GILBANE REPORT

UNDERSTANDING MICROSOFT'S XML STRATEGY

We looked at XML support in Office 2000 back in our April issue and suggested that, while useful in itself, what was really important was that it signaled a fundamental shift in computing. The promise of distributed object computing has never been realized because of a bias in favor of processing over content. XML is helping to change that, and Microsoft's support for XML in Office, though not complete, was nonetheless an early indicator that this important change had finally begun. This shift is not limited to Microsoft. Oracle, IBM, Sun, and others are moving in the same direction, and we'll take a look at some of their strategies in future issues.

The announcements Microsoft made this month are rich with information about their direction and strategy, and XML has a key role throughout their product line. Microsoft understands the shift in computing as well as anyone. But they also have more specific and immediate reasons for building "pervasive" XML support into their product line. Understanding their motivation is critical to making your own judgments about their commitment to the standard, and more importantly, to making decisions about the role of XML in your IT strategy. In this issue we look at why Microsoft has invested so much in XML.

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UNDERSTANDING MICROSOFT'S XML STRATEGY

Earlier this month Microsoft outlined their technology strategy for the foreseeable future. They didn't quite describe it like that, and the press hasn't reacted as if anything really important happened. There were no big surprises, but there was a major reinforcement of a direction that some of you may have been unconvinced of before.

For those who missed it, the announcement was summarized in three press releases: one announcing "Windows DNA 2000", another describing Microsoft's "pervasive" XML support, and a third announcing the release of a BizTalk developers kit. All together, there is a wealth of material for analysis and speculation. What was most interesting, however, was that XML was a key component of the majority of their announcements. Many IT strategists are scratching their heads over what this means.

How serious is Microsoft about XML? Why are they so interested in XML? Will they control XML? Is it safe to make IT decisions based on XML? Answering the first two of these questions requires an understanding of Microsoft's motivations. Answering the second two questions requires an understanding of the evolution of information technology. In this issue we touch on all four questions, but focus mainly on the first three. (Regular readers of this publication will be familiar with our views on the fourth question.)

MOTIVES

The Internet has turned out to be the best thing that could have happened to Microsoft. What first looked like a nightmare kicked off a lot of soul searching, the relevance thing, and a real interest in some standards — XML being the one that mattered. The announcement about Windows DNA 2000 is the culmination of all this. Not that it is the end of the story, but it is a strategy that has enough substance and direction to it that you can plot a course with confidence.

The Internet & Parity

As I argued back when Microsoft was first ramping up their XML efforts, a key motivation was to protect client-side computing from the onslaught of thin clients *etc.* The idea wasn't limited to keeping clients fat or rich, but was to level the processing playing field. Freedom to process XML on everything from handhelds to PCs to mainframes means all platforms can have a role to play. Microsoft knew the Internet meant they couldn't win with thick client based technology, so the next best thing was to help change the rules so they were at least on an equal footing.

Developer Relevance

This may be the most obvious motivating factor. Developers have always been key to Microsoft's success and they had to ensure relevance to web developers at all costs. XML is important to traditional developers building web applications, but there are also legions of new XML developers that Microsoft has been encouraging for some time.

Enterprise Relevance

Most of Microsoft's revenue comes from Windows and Office. They have two problems with these products: First, Internet computing models threaten them both — XML support can significantly ease this problem. Second, they are both so successful that growth rates are a big challenge. The need to penetrate enterprise applications is more urgent then ever to offset this. XML allows them to participate in enterprise applications without having to wait until they can build entirely new products to compete with entrenched players. This is not just wishful thinking, and not just about the front-end of e-commerce. Even the stodgiest ERP vendors are building XML application inferfaces.

Standards & Frameworks

There is a lot of skepticism surrounding Microsoft's support of standards. Prior to XML this was a lot more deserved. With XML Microsoft has been playing the standards game the same way that IBM, Sun and anyone else with enough clout has played over the years. Fortunately, this time everyone is pretty much on the same side.

A key result of an accepted encoding standard (like XML) is that no vendor or group of vendors can monopolize the technology for processing it. If no one controls the standard or the relevant technology then competition forces increasingly better products. This is all "motherhood and apple pie" as we say in the states. But there is another option, which is to control the environment. This is not new. The battle for the hearts and minds of developers is fought with development environments. Environmental control in the case of XML applications can only be won by voluntary agreement — but it *can* be won. This is Microsoft's strategy with BizTalk (more on this below).

"Environmental control in the case of XML applications can only be won by voluntary agreement — but it can be won."

DNA & XML

Microsoft is positioning Windows DNA 2000 as a platform for building web applications. It includes: Windows 2000, Commerce Server, BizTalk Server, Integration Server, SQL Server, AppCenter, and Visual Studio. Some of these products are new versions and some are new products. What ties them all together is XML. There is a difference in degree of XML support and we'll have to wait until the products are available to see what this means in detail.

Four of these products deserve special mention. The BizTalk Server is certainly no surprise given the amount of effort and support BizTalk has garnered. Integration Server ("Babylon") is interesting because of its use of

"What does it mean for an operating system to have 'integrated end-to-end XML support...'?"

XML to share data with legacy systems. And the upcoming version of SQL Server ("Shiloh") is adding "native" XML support. Note that all three of these add substance to the XML commitment, and all three are critical for enterprise application integration, especially for e-commerce.

AppCenter has more to do with relevance than XML. There are a number of ways Microsoft plans on being relevant as there are a number of constituencies to be relevant to. Where XML is relevant to web developers, AppCenter is relevant to, *e.g.*, ASPs (Application Service Providers *not* Active Server Pages!). Microsoft still has a challenge at the high end, but they are certainly relevant. A recent issue of Soft•letter repeats a quote of Steve Ballmer's from the Wall Street Journal; "Server-based computing is great. It's happening. It's part of our strategy." You may chuckle as I did when I first saw this, but it is part of their strategy, and they are moving on multiple fronts.

PERVASIVE XML

What does this mean? What does it mean for an operating system to have "integrated end-to-end XML support" (from the press release)? Well, in Microsoft's case it doesn't mean what some of you may think it should mean, *i.e.*, direct support for XML objects instead of or alongside of a file system (at least not yet). By incorporating an XML parser however it is possible to approximate this kind of deep support. The SOAP draft (Simple Object Access Protocol) Microsoft submitted to the IETF is also evidence that Microsoft sees pervasive end-to-end XML evolving beyond a Windows environment to different object sharing schemes over the Internet — a requirement for enterprise applications.

Application integration is almost everyone's favorite reason to adopt XML. Babylon is directly targeted at application integration and Shiloh is certainly key to enterprise integration applications. This is much more interesting than supporting XML islands inside Office files (for more on XML and Office 2000, see *Vol 7, Num 4*), although it should have been clear then that the support for XML in Office 2000 by itself was never intended to be the end result. That was a first step; this is a (substantial) second step. If you look at what is happening, Microsoft is serious about the pervasive bit. XML was never just a "front office" strategy. This strategic announcement makes clear that "back office" applications, the applications that tie them together, the underlying datastores, and platform and inter-platform object communication are all part of the strategy.

BIZTALK, FRAMEWORKS, & CONTROL

BizTalk is another take on pervasive XML, as a quick look at the number and variety of BizTalk supporters will show. Some have expressed concern that Microsoft is turning XML to its own use, and BizTalk is perhaps the most common evidence given. It would be naïve to think that Microsoft, or anyone else, won't develop or favor certain uses of XML. There is no doubt that certain schemas will integrate more easily with Microsoft products and

that Microsoft will develop and control certain schemas that will work especially well for integrating their own product set. But it would also be naïve to think that Microsoft does or will control XML.

If you keep in mind what is motivating Microsoft then you will see that although it would certainly benefit them to control schemas, meta-schemas or frameworks, it is a fringe benefit; a benefit they may not get in the end. What is more important to them is that widespread XML adoption levels the playing field and helps ensure their developer and enterprise relevance. Remember that there is an industry need for something like BizTalk. Microsoft should, and almost certainly would, cede all control of BizTalk if the right industry group were in place to take it over.

CONCLUSIONS & RECOMMENDATIONS

There is no doubt that you should take Microsoft's commitment to XML seriously. It would probably be an overstatement to say that Microsoft needs XML to ensure their continued role as the most influential player in IT, *but* it is clearly a key part of what they need.

What you need to be concerned with is not if, but how; **how** in terms of the actual tools and functionality they provide in their products, and **how** in terms of which XML schemas or "frameworks" they favor. You also need to know when; **when** you will have the specific tools available, and **when** specific schemas or frameworks will gain acceptance. Microsoft can influence acceptance, as they are with BizTalk, but they can't determine acceptance. Look to developer and industry backing to find the schemas that will emerge as winners, and to make judgments about when you can take full advantage of them.

Being relevant to Microsoft's technology is an important part of being relevant to your customers. It hasn't always been easy to divine where Microsoft was headed. There will always be plenty to speculate about, but now there are some fundamentals you can rely on for awhile, and not just because Microsoft says so. Understanding what is driving them will help you make more confident, successful decisions.

What Microsoft has laid-out is in the language, and with the spin, of their own products, but it is also consistent with the way information technology and software development have been evolving. The ability to deal with various schemes for sharing data and documents and code using XML messaging will stand you in good stead for integrating your applications with platforms from Microsoft and others. It won't always be easy to keep up with the changing and competing schemas, but at least you won't have to be as much at the mercy of the cruel joke that many APIs have been.

Frank Gilbane

"If you keep in mind what is motivating Microsoft then you will see that although it would certainly benefit them to control schemas. metaschemas or frameworks. it is a fringe benefit..."

