B DOCUMENT EXCHANGE
5/3/00

Delano Technology Corporation announced the release of the Delano Component Pack for XML, which extends the Delano e-Business Interaction Suite to provide native support for XML and the standard XML document formats used in B2B applications. By leveraging XML, the Delano Component Pack for XML increases the level of integration between Delano e-business applications and enterprise applications, including ERP and legacy systems, enabling enterprises to reduce the costs and increase the effectiveness of interacting with business partners over the web, e-mail, and other communication channels. The Delano Component Pack for XML, coupled with the Delano e-Business Interaction Suite allows companies to leverage existing databases, enterprise applications and systems infrastructure to automatically exchange data between disparate and/or legacy applications, as well as supplier and partner systems. Through the efficient use and integration of XML and e-business applications, an enterprise can significantly reduce the costs associated with B2B interactions via EDI or manual processes. The Delano Component Pack for XML facilitates commerce interactions between trading partners, enabling buyers and suppliers to tighten relationships and extend trading opportunities. Leveraging the open nature of the Delano e-Business Interaction Suite, the Delano Component Pack for XML provides support for all current and emerging B2B communication standards, including BizTalk, OASIS, cXML, xCBL, OBI, W3C XML, and RosettaNet. This enables enterprises to extract and understand data from these XML standards to further support the automated exchange of B2B documents, such as purchase orders and invoices, through electronic channels. The Delano Component Pack for XML is immediately available from Delano, or a Delano authorized reseller.
www.delanotech.com

NEXTPAGE LAUNCHES CONTENT NETWORKING PLATFORM
5/3/00

NextPage announced the launch of a Web-based content delivery platform. This platform, the Content Network, enables users to simultaneously access Internet sites, databases, intranets and document repositories as if the data existed in a single location. NextPage solutions are targeted at companies establishing corporate portals as well as professional publishers seeking to publish high-value content to customers inside corporate intranets. The Content Network searches, navigates, categorizes and personalizes information across disparate content sources. Two core products form the foundation of this new technology: LiveEnterprise software for corporate intranets, and LivePublish software for Internet publishers. LiveEnterprise provides users a single point of access to retrieve and organize information from file types, such as XML, HTML, Microsoft Office and Adobe PDF files, which are stored in relational databases, file systems and on the Web. With LivePublish, professional publishers can assemble and deliver content on the Internet and inside corporate intranets. Inside LiveEnterprise and LivePublish is a software adapter, called the Content Network Adapter, that creates a continuous link between all content servers within the Content Network. This live link, called LiveSyndication, connects users to information in almost any format and in any location. The technology overcomes today's practice of IT departments having to centralize content to make it available within a corporate portal.
www.nextpage.com

MEDIASURFACE ANNOUNCES UPGRADE TO CONTENT MANAGEMENT PRODUCT
5/2/00

Mediasurface Limited announced availability of its third generation software. Mediasurface 3 boasts rules-based one-to-few personalization, high performance caching for dynamic content delivery, WAP support and e-services integration with localization and syndication providers. For most customers, Mediasurface 3 implements in 6-8 weeks, providing a powerful solution with a much-needed boost in time to market for business-to-business, business-to-consumer and communities-based Web sites. Mediasurface 3 was designed as the hub of e-business to manage all interactions between people, content and applications with unprecedented levels of integration and support. Mediasurface 3 takes the ideal content management infrastructure and expands it to include customer features that enhance delivery of content. The dynamic caching capability enables customers to confidently increase site traffic and content bandwidths in line with demand. By separating content from presentation and structure, Mediasurface 3 returns the ownership of content to the business user. The software delivers ease of use and enables non-technical people to disseminate content with virtually no learning curve. Mediasurface 3 builds on Mediasurface's existing solution for Web content management. New features of Mediasurface 3 in-

clude: Group-based personalization out-of-the-box, Linux 6.1 & WAP support, High performance caching, localization for multilingual sites, syndication for import and export of content via Mediasurface Integrator & Gateway, and full support for Macromedia Dreamweaver as a Mediasurface template design tool, including access enabled through an HTTP connection. Mediasurface 3 is an enterprise strength application suite - not a toolset or commercialized custom-developed software. Mediasurface 3 integrates with e-commerce, knowledge management, design, localization and personalization software, and is delivered through select, highly trained service partners. In addition, Mediasurface 3 follows previous versions by operating in a multi-server environment where content is shared in real time between multiple Mediasurface servers. This content sharing is controlled by workflow rules and allows content to be synchronized in multiple repositories on multiple physical severs. The three-tiered approach to the Mediasurface product also allows the data repository to be held on separate highly tuned database servers where disk is optimized for access speeds and volumes. Pricing for Mediasurface 3 begins at $100,000 and is available directly from Mediasurface, through alliance partners or through ASP partners including Andel Consulting. www.mediasurface.com