INDUSTRY NEWS

Additional news is available at www.gilbane.com

INFOTERIA LAUNCHES FREE XML STYLE WIZARD 9/30/99

Infoteria Inc. announced the immediate release of its XML Style Wizard 1.0. This simple and clear XSLT file generator for XML is offered free of charge and is available for download from Infoteria's web site. Infoteria boasts that by answering only six simple questions, the XML Style Wizard can produce an XSLT file for XML. XML Style Wizard creates the XSLT file by analyzing existing XML data. It allows users to create a table from the XML data, or create a list table from multiple records of XML data. The XSLT file created by XML Style Wizard is used by XML browsers such as Internet Explorer 5.0 from Microsoft and for XSLT processors such as iXSLT from Infoteria. In addition, XML Style Wizard supports both W3Cs latest XSLT specification and the specification implemented in Microsoft Internet Explorer 5.0. www.infoteria.com

INSYSTEMS ANNOUNCES LATEST VERSION OF FASTFORMS 9/30/99

InSystems Technologies, Inc. announced the newest version of FastForms. FastForms V4.1 enables carriers to provide their sales force with customized and personalized access to the latest forms over the Internet. FastForms "VirtualCD" feature allows carriers to send forms over the Internet for agents to view and print from their desktop through a Webbrowser, using industry-standard Adobe Acrobat. This functionality has significant cost-savings for carriers by eliminating the need to mail paper forms or a CD to agents. Forms can include anything from application, replacement, supplemental, change of beneficiary, renewal forms to training manuals, marketing collaterals

and agent-specific forms. With FastForms 4.1, carriers can create distributions to be posted to the VirtualCD in a one step, automated process. FastForms 4.1 is currently available. www.insystems.com

TSI SOFTWARE ACQUIRES NOVERA 9/30/99

TSI International Software Ltd. announced it will acquire Novera Software, Inc. TSI Software is acquiring all of the capital stock of Novera for approximately 1.8 million shares of TSI Software common stock. In connection with the transaction, TSI Software will assume all outstanding Novera stock options in exchange for a maximum of approximately 350,000 shares of TSI Software common stock. The acquisition will be accounted for as a purchase transaction and is expected to qualify as a tax-free reorganization. The transaction is structured for immediate closing. www.novera.com, www.novera.com, www.tsisoft.com

THE E-CONTENT COMPANY & UWI.COM TEAM 9/29/99

The e-content company and UWI.Com announced a strategic partnership. By integrating BladeRunner and InternetForms, companies will have the ability to cleanly and securely collect important data with XML-based Internet forms and transform it into e-content information. E-content information is key to the success of e-business initiatives because it gives companies the ability to reuse and repurpose vital information to automate digital transactions, such as electronic procurement and purchasing processes with little or no human intervention. The integration of BladeRunner and Internet Forms Commerce System will be available in the upcoming quarter. www.uwi.com www.xmlecontent.com

SPSS 10.0 ADDS MAPPING & XML EXPORTATION 9/29/99

SPSS Inc. announced SPSS Server 10.0, a new release of the data analysis software which now features a server version for increased performance and scalability, a new mapping module for better strategy development and XML model exportation to assist front-line decision makers. The new software is shipping worldwide. The latest release of SPSS 10.0 is available for the first time in a distributed analysis architecture (DAA). SPSS' DAA provides users with a scalable, enterprise-level analysis product. SPSS Server minimizes the use of resources and maximizes performance by eliminating the need to copy and convert the data used in analysis, so all data can stay on the server where it resides. SPSS Server 10.0 also eliminates file size limitations, facilitates data access from many sources and allows administrators to maintain a high-level of data security. The end result is enterprises, especially those with huge amounts of centralized data, can analyze their data quickly and securely. The ability to export models in XML format allows analysts to export and deploy models to decision makers throughout an enterprise via an upcoming product called SmartScore. This new package will be used to personalize Web interaction, pinpoint cross-selling opportunities, and approve loan candidates and more -all in real time. SPSS Server 10.0 will be available initially only on Windows NT. Other versions will follow later. The North America list price for a single user license of SPSS 10.0 for Windows is \$999. Modules, including SPSS Maps, are priced at \$499 per module for a single user license. A variety of pricing programs, including aggressive multiple unit pricing, site and network licensing are available. Licensing is also available for operating multiple instances of the software on one computer. SPSS 10.0 for Windows and modules can be purchased online in the SPSS Software Store. www.spss.com

ART TECHNOLOGY GROUP'S DYNAMO 4.5 ADDS XML, MULTILANGUAGE SUPPORT 9/28/99

Art Technology Group (ATG) announced that it is shipping an upgrade to its Dynamo product suite. Dynamo 4.5 expands the breadth of ATG's Internet Customer Relationship Management (ICRM) offerings. Dynamo 4.5 provides infrastructure support for the XML and has been internationalized to accommodate the expanding global e-commerce market. The combination of Java and XML provides companies with an extensible platform that facilitates data access and application integration across and between enterprises. This ease of access and integration means ebusinesses can speed up their initial time-tomarket and react swiftly to changing market conditions. Customers can exchange information and data using applications from many third party content systems, as well as multiple back-end transaction systems and data sources across the enterprise. Dynamo 4.5 is now available. www.atg.com

QRS KEYSTONE REALTIME 2.0 DELIVERS XML TO RETAIL INDUSTRY 9/28/99

QRS Corporation launched QRS Keystone Realtime 2.0. With XML and IBM MQSeries messaging and queuing software, QRS Keystone Realtime 2.0 empowers retailers to integrate QRS Keystone product information across multiple platforms directly into their systems. Now, retailers can request the exact data they require from the retail industry's largest product information database. QRS is the only major electronic catalog provider to offer XML capabilities for product information in support of new electronic commerce and e-retail initiatives. Retailers can dramatically reduce time and effort required for item setup and purchase order creation while improving product information accuracy. Current QRS

Keystone Realtime customers have seen item setup process reduced from eight hours to twenty minutes. Often, the purchase order process is reduced from days to minutes. www.qrs.com

ACORD RELEASES XML DICTIONARY FOR PROPERTY/CASUALTY INSURANCE 9/28/99

ACORD working groups have completed a standardized vocabulary for XML based on the ACORD ObjX and AL3 Standards. The result of a joint initiative with the Independent Insurance Agents of America, the XML project is targeted to help prevent the potential growth of nonstandard DTDs. Responding to a specific set of requirements from the IIAA's Agents Council for Technology (ACT), ACORD working groups refocused their XML efforts to address the fragmentation of industry XML standardization. ACT member organizations, all ACORD participants, brought individuals to the table to accelerate the process. The resulting ACORD XML Dictionary encompasses all of the property/casualty data requirements for all existing ACORD Standards including Personal, Commercial, Claims, Accounting, and Surety. The next steps underway at ACORD include the creation of a process to facilitate the creation of XML transaction standards and a transaction specification based on the dictionary. Several proposed transactions are currently under development for Personal Auto, Homeowners, Business Owners, and Workers Compensation. These include quote requests in addition to new business and change submissions. ACORD also released a resource kit that contains guides to assist in the transaction definition process, including a Standards Mapping Guide for AL3 and ObjX, a Code List Guide, a DTD, and a Submission Template for proposed transactions. The XML standards project has received the support of major carriers and software developers. In addition to SAFECO and National Grange Mutual, participating companies include CGU, Chubb, Hartford, Kemper, Progressive, St. Paul, and Travelers. In addition to IVANS and AMS, participating software developers are Applied Systems, APT, Delphi, DocuCorp, ISO, JCRS, Microsoft, NCCI, Ontos, PMSC, and Symmetry Technology Labs. www.acord.org.

BENTLEY'S MODELSERVER INTEGRATOR SUPPORTS XML & AECXML

9/28/99

Bentley Systems, Incorporated announced that its Web-based ModelServer Integrator product includes support for XML and aecXML. ModelServer Integrator is an information broker for engineering projects that enables engineering enterprises to assemble information from multiple databases and software applications and present relevant, timely, and accurate information to users throughout the organization. ModelServer Integrator's support of XML allows users to take full advantage of the wealth of rapidly emerging support tools, technology, and standards built around XML in such areas as e-commerce and data exchange. Important among these is the industry-wide aecXML effort, which Bentley initiated earlier this year (www.aecxml.org). In this initiative, the aecXML Working Group is a forum for industry, government, research communities and end users to contribute to an XML schema particularly suited for architecture, engineering and construction (A/E/C). ModelServer Integrator, with support for XML, will be available in the fourth quarter of 1999. www.bentley.com

FUTURETENSE & MIGRATION SOFTWARE SYSTEMS TEAM 9/28/99

FutureTense, Inc. and Migration Software Systems Ltd. announced that Migration has joined the FutureTense Business Partner Program. Migration, as a systems integrator, will implement FutureTense's Internet Publishing System (IPS) for FutureTense's professional publishers and corporate customers. Migration also will become a VAR of the FutureTense IPS Web content management and delivery products. www.futuretense.com, www.migration.com.

WEBMETHODS INTRODUCES B2B 3.0

9/28/99

webMethods, Inc. announced webMethods B2B 3.0. This next generation of the company's B2B integration product seamlessly connects companies B2B marketplaces and trading partners in extensive trading networks. webMethods B2B makes it possible for companies to pursue direct integration with trading partners, while also participating in emerging B2B marketplaces such as mySAP.com, the Ariba Network and Clarus SupplierUniverse. In addition to support for current and emerging XML standards such as Commerce XML (cXML), Financial Products Markup Language (FpML), Open Applications Group (OAG) IS, Microsoft BizTalk and others, webMethods B2B 3.0 adds support for non-XML B2B standards such as Open Buying on the Internet (OBI), RosettaNet and major EDI standards such as ANSI X12 and EDIFACT. There are also new integration modules for Baan, Oracle Applications, PeopleSoft and IBM MQ Series. webMethods B2B 3.0 is available for all platforms that support Java, including Microsoft Windows NT, Sun Microsystems Solaris, Linux, Hewlett-Packard HP-UX, Compaq Unix, and IBM AIX and AS/400. The product integrates with DBMS products such as Oracle, Informix, DB2 and Microsoft SQL Server, and ERP applications from Baan, SAP, Oracle and PeopleSoft. Pricing for webMethods B2B starts at \$100,000. webMethods B2B 3.0 is available immediately for select customers, with general availability scheduled in October. www.webMethods.com.

ASYMETRIX SHIPS TOOLBOOK II INSTRUCTOR 7.1 WITH XML 9/27/99

Asymetrix Learning Systems, Inc. announced the availability of ToolBook II Instructor 7.1. Version 7.1 represents the next generation release of the online learning authoring product used by professional developers, programmers, instructional designers and trainers to create compelling, web-delivered courseware. Instructor 7.1 offers a host of new features including a DHTML runtime engine that allows authors to convert their applications to DHTML for delivery to 4.x and higher browsers; an

Actions Editor, a visual programming tool that allows developers to create action sequences to add functionality that can be exported to DHTML; and AICC compliance, allowing courses created with the product to support connectivity to AICC compliant learning management systems and servers. Additionally, Instructor 7.1 now includes XML support by exporting to an intermediate XML file in the process of translating applications for delivery on the Web. Another new addition to the product, the Universal Media Player, allows a single object to have built-in support for most modern media types. This new Catalog object provides support for all of the standard media formats (AVI, WAV, MIDI) and the media formats supported by the new Windows Media Player (Windows streaming media, MPEG video, QuickTime video, MP3 audio, and others). The RealNetworks RealPlayer G2 (all RealMedia formats, SMIL), the Macromedia Flash Player, and other media file formats are also supported in this new release. ToolBook II Instructor 7.1 is immediately available and is priced at \$2,495 for first-time purchases or at an upgrade price for Instructor 6.5 customers of \$695 if purchased before October 31, 1999 (\$895 after this date). Owners of versions prior to 6.5 may upgrade for \$895 as well. www.asymetrix.com

INTEGRAL LAUNCHES B2B E-COMMERCE PORTAL FOR CAPITAL MARKETS 9/27/99

Integral launched CFOWeb.com a business-tobusiness e-commerce portal for capital markets. CFOWeb.com will give CFOs, treasurers and fund managers free, direct access to sophisticated, powerful analytics and the ability to create, manage and maintain investment portfolios that are tailored to their specific needs. CFOWeb.com also gives investment banks and financial services providers an immediate online presence, dramatically increased deal flow and expanded geographic reach. CFOWeb.com helps financial services providers leverage the increasing opportunity presented by Internet delivery of products that is impacting nearly every vertical market. Participating in CFOWeb.com enables providers to either augment their own existing ecommerce site or to leverage CFOWeb.com as a rapid time-to-market e-commerce alternative.

The portal increases financial services providers' deal flow and allows them to offer their products to a wider range of prospective customers, regardless of company size or location, in a dynamic online environment. CFOWeb.com will become an international network of banks, consultants, dealers, and independent service providers. CFOWeb.com is not a company, but an array of products and services delivered by industry providers to provide maximum value to end-users. The technology underlying CFOWeb.com is based on the Integral's enterprise Java technology and XML. The core of the Integral platform is the Integral Internet Financial Server (IFS), an intelligent financial server capable of modeling financial instruments and events including front to back office trading and risk management processes provided by the financial institutions. Users and providers can register for CFOWeb.com at www.cfoweb.com. www.integral.com

INTERFACE SYSTEMS ADDS XML SUPPORT TO L21 9/27/99

Interface Systems, Inc. announced adoption of XML as part of its new L2i (Legacy-to-Internet) technology platform. Interface will include XML support across its product line with the first implementation being its newly enhanced version of its eBill Manager product for electronic bill presentment and payment and MyCopy, designed for L2i electronic statement delivery for Web based environments. Interface's L2i technology is the bridging technology between the mainframe, where information resides, and the desktop, where the information is needed. L2i allows companies to deliver information across the Internet or Intranets, fax machines, CD-ROMs, voice response systems or to remote and/or local printers. Interface's L2i technology allows any Internet application to make full use of legacy application output without changing the legacy application in any way. Interface's L2i products are based on the company's Document Server software. These products include eBill Manager for Internet billing and MyCopy for Internet statement delivery. www.intface.com

POET ECATALOG SUITE ENABLES SUPPLIERS TO EXTRACT & MANAGE CATALOG DATA 9/27/99

POET eCatalog Suite, an out-of-the-box solution for extracting, managing and distributing supplier catalog data over the Internet for B2B eCommerce, is now available from POET Software. With POET eCatalog Suite (eCS), suppliers can now automate the traditionally labor-intensive process of assembling catalog information to send to buyers and content aggregation websites. POET eCatalog Suite is the essential supplier link to the Internet market. POET's eCS solution addresses the growing demand for electronic catalog data and permits suppliers to automate the interaction with buy-side procurement software from companies like Ariba, and eMarkets like Ariba Network. Furthermore, even though buyers and eMarkets may require data in different formats-based on dialects of XML specific to a vertical market or procurement application-POET eCatalog Suite insulates the supplier from mastering these various dialects by transforming the data on the fly into the appropriate delivery format. As a result, POET eCatalog Suite enables any supplier to deploy an eCatalog solution that works with the growing ranks of Internet buyers and marketplaces – today and as B2B eCommerce evolves without having to become experts in XML. By extracting the catalog data from an existing IT system and storing it in a separate master catalog, users can edit their data to make it useful to buyers-a process called data normalization. After the data is normalized. custom catalogs can be generated for each buyer or marketplace according to a unique profile. The catalog is then transmitted via the Internet where it can be loaded into a customer's procurement software or to an eMarket of aggregated content using the appropriate dialect of XML. POET eCatalog Suite is written in 100% Java. And costs \$30,000. <u>www.poet.com</u>

INFORMATICA & VIADOR PARTNER TO DELIVER XML PORTAL 9/24/99

Informatica Corporation and Viador Inc. announced a joint partnership to develop a single, end-to-end, Web-based architecture to provide global businesses with access to critical enterprise data assets. The jointly developed solution, which initially will be targeted at emerging e-business applications, will feature two products for integrating and accessing enterprise data: Informatica's data-integration platform, anchored by the PowerCenter dataintegration hub, and the Viador E-Portal Suite, an enterprise portal that allows users to securely search, access, and distribute business information from any source via a single, personalized view. The Viador and Informatica integration effort will exploit the capabilities of XML. The two company's products can already exchange metadata through the use of Informatica's MX (metadata exchange) interface, the data warehousing industry's first viable solution for exporting metadata to business intelligence reporting and query tools, and enterprise portals. The planned integration of Informatica and Viador products is a logical next step as XML takes center stage and becomes a widely accepted language for exchanging data and metadata among a whole of new class of Web- and e-business-enabled applications. The PowerCenter data-integration hub consolidates data from any source, including ERP systems from SAP and PeopleSoft, and delivers it and the underlying metadata to a data warehouse, data mart or operational data store (ODS). The data can also be written to message queues, flat files and XML files. www.informatica.com, www.viador.com

MULTICOSM ANNOUNCES NEW VERSION OF REFINDMENT FOR EXCALIBUR RETRIEVALWARE 9/24/99

Multicosm Inc. announced version 1.5 of Refindment for Excalibur RetrievalWare 6.7 and a worldwide reseller agreement with Excalibur Technologies. Refindment's theming and summarization features enables users to create a virtual web of related information that is linked by concept. Refindment version 1.5

features faster theme extraction, an easier to use interface, and tighter integration with RetrievalWare. When used with Excalibur RetrievalWare, Refindment helps to rapidly analyze hundreds of documents and extract the dominant concepts in less than a minute, then stores the resulting concepts in a master index. It summarizes each of the found documents and dynamically attaches hyperlinks to the primary themes in the summaries — allowing a user to jump immediately to the parts of the source document where those themes are mentioned and bypass irrelevant information. Hyperlinks are dynamically inserted into the full documents as well, enabling users to surf through their search results based on shared concepts instead of continually returning to the results list. Refindment is available immediately from Multicosm and is planned for Q4 availability by Excalibur for Excalibur RetrievalWare 6.7. www.multicosm.com

INFODATA SYSTEMS NAMES JIM MYERS COO 9/24/99

Infodata Systems Inc. announced that James W. Myers has been named to the newly created position of Chief Operating Officer. Steve Samowich, President and CEO of Infodata, made the announcement. Prior to joining Infodata, he was Executive Vice President and General Manager at DynSolutions, Inc., a subsidiary of DynCorp, Reston, Va. Prior to DynSolutions, Myers was co-founder and president of Vantage Technologies, Inc. www.infodata.com

DOCUMENT TECHNOLOGIES APPOINTS PRESIDENT 9/23/99

Document Technologies, Inc. (dTech) announced that Todd K. Andersen has joined the company as President and Chief Operating Officer. Mr. Andersen began his career as a Marketing Manager with General Mills, then spent over 5 years as a Management Consultant with McKinsey & Company. Most recently, he spent 2 years as the CEO of Oriental Emporium Ltd. in Singapore. Todd will take over the daily management of the company to allow the current President, Scott A. Theis, to focus on continuing technology development. Mr. Theis

will take the title of Chairman and Charles D. Weeden will move from Chairman to Vice Chairman. <u>www.dtech-net.com</u>

ENGAGE TO ACQUIRE ADKNOWLEDGE 9/23/99

Engage Technologies, Inc. announced it has signed a definitive agreement to acquire AdKnowledge Inc, in an all stock transaction valued at approximately \$193 million. By integrating Engage's profile based targeting, AdKnowledge customers will be able to target and analyze campaigns based on profiles of their target audience. AdKnowledge has become a widely used source for marketers targeting online advertising. To date, nearly all such targeting has been based on content specific ad buying. With Engage, AdKnowledge will be able to broaden its offering to include profile based targeting to its customers. Under the terms of the merger and contribution agreement, CMGI will initially acquire control of AdKnowledge through the issuance of approximately \$170 million of CMGI common stock, followed by a contribution of AdKnowledge shares held by CMGI and AdKnowledge shareholders to Engage in exchange for approximately \$193 million of Engage common stock. The transaction, which will be accounted for as a purchase, is subject to certain conditions, regulatory approval and the shareholder approval of Engage and AdKnowledge, AdKnowledge, which recently filed its S-1 with the SEC, is privately held and will become a wholly-owned subsidiary of Engage. The transaction is expected to be completed in late 1999 or early 2000. www.adknowledge.com, www.engage.com, www.cmgi.com.

XMLSOLUTIONS RELEASES XMLZIP 9/22/99

XMLSolutions Corporation announced the availability of XMLZip for the Windows NT and Linux operating systems. XMLZip provides a compression tool for use with XML documents. XMLSolutions developed XMLZip to provide an efficient solution for handling large XML files. These large XML files use a disproportionate amount of transmission time over the Internet as well as large amounts of storage on both the

server and client equipment. XMLZip reduces the size of XML files without adding undoprocessing time to access portions of the files. XMLZip's compression technique allows users to determine the level at which they want to compress XML files, thus allowing continued utilization of the DOM API without performance degradation. XMLZip is currently offered at no cost to the public. XMLZip supports the Windows NT and Linux platforms and will support UNIX in the near future.

AKAMAI UNVEILS PROTOCOL FOR COMMUNICATING WITH CACHES 9/22/99

Akamai Technologies announced the development of a protocol that facilitates communications between caches and Akamai's global network of servers. In separate announcements, the Company also released that leading cache vendors are implementing the new protocol. The added functionality will be derived by the development of a new standard for communications called the Cache Interface Protocol. The development of this protocol will enable caches to report on their performance such as the number of hits served - to Web site owners through Akamai's content delivery services. This development will expand the level of functionality in the caching market for the benefit of both ISPs and Web site owners. Akamai will make the protocol available to third parties at no cost. Caching and Internet content delivery are separate and complementary products. Caches are hardware and/or software systems sold to ISPs and enterprises for the purpose of reducing bandwidth expense and improving Internet performance. Akamai's FreeFlow service is sold to major Web sites to improve speed and reliability, and is built upon a global network of servers deployed at ISPs' points-of-presence (POPs) and data centers. Today, many ISPs which have installed caches also have Akamai's servers located alongside them. Whenever Internet users request popular content from Akamai's Web site customers, these ISPs' caches transparently retrieve it from Akamai servers, even when it is marked uncacheable, ensuring that only fresh content is delivered. www.akamai.com

INTERTECH ANNOUNCES ASP MODEL

9/22/99

InterTech announced it is now a software and application service provider for electronic document management and workflow solutions that enable document-centric commerce over the web. InterTech offers enterprise and departmental document management solutions along with extranet trading partner solutions that can be deployed onsite or outsourced depending on individual client needs. www.intertech.com