PANASITE ANNOUNCES CONTENT MANAGEMENT SERVICE BETA
5/2/00

PanaSite Software Inc. announced the successful beta testing of its new Web-based content management servicee. PanaSite's Web-based subscription service is an online application that helps businesses get – and keep – a handle on issues that are critical to the successful execution of a company's Internet strategy. Subscribers to the service have access to a customized turnkey Web content management solution that reduces the time and capital investment required to build and maintain a dynamic Web presence. The new PanaSite service eliminates the need for dedicated Web-focused technical specialists and puts control in the hands of the non-technical professionals who understand the content. It also eliminates the need for custom content management software. PanaSite's application platform contains a set of tools capable of importing assets from an existing Web site anywhere on the Internet and automating a client-specific publishing workflow that tracks new content from creation through approval and deployment. Beta testing is wrapping-up this month for the as yet un-named service. Value-add services include opportunities for expanded exposure and revenue generation via the display and/or resale of a com-

pany's original content to and through third-party Web sites and content distributors; opportunities to integrate interesting and dynamic content from a variety of content feeds for automatic publication to a subscriber's Web site; and easy-to-use credit card processing, survey and contact information forms for collecting and tracking marketing data and leads, and more. The new Web-based subscription service is expected to be available June/July 2000, and joins PanaSite's other content management solutions, PanaSite Enterprise and PanaSite Professional. There is a one-time set-up charge and a low monthly fee. PanaSite will also offer a 30-day free trial. www.panasite.com

EC-CONTENT LAUNCHES CONTENT ACQUISITION, MANAGEMENT & MAINTENANCE OFFERINGS
5/2/00

ec-Content, Inc. announced the availability of its MRO content library, and content acquisition, management and maintenance offerings for B2B Net marketplaces, and introduced its Supplier Neutral Content methodology for managing and maintaining value-added content. A provider of comprehensive MRO content with a management and maintenance solution, ec-Content partners with Net marketplaces looking to increase the effectiveness of their online catalogs to attract and retain more buyers. Because no two suppliers, manufacturers or wholesalers collect, maintain and present content in exactly the same way, buyers often find there are many sources for price and product information coming from a single manufacturer or supplier, making it difficult to locate and purchase items. The acquisition and maintenance of electronic catalog content, and the ability to offer item cross-referencing are daunting tasks that require marketplaces to aggregate hundreds of thousands of items with different attributes, from different catalogs. ec-Content removes the burden of these tasks by providing Net marketplaces with access to a centralized content library of 5.2 million items, supporting tens of millions of SKUs, across 40,000 suppliers that can be customized to reflect buyers' negotiated prices for each supplier. The complex MRO content is cleaned, normalized and standardized, then maintained on a scalable database. By outsourcing content management to ec-Content, buying organizations eliminate the need to track their purchases through hundreds of paper catalogs containing items with different attributes and often outdated pricing. ec-Content's value-added content includes enhanced product descriptions, images, common identifiers, and current pricing information updated on a regularly scheduled basis. In addition, ec-Content provides quality

assurance services including the ongoing tracking of anomalies, discontinued items and pricing changes, that improve Net marketplace content and in turn, makes the marketplace more valuable to its customers. To effectively manage the electronic catalog content needed by Net marketplaces, ec-Content assigns a universal number to each item in their database, and maps that identifier to corresponding supplier part numbers and commodity codes. The solution behind ec-Content's Supplier Neutral Content is the Content Overlay Process that essentially overlays supplier catalogs that include varying descriptions for identical products. This eliminates the need for Net marketplaces to input multiple product descriptions from multiples suppliers, establishing a scalable process for managing and maintaining customized catalogs. www.eccontent.com

INTEL, EXCALIBUR TO FORM INTERACTIVE MEDIA SERVICES COMPANY
5/1/00

Intel Corporation and Excalibur Technologies Corporation announced that they have signed an agreement to form a new company that will enable owners of branded high-value content, such as sports and entertainment, to produce and securely sell their audio and video content over the Internet. The new company will offer a compelling, one-stop solution with key Internet technologies. Under the terms of the agreement, Intel will contribute its Interactive Media Services division and invest $150 million in exchange for 60 percent of the new company's equity. Intel will take a 49 percent position in the voting stock of the new company and the balance of its investment in non-voting stock. Excalibur will combine its entire business operations with those of the new company, with Excalibur stockholders receiving 40 percent ownership in the new company in exchange for their Excalibur stock. Excalibur shareholders will receive one share of stock in the new company for each share they hold of Excalibur. Holders of 29 percent of Excalibur's outstanding voting stock have agreed to vote in favor of the transaction. Other financial details were not disclosed. Compatible technologies and business models do not exist from one company in a fully integrated way that enable branded, valuable content to be delivered to subscribers over the Internet. The new company will seek to solve this problem by combining Excalibur's market-leading content management technologies for producing valuable media archives with Intel's patented technology for content protection. The transaction is subject to regulatory review, Excalibur stockholder approval

and other normal closing conditions. All other necessary corporate approvals have been obtained by Excalibur and Intel. Completion of the transaction and the new company's launch is expected in the third quarter of this year. Ronald J. Whittier will resign from Intel to become chairman of the board and CEO of the new company. Patrick C. Condo will become president and COO. www.intel.com, www.excalib.com

Excalibur has had multimedia search technology for quite some time – certainly well before the market was ready for it. The merger with Intel should finally give it the resources required to continue development and push the market along.