VERITY APPOINTS BETTENCOURT PRESIDENT

9/22/99

Verity, Inc. announced the promotion of Anthony J. Bettencourt III to president and his election to its Board of Directors. Bettencourt joined Verity two years ago, and has served as Verity's senior vice president, worldwide sales and product marketing for the past eighteen months. With nineteen years of high-tech sales and marketing experience, Bettencourt will now be responsible for all of Verity's sales, marketing, professional services and product development activities. Bettencourt will continue to report directly to Gary J. Sbona, Verity's chairman and CEO. Verity also announced the promotion of Joseph J. Lawless to the position of vice president, North America and Rest of World Sales. Lawless joined Verity in July 1996, and most recently served as vice president, Eastern Sales Region. www.verity.com

WEBRIDGE FORMS ALLIANCE WITH AGENCY.COM 9/22/99

Webridge, Inc. announced the signing of a technology alliance agreement with AGENCY.COM. The alliance will allow Webridge's Express applications for ecommerce, partner relationship management and knowledge portals to be offered to AGENCY.COM clients. In addition to recommending and deploying Webridge solutions for clients, AGENCY.COM has launched

its corporate knowledge management portal built on Webridge's Express Framework. The intranet site, which is the central repository for the storage and retrieval of AGENCY.COM knowledge assets, is based upon the concept of "rooms," which are information portals centered around well-defined topics or classifications. Rooms will provide the foundation for organizing all of the Intranet content and for creating communities of people who share information, common interests, and needs with one another. www.webridge.com, www.webridge.com,

TUMBLEWEED SHIPS IME DEVELOPER 9/22/99

Tumbleweed Communications Corp. announced IME Developer, a product that enables enterprise developers and systems integrators to create customized, integrated, secure communications applications that run on the Tumbleweed Integrated Messaging Exchange (IME) platform. In addition, the company announced the Tumbleweed Developer Program, created to certify and provide support for developers who build and deploy secure communications applications in enterprises. Developers can use IME Developer to integrate secure communications applications with legacy data and systems, to customize the look and feel of those applications, and to develop new features and functions to run on the Tumbleweed IME platform. Tumbleweed IME is a software and services solution that leverages existing e-mail systems and networks to create a new e-business communication channel. With IME Developer as a resource, developers can rapidly create online applications optimized for e-business. www.tumbleweed.com

SEQUOIA SOFTWARE INTRODUCES XML PORTAL SERVER 9/21/99

Sequoia Software Corporation announced the new Sequoia XML Portal Server. The Sequoia XML Portal Server provides a information delivery mechanism that shortcuts the search and retrieval process typical of corporate portals. The Sequoia XML Portal Server incorporates a patent-pending XML indexing engine that allows users to conduct contextsensitive searches. This enhances information retrieval by giving users the ability to conduct searches that are highly granular, accurate and efficient. The Sequoia XML Portal Server shortcuts information retrieval by eliminating drill down, the process of finding and piecing together fragments of data from multiple search results. This is accomplished by providing users with customized information snapshots called Aggregate XML Objects (AXOs). AXOs are assembled by aggregating multiple, unique XML data elements into a new object that represents a user's specific information requirements. Sequoia XML Portal will be available in October 1999 for Windows NT. www.sequoiasoftware.com

OMG AND OASIS EXCHANGE MEMBERSHIPS 9/21/99

The Object Management Group (OMG) announced a membership exchange with the Organization for the Advancement of Structured Information Standards (OASIS). OASIS has joined the OMG as a Domain Member and the OMG is now a Sponsor Member of OASIS. As an OASIS Sponsor Member, the OMG will participate in OASIS technical discussion groups and committee-working groups, receive XML.org registry/repository services, and will be directly involved in the work of the OASIS Technical Committee. As an OMG Domain Member, the OASIS is entitled to technical, business and marketing benefits including the ability to vote on technology adoptions in the Domain Technology Committee (DTC), Domain Task Forces (DTFs), Special Interest Groups (SIGs), and Subcommittees. In particular, OASIS can make technology submissions to the DTC Requests for Proposals (RFPs). www.omg.org, www.oasis-open.org

XML.ORG PUBLISHES OAGIS XLM DTDs FOR BUSINESS OBJECT DOCUMENTS; FORMS RELATIONSHIP WITH OPEN APPLICATIONS GROUP 9/21/99

OASIS, announced that it has formed a strategic relationship with the Open Applications Group, Inc. (OAGI). As part of the agreement, OASIS will make the OAGI XML Business Object Documents available on XML.org, the open, vendor-neutral industry portal hosted by OASIS. Further, the two organizations have agreed to exchange sponsor-level memberships, enabling each to contribute to the other's technical work. The Open Applications Group Integration Specification (OAGIS) is a model for business software application component interoperability. OAGIS defines a set of components, processes and interfaces for integrating many key enterprise business applications, including financials, manufacturing, human resources, supply chain and logistics both inside and outside the enterprise. The content of OAGIS has been made machine readable in the form of XML DTDs for all currently defined OAGI Business Object Documents. It is one of the largest collections of standardized XML DTDs in support of ERP applications in existence. www.openapplications.org, www.xml.org

SOFTLOCK.COM & HANDHELD MEDIA TO DELIVER E-BOOK PUBLISHING SOLUTIONS 9/21/99

SoftLock.com, Inc. and Handheld Media announced a reseller agreement whereby Handheld Media will offer format independent production, secure merchandising, distribution and electronic sale of e-Books. The combination of Handheld Media's services with the SoftLock CyberSales Solution will create a turnkey service for the distribution of valuable content designed for print, including documents in Quark, Word, and other pre-production file formats and allow publishers to easily sell their content using the emerging e-Book publication structure OEB 1.0. The results can be read on a variety of information appliances, enabling new consumer channels for the existing millions of print content sources. www.softlockcom

INFORMATION ARCHITECTS & THOUGHTMILL PARTNER FOR CONTENT AGGREGATION & SYNDICATION 9/20/99

Information Architects Corporation, and Thoughtmill Corporation announced they have entered a partnership to deploy iA's Metaphoria Virtual Web Server technology to Thoughmill's clients and partners. Metaphoria Virtual Web Server provides aggregation and syndication of any digital information from anywhere it resides, including from multiple sources. The Metaphoria Virtual Web Server enables data residing in mainframes, client server systems, web servers, Internets and Extranets to be combined and viewed from any internet accessible devise such as a PC, PDA, WebTV, Palm VII or WinCE device. The core components of the Metaphoria Virtual Web Server provides content management, syndication, publishing, e-commerce, and bi-directional Legacy and Client Server systems integration via the Web. www.ia.com, www.thoughtmill.com

XMLSOLUTIONS ANNOUNCES AVAILABILITY OF EXETERXML SERVER 9/20/99

XMLSolutions Corporation announced the general availability of the ExeterXML Server release 1.0. ExeterXML Server can apply serverside style sheets to XML documents, allowing customers to begin fielding XML applications today without worrying about the client capabilities. ExeterXML Server has the built in logic to recognize the capabilities of the requesting application or browser to determine whether or not to serve an XML or HTML document. The ExeterXML Server utilizes IBM's WebSphere Application Server to provide servlet processing. XMLSolutions also employs the WebSphere Studio application and VisualAge for Java. Today, the ExeterXML Server supports the Windows NT, Linux, and Solaris 2.5.1 platforms. A future release scheduled for early October will include support for the AIX platform. www.xmls.com

ARDENT UNVEILS STRATEGY TO BRIDGE STRUCTURED & UNSTRUCTURED INFORMATION 9/20/99

Ardent Software, Inc. announced a strategic initiative designed to allow organizations to deploy a single enterprise information infrastructure (EII) to support a wide variety of strategic solutions, including e-business, analytical applications and enterprise information portals. The EII initiative is a direct response to the growing need to include unstructured information sources, and provides a uniform, enterprise-wide approach to information integration across data, applications and processes. Ardent's EII initiative will provide users with reliable, timely, and relevant information from structured or unstructured enterprise data sources to support the decision-making process using the best information available. The approach is based on XML and is content- and applicationindependent. Ardent will deliver its EII solutions in several phases. The first solution is the DataStage Suite for Business Information Infrastructure (BII), The DataStage Suite

includes the DataStage data movement tool, DataStage XE, which includes data movement, meta data management and integration, and data quality assurance capabilities, and DataStage Enterprise, which adds mainframe processing and activity management services. In the second phase, Ardent will Web-enable enterprise access to the rich business and technical meta data provided by its BII, delivering broader access to BI reports, associated meta data and related unstructured data such as spreadsheets, presentations, and other content. In the third phase, Ardent plans to deliver the essential foundation for an enterprise portal. Ardent's EII for enterprise portals will incorporate an integration layer that unifies related content from both structured and unstructured sources, enabling a personalized view of information from across the enterprise. EII for enterprise portals will provide a content- and application-independent platform to support information-intensive applications, including e-business and analytical applications. www.ardentsoftware.com

OASIS EXPANDS TECHNICAL WORK; ADDS NEW POSITIONS 9/20/99

OASIS announced plans to expand its technical work and member services by adding several new staff positions. Most of the new personnel will concentrate on advancing the work of XML.org, the open, vendor-neutral industry. As part of the expansion, OASIS is seeking a program director to lead the implementation and management of XML.org, a technical staff member to support the XML.org and OASIS technical working groups and a webmaster to enhance the Consortium's sites (including the OASIS site, XML.org, the CGM Open site and Robin Cover XML Pages). OASIS will also add a member services manager dedicated to meeting the needs of Sponsor, Contributor, Associate and Individual members of OASIS. www.oasisopen.org

WORKGROUP TECHNOLOGY NAMES PATRICK H. KARIEVA CEO 9/20/99

Workgroup Technology Corporation announced the appointment of Patrick H. Karieva as president, chief executive officer and director effective today, September 20, 1999. The company also announced that John P. McDonough has resigned as the company's president, chief executive officer and director to pursue another business venture. www.workgroup.com.

IMR OFFERS ENHANCED DOCUMENT STORAGE FUNCTIONALITY 9/20/99

IMR announced significant enhancements to its Alchemy document and data management software. These enhancements allow Alchemy users and developers greater access to over 250 e-document types, managed by the Alchemy archival and retrieval software. Service Pack 2 for Alchemy Release 6 increases the efficiency of building a database with its new multi-user database feature. As a result, multiple indexing and scan stations can write to the same database. An Alchemy database stored on a network file server can now be opened for write and read use by simultaneous users and the database can be accessed by read-only Alchemy Search and Alchemy Web Server users even when open by the database builder. The new service pack also adds the ability to annotate image files. Annotations are used to add comments or highlight critical items within an image. Sensitive data can be hidden from view with Alchemy's new redaction feature which includes the ability to e-mail a redacted image file as an attachment. www.imrgold.com

ORI ANNOUNCES CLARIENTXML SERVER FOR LOTUS NOTES 9/20/99

ORI Inc. announced the availability of the ClarientXML Server solution to provide realtime XML publishing capabilities for Lotus Notes and Domino 5.0. The new offering will give Lotus Notes users a tool to accelerate ebusiness development within their organizations. The ClarientXML Server enables corporations to publish existing information or documents residing in Lotus Notes and Domino databases in XML. It allows Lotus Notes and Domino 5.0 servers to communicate using XML, interpret XML documents and perform various Lotus Notes database-related functions. ClarientXML Server accelerates the development of business-to-business ecommerce applications and supply chain management applications for large corporations by facilitating structured communications between computers. www.objres.co, www.lotus.com

COGOS ANNOUNCES ANDROMEDA2000 9/20/99

Cogos Consulting, Inc. announced Andromeda2000 for Domino Release 4.0. Based on groupware technology, Andromeda 2000 is a "galaxy" of virtual workspaces that supports people working together. Through a set of process management structures, such as project management and pipeline management, Amdromeda2000 for Domino improves knowledge work by organizing the dynamic information flows associated with teamwork. Through a browser, Andromeda2000 for Domino can be used for a stand-alone team or can be scaled to support multiple teams. For example, Andromeda2000 is appropriate for any organization that needs to support large initiatives such as merger integration efforts, global account teams, or implementing ERP systems. Also integrated into the Andromeda200 work structure is: o A wizard setup. Users can create new team spaces quickly, allowing organizations to begin new initiatives instantly while benefiting from builtin coaching on the "basics" of building effective teams. o Directory module. Provides a "map" of

the organization's teams, communities and libraries and connections to them. o Document management features. Features that manage documents such as check-in and check out are integrated into the Andromeda2000 environment. www.cogos.com

EASYASK, INC. MAKES CORPORATE & PRODUCT ANNOUNCEMENTS 9/20/99

EasyAsk Inc. (formerly Linguistic Technology Corporation) has been formed to provide Internet and Intranet search engine software for relational databases. EasyAsk Inc. will provide a family of natural language question/answer portal solutions specifically designed to address the idiosyncrasies of indexing, searching and generating the SQL required to access databases efficiently. New products, under the brand name EasyAsk, are being rolled out for a number of specific markets including electronic retailing, data warehousing and enterprise information portals that integrate the search process for text and database sources within a corporation, and ultimately the public portal market. www.easyask.com

INTRANET SOLUTIONS ANNOUNCES XPEDIO CONTENT SERVER 9/20/99

IntraNet Solutions, Inc. unveiled Xpedio Content Server, packaged enterprise Web software that enables organizations to easily build and support mission-critical, content-centric applications for the enterprise. IntraNet Solutions is also announcing today two new application modules. Xpedio Content Publisher provides advanced template-based technology to automatically publish standard business documents or content in HTML or XML as welldesigned, fully linked Web sites. Xpedio ReportSite provides an enterprise report publishing capability that includes support for streamlining publishing and distributing enterprise reports and building partner extranet applications. Xpedio Content Server's key functionality includes automatic Web conversion and publishing in both PDF and HTML, heterogeneous content input and management, personalized information delivery, enterprise security and scalability, and

adherence to Web standards. The Xpedio Content Server system will be available October 15, 1999. Pricing starts at \$125,000 USD and includes one development and production server for Windows NT and UNIX environments. Additional production servers start at \$50,000. Xpedio Content Publisher will be available in December 1999 with pricing starting at \$50,000 USD. Xpedio ReportSite will be available October 15, 1999. Pricing starts at \$50,000 USD and comes with report parsing and publishing of enterprise report data, including programmatic input from business and reporting applications, a staging server, replication and an Extrasite read only server for extranet use. www.intranetsol.com

INTRANET SOLUTIONS TO ACQUIRE INFOACCESS 9/17/99

IntraNet Solutions, Inc announced it has signed an agreement to acquire InfoAccess Inc. The acquisition will allow IntraNet Solutions to provide a content management solution that can be fully integrated with an organization's strategic information systems to deliver interactive, dynamically published and managed enterprise Web applications. Under the terms of the agreement, IntraNet Solutions will issue approximately 1.6 million shares of its common stock for all of the outstanding common stock of InfoAccess Inc., a private company, in a transaction that is intended to be accounted for as a pooling of interests. InfoAccess is a profitable company and has delivered solid revenue growth with its awarding-winning Transit Central product suite. The combined companies will have over 110 employees. www.infoaccess.com, www.intranetsol.com

UWI.COM ANNOUNCES SUPPORT FOR NETSCAPE CERTIFICATES & SMART CARDS 9/17/99

UWI.Com announced a free addition to its InternetForms Commerce System (ICS) that enables enterprise users to securely sign XML ecommerce documents using smart cards and Netscape digital certificates. InternetForms Commerce System provides options for creating verifiable records through digital

signatures, including third-party support for Netscape signatures, and support for Microsoft CryptoAPI, Entrust, and PenOp signatures. Through partnerships with VeriSign, Datakey, Entrust, Netscape, PenOp, GTE CyberTrust, and Digital Signature Trust, UWI.Com offers methods for securely removing paper from business processes. www.uwi.com

NEON`S MICROSCRIPT IMPLEMENTS XML 9/16/99

MicroScript, the healthcare business unit of New Era of Networks, Inc. announced support for XML as a key component of MicroScript's @ppian Enterprise Application Integration (EAI) product line. MicroScript's @ppian technology's use of XML provides a way to integrate disparate healthcare applications into Internet/Intranet architectures and e-Business frameworks such as Microsoft's BizTalk initiative. Configuration information, as well as data content and structure information can be transported and shared among various implementations by using XML. MicroScript's @ppian implements XML as the storage structure for metadata. Messages processed through the @ppian engine can be serialized as XML documents. The @ppian DataMapper translates messages in a single pass to and from XML, in addition to transforming messages in other formats. Additionally, @ppian's DataMapper uses XSL for data access syntax. www.neonsoft.com

ARDENT SOFTWARE ANNOUNCES REDBACK RELEASE 3 9/16/99

Ardent Software, Inc. announced the general availability of RedBack Release 3, a Web Application Server for creating scalable, transactional applications for the Internet and corporate intranets. Using RedBack Release 3, companies can leverage existing IT assets, such as OLTP systems with proven business rules, to deploy real-time, e-business solutions. RedBack Release 3 is available immediately. Supported platforms include Microsoft Windows NT, Red Hat Linux, and all major UNIX platforms. www.ardentsoftware.com/redback.

XML EDGAR PORTAL ANNOUNCED 9/16/99

Invisible Worlds, a San Francisco-based startup company unveiled the EDGARspace portal, a new Web service that delivers refined searches of the U.S. Securities and Exchange Commission's (SEC) EDGAR filings. The EDGARspace portal, one of the largest XML-based information systems ever developed, demonstrates the potential of XML by giving investment, financial and research professionals better ways to search for and find information that had been difficult to obtain. A trial version of the EDGARspace service is available free to the public at www.invisible.net/ for the next 90 days. It will then be available by subscription. Some features will remain free.

INFOACCESS SHIPS TRANSIT CENTRAL EDM 4 FOR DOMINO.DOC 2.5 9/16/99

InfoAccess, Inc. announced the release of version 4.0 of Transit Central EDM for Lotus Domino.Doc. This new release enables Domino.Doc users to publish entire Websites in XML, HTML, or a hybrid — without changing the source material in their Domino.Doc repositories. Transit Central EDM for Lotus Domino.Doc is also offered from IBM as a softbundle with Netfinity servers and Domino.Doc. www.infoaccess.com.

LOTUS & MICROSOFT TO INTEGRATE MEDIA TECHNOLOGIES INTO R5 OF NOTES AND DOMINO 9/15/99

Lotus Development Corp. and Microsoft Corp. announced their intent to integrate Microsoft Windows Media Technologies into Lotus' Notes and Domino Release 5 collaboration software products via IBM's HotMedia Connect technology. This strategic distribution, development and licensing agreement will deliver the benefits of Microsoft streaming multimedia technology to Notes and Domino R5 users worldwide as well as tighten the

integration between Lotus and Microsoft technologies. Initially Lotus plans to ship a partially integrated version of Microsoft Windows Media Player with an upcoming version of Lotus Notes and Domino Release 5. Lotus and Microsoft intend to integrate upcoming versions of Windows Media Technologies with a future update version of Notes and Domino R5 via HotMedia Connect for Domino technology. Additional availability and pricing details will be announced next year. www.lotus.com, www.microsoft.com

ACTIVE SOFTWARE & ART TECHNOLOGY GROUP PARTNER 9/15/99

Active Software, Inc., provider of eBusiness integration software products, and Art Technology Group, Inc., developers of ecommerce and online personalization applications, announced the formation of a strategic alliance to enable businesses to deliver Internet Customer Relationship Management (ICRM) solutions integrated with enterprise applications, including Oracle, PeopleSoft and SAP. ATG offers the Dynamo suite of ecommerce and personalization software products for enabling large-scale e-commerce solutions that extend customer relationships across the enterprise. ATG will develop, market and resell a Dynamo Adapter for Active Software's ActiveWorks Integration System. The Dynamo Adapter for Active Works allows businesses to draw customer information from multiple data sources enabling a seamless flow of information throughout the extended enterprise. www.activesw.com, www.atg.com

COMMERCE ONE ANNOUNCES CBL 2.0 9/14/99

Commerce One, Inc. announced the Commerce One Common Business Library (CBL) 2.0, an XML specification for the cross-industry exchange of business documents such as purchase orders, invoices, product descriptions, and shipping schedules. Commerce One CBL 2.0 is a set of XML building blocks and a document framework that allows the creation of reusable XML documents for electronic commerce. Using the CBL 2.0 document framework, businesses can

conduct electronic commerce by exchanging business documents of different types. To enable companies to preserve their investment in existing standards such as traditional EDI, CBL 2.0 provides a transition path to XML-based commerce capability. Based on a broad range of Internet and commerce-related industry standards and specifications, CBL 2.0 is endorsed by the Microsoft BizTalk initiative, OASIS, the UN/CEFACT Techniques and Methodologies Working Group, and CommerceNet and its eCo Framework Project and Working Group. To encourage its industrywide adoption and development, CBL 2.0 is free of charge and available immediately from ecommerce document repositories including XML.org, BizTalk.org, CommerceNet and Commerce One MarketSite.net. www.commerceone.com

BLUESTONE INTEGRATES TECHNOLOGY WITH CLOUDSCAPE, EXTENSIBILITY, FIORANO, POINTBASE, & VERVET LOGIC 9/14/99

Bluestone Software Inc. announced complementary product agreements with Cloudscape Inc., Extensibility Inc., Fiorano Software Inc., PointBase Inc., and Vervet Logic to bundle and integrate their XML technologies with Bluestone Visual-XML, the company's toolkit for building XML applications. Fiorano/EMS brings its Java message-queuing and publish-subscribe communications listener and dispatcher, while Cloudscape adds its 100% Pure Java SQL database management system and its Cloudsync application synchronization facility. PointBase extends Bluestone's XML functionality with its own 100% Pure Java SQL DBMS. In addition, Bluestone Visual-XML users now have access to a pair of advanced XML authoring tools — Extensibility's XML Authority v1.0 XML schema design and conversion tool and Vervet Logic's XML Pro v2.0 XML editor. Bluestone will bundle all five companion products with Bluestone Visual-XML, which will support plug-and-play integration of the products. www.bluestone.com.