BLUESTONE ANNOUNCES J2EE-BASED BLUESTONE UNIVERSAL BUSINESS SERVER FOR TEB
5/1/00

Bluestone Software, Inc. announced General Availability for Bluestone Universal Business Server for TeB Version 7.0, its 100% Pure Java Application Server deployment engine which is the heart of its Sapphire/Web and its Integration Server, Bluestone XML Suite, as well as the foundation of its newest product line, Total-e-Business platform. Based entirely on Sun's J2EE (Java 2 Platform, Enterprise Edition) specification and using XML as its internal communication vehicle, Bluestone Universal Business Server for TeB establishes an infrastructure foundation for enterprise-class e-business applications. Bluestone Universal Business Server for TeB is the next generation of the Sapphire/Universal Business Server, the application deployment architecture that powers the company's Sapphire/Web Application Server framework. As a result, the Bluestone Universal Business Server for TeB brings performance, scalability, fault tolerance and XML services to the company's forthcoming Total-e-Business platform editions, including Total-e-Global, Total-e-B2B, Total-e-B2C, Total-e-Wireless, and Total-e-Server, scheduled for release later in Q2 of this year. The J2EE foundation fortifies Bluestone Universal Business Server for TeB with implementations of Enterprise JavaBeans (EJB) 1.1, Java Servlets 2.2, and JavaServer Pages (JSP) 1.1, including Taglib support. Bluestone Universal Business Server for TeB also includes a complete implementation of Java Servlets API 2.2 to provide a standard mechanism for building dynamic Web applications that are portable across hardware, Web server, and Application Server platforms. Bluestone Universal Business Server for TeB relies on XML for a number of services, including the persistence map that permanently stores the state of an application. XML gives the Bluestone Universal

Business Server for TeB high-performance support for fine-grained objects in an EJB. The Bluestone Universal Business Server for TeB also employs a dynamic XSL engine that lets users automatically detect client device types and generate the proper delivery format, whether it is a cell phone, palmtop device, desktop browser, B2B application, or other client type. Bluestone Universal Business Server for TeB is available today in Sapphire/Web, Bluestone XML Suite, and Total-e-Business.
www.bluestone.com

REMEDY & REQUISITE PARTNER ON EPROCUREMENT & CONTENT MANAGEMENT
5/1/00

Remedy Corp. and Requisite Technology, Inc. announced a strategic alliance to add Requisite's e-content tools to the Remedy Purchasing@Work eProcurement solution. Remedy will embed Requisite's patented BugsEye finding engine and eMerge content management toolset into Remedy Purchasing@Work. BugsEye is an intuitive, natural-language finding engine that lets users quickly find and select the products they need, without forcing them to learn the specialized rules of the underlying data structure. eMerge tools and services enable buyers and suppliers to create and manage dynamic e-catalogs. To help buying organizations realize bottom line savings in record time, Remedy will offer a "quick start" e-content program. Customers will be able to select suppliers for office products, paper, industrial supplies, software and other items from Requisite's eLeader supplier network. www.requisite.com, www.remedy.com

BACK ISSUES

Issues less than a year old are usually available in both print and PDF for $45. Sometime there are special offers at www.fatbrain.com (just search for "Gilbane"). Issues from 1993 thru 1998 are $15 *if* in print. See www.gilbane.com/back_issues.htm for more information.

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CALENDAR

iS2k - Internet & Society 2000, May 21 - June 2, Harvard University, Cambridge, MA, (617) 204-4234. The Third Biennial International Conference on Internet and Society. "How will society keep pace with the changes brought by the Internet? Will cyberspace create a new social elite or lead to further democratization? How will new Internet technology restructure life in the 21st century?" Indirectly related to our usual topics, but it is our job to keep up with trends that will influence computing, content, and commerce, so we'll be there.

XML Europe, June 12-16, at Le Palais des Congrès, Paris, France, 703 519 8190. The annual XML event in Europe produced by the GCA and chaired by Pam Gennusa.

Extreme XML 2000, August 13-18, Montreal, Canada, (703) 519 8190. "…A new, highly technical conference concentrating on the evolving abstractions that underlie modern information management solutions, how those abstractions enhance human productivity, and how they are being applied." Chaired by the editors of the MIT Journal on Markup Languages.

Seybold San Francisco 2000, August 28-September 1, San Francisco, (650) 578 6900. The big annual Seybold event covering computing and publishing technology for both web and print.

eb-implement.com 2000, September 11-14, Atlanta, (703) 519 8190. A new conference on implementing B2B and B2C e-business systems. A GCA event with PricewaterhouseCoopers, IBM, and webMethods sponsoring.