WEB-ENABLED IXOS-ARCHIVE 3.5 AVAILABLE 9/14/99

iXOS Software AG, announced that its new web-enabled iXOS-ARCHIVE version 3.5 is now available. iXOS-ARCHIVE 3.5 has an integrated HTTP interface (already certified by SAP for interfacing with SAP ArchiveLink' Release 4.5), that extends access to information via the web in addition to allowing business document management using a standard web browser. www.ixos.com

ARIBA INTEGRATES CXML MICROSOFT BIZTALK 9/13/99

Ariba, Inc. announced it has completed its integration of Commerce XML (cXML) with the Microsoft BizTalk Framework. A member of the BizTalk Steering Committee, Ariba has integrated cXML with the BizTalk Framework to enable electronic exchange of business-tobusiness content, such as catalogs and purchase orders, between Ariba eCommerce solutions and the multitude of supplier Web sites based on the BizTalk Framework. cXML supports all supplier content and catalog methods, including buyer-managed, supplier-managed, content management services, electronic marketplaces, and Web-based sourcing organizations. In addition, cXML defines a request/response process for the exchange of transaction information for purchase orders, change orders, acknowledgments, status updates, ship notifications and other transactions. cXML is integrated with the BizTalk Framework using the XML-data Reduced (XDR) syntax. A list of supporting companies and additional information is available at www.cxml.org. www.ariba.com

MICROSOFT RELEASES BIZTALK JUMPSTART KIT 9/13/99

Microsoft Corp. today announced the availability of the freely downloadable BizTalk JumpStart Kit to aid developers in the immediate creation of BizTalk-compatible software applications. The Microsoft BizTalk JumpStart Kit makes it easier for developers to use XML schemas and the BizTalk Framework in current development projects and existing applications and to realize the benefits of XML for electronic-commerce and application integration within and across organizations. In addition, a library for BizTalk-compatible schemas is now live on the BizTalk.Org Web site, with more than 100 freely available schemas submitted by 30 organizations. www.microsoft.com

MICROSOFT ANNOUNCES WINDOWS DNA 2000. DEPTH OF XML SUPPORT, & SUBMITS "SOAP" TO IETF 9/13/99

Microsoft Corp. announced Windows Distributed interNet Architecture (Windows DNA) 2000, a comprehensive, integrated platform for building and operating distributed Web applications as well as Internet-based Web services. Web services represent an evolution from today's Web sites that simply deliver pages to a browser. Richer, more personalized and more proactive, these Web services can directly link applications, services and devices with one another over the Internet. Microsoft is creating tools and infrastructure to make Web services into reusable, universally programmable building blocks that can be easily created, combined and augmented by developers around the world. Once programmable, Web services become another piece in the assembly of solutions that can span multiple software components, business processes and applications anywhere on the Internet. Windows DNA 2000 builds upon XML as its fundamental foundation to put the resources of the entire Internet within reach of developers. The Windows DNA 2000 family of solutions includes: Microsoft Windows 2000, Microsoft

Commerce Server 4.0, Microsoft BizTalk Server, Microsoft "Babylon" Integration Server which provides bi-directional network, data and application integration with legacy hosts, Microsoft AppCenter, a new product that makes deployment and management of Windows DNA-based applications across high availability server "farms" as easy as managing a single server, Microsoft SQL Server "Shiloh", the next generation of SQL Server 7.0 that adds native XML support and integrated data-mining capabilities, and Microsoft Visual Studio. Microsoft also submitted to the IETF an Internet draft specification for the Simple Object Access Protocol (SOAP), an XML-based mechanism that bridges different object models over the Internet and provides an open mechanism for Web services to communicate with one another. Windows 2000 is expected to release to manufacturing this year. The other server products in the Windows DNA 2000 family will enter beta testing this year and are expected to be available by the middle of 2000.

www.microsoft.com

A FLURRY OF BIZTALK SCHEMA ANNOUNCEMENTS 9/13/99

In addition to some Biztalk announcements incorporated in product news there were a number of companies announcing Biztalk schemas or support, including: CollaTech Inc., www.collatech.com; Concur Technologies, www.concur.com; Clarus Corporation, www.claruscorp.com; Softshare, www.softshare.com; Bently Systems, www.bently.com; Prophet 21, www.p21.com; Cybertek, www.cybertek.com; Timberline Software, www.timberline.com; Scala, www.scala.com; and Compaq, www.compaq.com

NETDOCUMENTS ANNOUNCES FREE DOCUMENT STORAGE SERVICE 9/13/99

NetDocuments announced a new Web-based document service based upon common office metaphors such as folders, subfolders, and envelopes that includes free 10mb of storage. www.netdocuments.com.

EASTMAN SOFTWARE ANNOUNCES DEAL WITH CIS 9/13/99

Eastman Software, Inc. announced CIS Corporation as the exclusive Japanese distributor of Eastman Software's line of collaborative knowledge management products Work Manager Suite (WMX).

www.eastmansoftware.com.

BROADVISION INTRODUCES ONE-TO-ONE 4.1 9/13/99

BroadVision, Inc. announced the availability of BroadVision One-To-One Knowledge 4.1. The application introduces sophisticated personalization referred to as "Personalized Navigation" as well as personalized content capabilities, new knowledge administration features, simpler publishing, and a higher level of integration with existing data sources. www.broadvision.com

NETOBJECTS ANNOUNCES AUTHORING SERVER SUITE 2000 9/13/99

NetObjects, Inc. announced the new NetObjects Authoring Server Suite 2000. NetObjects Authoring Server Suite 2000 brings together collaboration, control, rapid design, Web site administration and management, and openness and connectivity. NetObjects Authoring Server 2000 will be available in September 1999, direct from NetObjects and authorized resellers. Pricing for NetObjects Authoring Server 2000 will begin at \$1,985 for a 2 client and 2 concurrent user system. www.netobjects.com

SOFTQUAD INTRODUCES HOTMETAL PRO 6.0 9/13/99

SoftQuad Software introduced HoTMetaL PRO 6.0. Key new features include enhanced FTP capabilities, automated synchronized site updates and remote file editing which will ensure that professional developers can update sites quickly and easily. HoTMetaL PRO 6.0 will

be available from September 23 1999 for tine Windows 95/98 and NT 4.0. Requirements: Pentium 75 processor, 16Mb of RAM, 256 color/SVGA display with minimum 640 x 480 resolution, CD-ROM drive. www.softquad.com

INPRISE SHIPS BORLAND DELPHI 5 HIGH WITH XML 9/13/99

Inprise Corporation announced the shipment and availability of Borland Delphi 5, the latest version of its rapid application development tool for Windows. Delphi 5 is designed to simplify the integration of Windows and browser clients, Web servers, middleware and back-end database systems. This new version includes support for HTML 4 and XML. Delphi 5 is available in three versions — Delphi 5 Enterprise, Delphi 5 Professional, and Delphi 5 Standard. All versions of Delphi 5 are currently available from Inprise and major software distribution channels. Delphi 5 Enterprise has an estimated street price of \$2,499 for new users. Delphi 5 Professional has an ESP of \$799. Delphi 5 Standard has an ESP of \$99.95. Current owners of any Borland Client/Server or Enterprise product can purchase Delphi 5 Enterprise for an ESP of \$1,699. Current owners of any Borland Professional product can purchase Delphi 5 Enterprise for an ESP of \$2,199. Current owners of other Borland development tools products can purchase Delphi 5 Professional for an ESP of \$249.95. Current owners of competing products, like Visual Basic or PowerBuilder, can purchase Delphi 5 Professional for an ESP of \$299.95. These prices are in US dollars and apply only in the United States. International customers should contact their local Inprise office, distributor or representative. www.inprise.com

FILENET ANNOUNCES NEW "DASHBOARD" 9/13/99

FileNET Corp. announced it has integrated a new Panagon Dashboard portal environment as a key part of its new Panagon IDM Desktop 3.0 Integrated Document Management software. Panagon Dashboard provides direct IDM application interfaces so that users can view repository documents and manage FileNET

content within Microsoft Outlook. Once users have installed IDM Desktop 3.0 they can immediately customize their Outlook navigation bar, pull-down menus and mouse controls to directly access Panagon 2000 functionality within Microsoft Outlook. It will ship in the 4th qtr, 1999. www.filenet.com

KEYFILE RELEASES XML WORKFLOW SCHEMA FOR BIZTALK 9/13/99

Keyfile Corporation announced it will support the Microsoft BizTalk Framework with an XML workflow schema that can be embedded with online forms, transactions and other XML documents. The schema defines the business logic for receiving, handling and processing the XML document as part of an e-commerce transaction. It is available in the library section of biztalk.org. www.keyfile.com

XML.ORG ADDS XML SCHEMAS & INTRODUCES XML SPECIFICATIONS CATALOG & SUBMISSIONS FORM 9/13/99

OASIS announced major enhancements to

XML.org, the open, vendor-neutral industry

portal for XML. New XML schemas from DataChannel and the HR-XML Consortium have been submitted to XML.org. Other content upgrades include the addition of the XML.org **Specifications Catalog** (xml.org/xmlorg_catalog.htm), a list of XML specifications currently under development including links for more information. The site also incorporates the XML.org Specification Submission Form to encourage and enable organizations to share their XML specifications with the community at large. DataChannel's submission to XML.org is the Portal Markup Language (PML), which is designed to support inter-portal communication by providing an XML-based description of portal-related data and metadata. PML incorporates the basics of vocabularies such as Dublin Core, Directory Services Markup and WebDAV and will continue to closely track applicable standards of relevance to this arena. The HR-XML Consortium submitted three XML schemas to XML.org, all designed to enable a new generation of webbased workforce management and recruiting services.www.oasis-open.org

BULLDOG, ORACLE, & SUN LAUNCH CONTENT MANAGEMENT SOLUTION 9/13/99

The Bulldog Group Inc., Oracle Corporation, and Sun Microsystems Inc. announced Content BOSS, an integrated enterprise content management solution that enables media-rich organizations to reduce marketing and production costs. Content BOSS combines Bulldog's enterprise content management software and services, Oracle8i with Oracle interMedia, and Sun's servers and network storage. The Content BOSS agreement aligns marketing and sales efforts of the three companies, including joint sales training programs, events and marketing initiatives. Future Content BOSS plans include technical integration development and support for future releases of Bulldog and Oracle on Sun platforms. In addition, a Sun Microsystems Finance program will enable content companies and other media-rich organizations to implement a digital asset management strategy. Customers will be able to finance any combination of Content BOSS software, hardware and services from Sun and Bulldog through a single source. www.bulldog.com, www.oracle.com, www.sun.com.

INTERWOVEN LAUNCHES U.K. OFFICE 9/13/99

Interwoven, Inc. has opened a UK office.
Interwoven Ltd's team, led by David Ogidi,
managing director northern Europe, will direct
the company's business in the UK and Europe.
Ogidi has held senior positions at companies
including Sqribe Technologies, MapInfo and
Hewlett-Packard. www.interwoven.com

I-MIND ANNOUNCES EDUCATIONAL FRAMEWORK 9/10/99

i-mind education systems, inc., announced the release of the underlying architecture that drives the i-mind education hub, code named "Otto." The "Otto" engine is an educational framework or "backplane" that is compliant with leading educational standards and based on Internet technologies. i-mind will deploy this Enterprise JavaBeans-based system into select Florida and California schools this fall; it will be broadly available early 2000. Capable of running on any modern operating system, the framework provides interoperability among legacy administrative systems, Internet-based content delivery technologies, and instructional productivity tools. i-mind uses Citrix Systems, Inc. application server software as its cornerstone. i-mind education systems is a charter member of the SchoolTone Alliance (formerly WebTone), an organization devoted to improving the educational futures of children. Tracking the work of the Schools Interoperability Framework, the IMS Project, and the AICC's recommendations for Computer-Managed Instruction, i-mind's first product, code-named "Otto" (named after Nicolaus Adam Otto. the inventor of the four-stroke engine), is an interoperability framework that runs on school and district servers. It links existing teacher management systems (such as attendance, scheduling, and resource management systems) with new systems, especially those that provide "line-of-business" information to teachers, parents, and students. Otto leverages Internet-enabling technologies such as XML, LDAP, and the Internet Mail Consortium's iCalendar specifications, to make systems available on any browser-enabled device with scalability and security. www.imind.com

CSC ANNOUNCES CALS XML APPLICATION 9/9/99

Computer Sciences Corporation announced a new XML tagging convention that allows information to be shared over the Web between disparate workflow applications to achieve end-to-end process interoperability.

The new capability is the result of a cooperative effort launched by the DoD's Program Manager for the Joint Computer-aided Acquisition and Logistics Support (JCALS) Office and CSC. The JCALS workflow manager is a key component of the JCALS system that CSC has developed and implemented for the DoD. JCALS is a joint service information technology program that improves the processes to acquire, develop and maintain U.S. military systems. It is deployed among all the armed services at 60 locations throughout the United States. The new XMLbased specification, developed by JCALS program management and CSC, has been enthusiastically endorsed and accepted by the Technical Committee of the Workflow Management Coalition (WfMC). The coalition is a non-profit, international organization that promotes and develops the use of workflow through the establishment of standards for software technology, interoperability and connectivity between workflow products. www.csc.com

That's right, CAIS never really went away. In a way it was just superceded by events. Imagine all the money governments could have saved if the Web and XML had arrived a few years earlier!

INSWEB ROLLS OUT XML ENABLED INTERFACE 9/9/99

InsWeb Corp. has implemented an XML interface designed to streamline the exchange of data among insurance carriers and other online partners connected to the Internet's leading insurance marketplace. InsWeb has direct connections to 40 participating insurance companies, including State Farm, Nationwide, Progressive, AIG, CNA, Metropolitan Life, and Mutual of Omaha. Offering auto, term life, homeowners, renters and health insurance products, InsWeb also enables consumers to access its shopping services through the industry's most extensive network of Internet partners. Today, InsWeb has relationships with more than 110 leading Web aggregators, including Yahoo!, GO Network, Snap.com, ZDNet, LookSmart, E*TRADE, Wingspan, and enfoTrust.com. www.insaweb.com

DATAMIRROR ADDS FLAT FILE & XML SUPPORT 9/9/99

DataMirror Corporation announced the availability of Transformation Server for Flat Files. This new product release is a key addition to DataMirror's Transformation Server product line and expands DataMirror's market opportunity by giving customers access to nonrelational data. Transformation Server for Flat Files can reside in any Unix or Windows NT environment and allows users to move data directly into a target relational database without requiring staging. Transformation Server for Flat Files also has built in masking capability to aid in the description and replication of more complicated formats such as dates and currencies. Transformation Server for Flat Files also represents the first use of XML as a core technology in Transformation Server. Transformation Server for Flat Files will be generally available on September 15th, 1999. Pricing is custom quoted based on computing environment. www.datamirror.com

INTENTIA TO OFFER WAP SUPPORT 9/9/99

Intentia unveiled the next step in mobile enterprise application access. By using the WAP technology (Wireless Application Protocol) as defined by the WAP Forum, Movex customers can use any WAP-enabled device, such as handheld computers and mobile phones, to access their enterprise systems. This further extends the reach of the enterprise application to sales and service staff and will also enable field equipment such as vending machines to manage themselves and place orders straight into the Movex system. www.intentia.com

J.D. EDWARDS & OPEN TEXT ANNOUNCE ALLIANCE 9/9/99

J.D. Edwards and Open Text Corp. announced a technology alliance that enables J.D. Edwards OneWorld and WorldSoftware customers to integrate with Livelink using Livelink Enterprise Activator. This solution allows J.D. Edwards' customers to integrate unstructured knowledge and external information into core business

processes, providing access to enterprise information. Using the Livelink Enterprise Activator to search and retrieve information directly from the OneWorld and WorldSoftware systems, J.D. Edwards customers will be able to catalog and retrieve unstructured information types that are not typically available within enterprise business software. This integration will also enable Livelink users to participate in business processes that may originate from outside of the enterprise system. By providing users with access to corporate knowledge and unstructured information, management teams are able to make more informed decisions and more deftly respond to changing market conditions. www.opentext.com, www.j.d.edwards.com

THOMAS REGISTER ONLINE & INFORONICS ANNOUNCE TR-XML 9/9/99

Thomas Register Online and Inforonics, announced expanded product access through a "trading network" program. Thomas Register is providing line item detail with pricing information for more than 250,000 products that are available for online purchasing via secure credit card transactions. Using technology developed in cooperation with Inforonics, Inc., Thomas Register Online is creating a trading protocol that enables requests for catalog data, product information, orders and payment through the use of XML. Inforonics is implementing the new TR-XML for Thomas Register, which will enable companies to link to and access its website's line item product content. www.inforonics.com, www.thomasregister.com

EFINITY CONNECTS MANUFACTURERS & PARTNERS WITH REAL-TIME SUPPLY CHAIN DATA 9/9/99

Efinity Inc. announced their entry as an application service provider for real-time management of supply chain and business systems transactions for manufacturing companies and their trading partners.

Customers are provided a secure connection to

Efinity's Internet hosted application, streamlining day-to-day business operations including order entry, change orders, shipment status and forecasting, as well as inventory control. Utilizing the Internet and emerging standards technologies such as XML, Efinity provides a marketplace where buyers and suppliers of manufactured goods and services exchange vital, real-time business transaction data. Efinity's hosted applications allow companies with dissimilar business systems to communicate through a common medium. Efinity provides the service of "translating" the data so the companies can utilize the transacted information in a secure environment. Another feature of the system provides every user with the means of personalizing their view of the software, to better improve their work efficiency. www.efinity.com.

C-CALL.COM PUBLISHES BIZTALK SCHEMA FOR EARNINGS 9/9/99

c-call.com, Inc. announced its support for the Microsoft BizTalk Framework by publishing a schema for the seamless electronic exchange of earnings-related corporate events of interest to securities analysts, institutional investors and individual investors. Data described with this schema can be used for scheduling, planning and researching, while serving as a host of other investment-oriented functions. One of its uses is in populating a corporate earnings calendar targeted at analysts, institutional investors and individual investors. This corporate earnings calendar can aggregate and organize detailed information about current, future and historical earnings-related events that affect a list of companies of interest to an investor. www.ccall.com

TECHNOMATION PUBLISHES SCHEMA FOR EPROPOSALS 9/9/99

Technomation Systems Inc. announced plans to support Microsoft's BizTalk Framework by incorporating it into Technomation's BizOffice Portal for eProposals (electronic proposals). Technomation's eProposal XML schema will initially be offered as a schema for the exchange of eProposals and quotations along the

integrated E-value chain of proposal creation, quote generation, order entry, inventory control, invoicing, and post-sales customer support. The eProposal XML schema will provide the means for transferring data and descriptions of products or services, including specifications, capabilities, and costs, which can be communicated to potential customers, vendors, or trading partners. www.technomation.com

NAVISION SOFTWARE ADOPTS BIZTALK 9/9/99

Navision Software announced its plans to support the BizTalk Framework by developing BizTalk-compatible schemas for electronic exchange of business documents and messages expressed in XML. www.navision.com.

NCOMPASS LABS ESTABLISHES U.S. OFFICE; HIRES VPS OF SALES & BUSINESS DEVELOPMENT 9/8/99

NCompass Labs Inc. announced the opening of its U.S. center of operations in Silicon Valley. The company's newly appointed vice president of sales, Chris Sterbenc, will be responsible for all operations at NCompass Labs USA, which is headquartered at 2155 South Bascom Avenue, Suite 210, Campbell, Calif. Also new to NCompass Labs USA is Stan Shull, the company's vice president of business development. Previously, Sterbenc was the vice president of sales for Rainmaker Systems, a business process outsource company for large software publishers. Prior to Rainmaker Systems, Sterbenc managed the reseller channel at Edify Corporation, a provider of intelligent software agents for the Web. Prior to joining NCompass Labs, Shull was the director of business development at Boeing Enterprises, the investment arm of The Boeing Company. www.ncompasslabs.com

MICROSOFT SHIPS VIZACT 2000 9/8/99

Microsoft Corp. announced the immediate worldwide availability of Microsoft Vizact 2000, which allows users to add the dynamic and engaging features of the Web to their HTML documents. The Vizact 2000 technology allows users to add multimedia functionality such as timing, animation and interactivity to their Web documents, turning them into "active documents." With Vizact 2000, document authors can control multimedia functionality (e.g., text, images and sound) in their documents to increase attention to key messages, enhancing readers' understanding and retention of ideas. Via the Vizact Timeline, users can control when elements appear and disappear, the movement of elements, and the reaction of the elements to a user's mouse. Since Vizact looks and works like the Office family of applications, new users can get up and running quickly and easily. Vizact includes professionally designed wizards and templates, giving users impressive, professional results without requiring them to master new technology. Part of Microsoft's overall knowledge management strategy, Vizact is an example of providing knowledge workers with the right information at the right time. Vizact 2000 is available now in stores for the suggested retail price of \$149. www.microsoft.com

SEQUOIA SOFTWARE ANNOUNCES PARTNERSHIP WITH THE WINDWARD GROUP 9/8/99

Sequoia Software Corporation announced a reseller agreement with The Windward Group. The Sequoia XML Portal is a platform upon which Windward's technical staff will deliver customized enterprise information portals. This agreement will extend Sequoia Software's presence throughout the western United States via Windward's headquarters near San Jose and its affiliate offices near Seattle, San Diego and Salt Lake City. Sequoia's XML Portal delivers personalized information snapshots assembled from any of the XML data elements managed by the portal's patent-pending XML index. www.sequoiasoftware.com, www.wwg.com

NIMBLE.COM SECURES FIRST ROUND OF VENTURE FUNDING 9/8/99

Nimble.com, announced that it has received a first round of equity financing from Madrona Investment Group and ARCH Venture Partners. The company will use the funding to ramp operations and plans to release its first product early next year for advanced XML database technology for enterprise and e-commerce products. In addition to VC funding, the company has received financial backing from David Pool, CEO of DataChannel. headquartered in Bellevue, Wash. Nimble.com was founded in June, 1999. www.nimble.com

MANAGE.COM & DATACHANNEL PARTNER 9/8/99

Manage.Com and DataChannel, Inc., announced an alliance aimed at helping the emerging generation of on-line businesses make effective use of XML in managing the disparate systems and applications on their networks. The alliance calls for DataChannel to develop XML-based product extensions that will assist Manage.Com's partners and customers in adapting its FrontLine e.M management software product, which is used to discover, monitor, analyze and diagnose problems across the extended electronic community, or extranet. The development effort will result in an XML "wizard" that gives users an automated way to create documents in manageXML, Manage.Com's extension of XML specifically for e-management; the documents will specify XML data access, content and display rules for specific, commonly-used network devices, NT systems, web servers and applications. The wizard will be available by the end of 1999 from Manage.Com. www.datachannel.com, www.manage.com.

BOWSTREET NAMES ROBERT D. CROWLEY CEO 9/8/99

Bowstreet Software Inc. has appointed Robert D. Crowley to the post of president and chief executive officer. Crowley comes to Bowstreet from Arbortext where he was president and CEO. Bowstreet's current CEO and co-founder, Jack Serfass, will assume the role of co-chairman of Bowstreet, along with co-founder Frank Moss. Bowstreet, was founded in January 1998 and last week announced a \$20M second round financing. The company's Web Services Architecture, which combines XML and directory services technology, is technology for dynamic, frictionless B2B e-commerce. While President and CEO at Arbortext, Crowley positioned the company as a leader in Webbased e-content for e-business, tripling the company value in twelve months. Prior to Arbortext, Crowley was vice president of business development at Kenan Systems Corporation, an enterprise customer care, billing and analysis products firm. Prior to Kenan, Crowley was a senior vice president at USCS International. During his 11 years with California-based USCS. He earned his BS in finance from Villanova University. www.bowstreet.com

DMTF STANDARDIZES ON PROTOCOL FOR WEB BASED ENTERPRISE MANAGEMENT 9/8/99

The Distributed Management Task Force, Inc. (DMTF) announced the completion of the specification for Common Information Model (CIM) Operations over HTTP v1.0. This specification, which is available on the DMTF Web site at www.dmtf.org/wbem/index.html joins CIM and XML in providing the base of technologies for the DMTF's WBEM initiative. The CIM Operations over HTTP specification defines a mapping of CIM operations onto HTTP

that allows implementations of CIM to interoperate in an open, standardized manner and completes the technologies that support WBEM. With all three of the component pieces of WBEM now in place, CIM, xmlCIM, and CIM Operations over HTTP, vendors can now build WBEM based management solutions. CIM is an object-oriented information model standardized within the DMTF for the purposes of providing a conceptual framework within which any management data may be modeled. Allowing CIM information to be represented in the form of XML brings all of the benefits of XML and its related technologies to distributed management. WBEM is a set of management and Internet standard technologies developed to unify the management of enterprise computing environments. It provides the ability for the industry to deliver a well-integrated set of standards-based management tools, leveraging ubiquitous technologies such as CIM, XML and HTTP. www.dmtf.org

VERITY SHIPS K2 UPDATE 9/8/99

Verity, Inc. announced that the new version of its Verity K2 Toolkit (v2.1) is shipping and provides enhanced performance and application development options for online stores and online publishers. The product is designed to turn online browsers into buyers by arming Web-based businesses with more advanced text retrieval precision, scalability and application integration features needed to customize product catalog navigation and search on extremely large volumes of content. Newly added support for Active Server Pages and Java technology is included. The Verity K2 Toolkit is available for the Microsoft NT, IBM AIX, HP/UX, Digital Unix, and Sun Solaris operating systems and uses hardware vendors' latest SMP architectures. Customers can run the Verity K2 applications using any combination of servers running one or more of these operating systems. Verity also offers a full range of consulting services for Verity K2 projects. Pricing is based on specific application requirements. www.verity.com

INFORMATION MAPPING ANNOUNCES SEMINARS AIMED AT CREATING USABLE WEB DOCUMENTS 9/8/99

Information Mapping, Inc. announced the launch of three seminars aimed at helping organizations optimize information delivery over intranet, extranet, and Internet Web sites. The three seminars, "Designing Information for the Web", "Writing for the Web", and "Making Web Content Work", teach participants to maximize the utility of Web documents by applying techniques for organizing and presenting information. The seminars provide training for organizations that use Web technology to publish large amounts of complex information. Rather than instructing participants in Web programming languages or software, the seminars focus on how to develop and structure compelling site content that takes full advantage of the Web's capabilities. www.infomap.com.

JAIME ELLERTSON APPOINTED CHAIRMAN AT INTERLEAF 9/6/99

Interleaf, Inc. announced the appointment of Jaime Ellertson as Chairman of the Board for the Company. In addition to his current responsibilities as President and CEO, Jaime moves into this position to lead Interleaf to its next phase of aggressive growth as the Company continues to strengthen its position as a provider of XML-based content management solutions. www.interleaf.com

XEROX SIGNS AGREEMENT TO RESELL INSCI'S COINSERV 9/3/99

Xerox Corp. and INSCI Corp. announced that the two companies have signed a strategic agreement whereby Xerox will incorporate and resell the INSCI suite of COINSERV enterprise digital transaction document archive and Web delivery products. Under terms of the agreement, Xerox will resell INSCI's products initially within North America, with planned

future expansion to other geographies. Xerox has been reselling INSCI products in areas such as Latin America and Asia since 1996.

www.xerox.com, www.insci.com

LIVEPAGE UNVEILS NEW RELEASE

LivePage Corporation today introduced Version 3.0 of LivePage Enterprise, designed to enable the delivery of Enterprise Information Portals which improve customer service and increase productivity by providing effective access to corporate information. New Features and Benefits of LivePage Enterprise 3.0 include: Enhanced XML Support - LivePage Enterprise 3.0 advances support for XML with a new implementation of XSL and improved integration with leading XML editors including ArborText Adept*Editor, Adobe FrameMaker+SGML, Microsoft Office 2000 and Corel WordPerfect Office 2000: Simplified Deployment of Personalized e-Business Solutions With new LDAP support and the LivePage Extensibility SDK, LivePage Enterprise 3.0 can leverage user profile information enabling dynamic content and site personalization based on the end-user; Text Searching in Word and PDF Documents - In addition to advanced XML, SGML and HTML content searching, LivePage Enterprise will allow for the indexing and searching of content stored in native Word and PDF documents. Matching search results are highlighted in the body of the document for enhanced end-user productivity. The beta version of LivePage Enterprise 3.0 is expected to be available within four weeks. General Availability of LivePage Enterprise 3.0 is expected in the fourth quarter of 1999. Pricing and packaging will be announced at that time. www.livepage.com

NEW DOCUMENT MANAGEMENT SOFTWARE FROM KRUSE 9/2/99

Kruse, Inc. is now shipping kWise, new document management software designed to address the need for a more affordable and rapidly-implemented solution for today's increasingly fast-paced businesses. The product enables individuals with average PC skills to rapidly organize and share all their project and product related documents. kWise is a software

solution incorporating advanced file viewers for more than 200 document formats including CAD engineering drawings, computer graphics, spreadsheet, text documents and video combined with document management capabilities not found in existing file viewer software suites. It was developed for Windows 95, 98 and NT 32-bit operating systems and is fully ODBC compliant. At the heart of the product's interface is Kruse's kWise NavTree navigational interface, and file tree concept that makes document management available to anyone with average PC skills. This interface was developed as an alternative to the multiple screens and complex protocols needed to locate and view files with traditional document management systems. www.kwise.com

DIG TO ENABLE IMAGE WORKFLOWS THROUGH METADATA 9/1/99

The Digital Imaging Group (DIG), the digital imaging industry consortium, disclosed its plans to enable a variety of image workflows through its metadata initiative, DIG35. The goal of the Initiative is to simplify the process of collecting and managing information about an image and in the process enable a broad range of applications from image management to digital photo finishing. Such a standard will benefit the many different users of digital imaging, from personal imaging at the consumer level; commercial imaging for e-commerce of imagebased content; and professional imaging for such industries as real estate, insurance, and scientific imaging. The DIG35 Initiative is supported by a broad cross-section of DIG members: Agfa, Canon Inc., Digital Intelligence Inc., Digitella Technology Inc., Fuji Photo Film Co., Ltd., Hewlett-Packard Co., Eastman Kodak Co., Microsoft Corp., NETIMAGE, PhotoChannel Networks Inc., Polaroid and Seattle FilmWorks

Inc.. XML will be a key technology in the implementation of the standard. XML's powerful data representation capabilities and its wide spread adoption in the Internet will allow flexibility. For example, take the problem of describing the location a picture was taken. Depending on the application domain, location in a consumer photograph could be a place name or a GPS coordinate. For medical images, location would represent a part of the body; for astronomical images, location would carry yet a different meaning. The DIG chose XML not only for its widely adopted use, but also for the opportunity to unify its work with a concurrent effort happening in the ISO MPEG Committee (ISO/IEC JTC 1/SC 29/WG 11), the MPEG-7 Group. The DIG35 Initiative recently formalized an official liaison with the MPEG Committee to collaborate with MPEG-7's effort in the area of still image metadata standardization. Through this partnership, the DIG will help define the metadata for still images within multimedia contents in order to help multimedia producers, owners and users manage their contents. www.digitalimaging.org

INTERLEAF RELEASES QUICKSILVER 9/1/99

Interleaf, Inc. announced QuickSilver, a comprehensive XML-based workgroup publishing solution for complex documents. QuickSilver offers customers a bridge to the rapidly emerging XML standard by extending the power of the complete line of Interleaf's high-end desktop publishing solutions known as Interleaf 5, Interleaf 6 and Interleaf 7. With QuickSilver, customers gain the ability to convert legacy documents to the open XML standard and to publish to multiple formats including Web, CD-ROM or hardcopy distribution. QuickSilver is available immediately and as part of the introduction to QuickSilver, Interleaf will be offering a special migration package to its existing Interleaf 7 customers this September. www.interleaf.com

IHS GROUP FORMS ENTERPRISE SOLUTIONS DIVISION 9/1/99

IHS Group announced it has formed IHS Enterprise Solutions Group, a division that provides information management solutions to customers worldwide. Companies that need help managing their information will be the target market for this IHS Group division. IHS Enterprise Solutions Group will manage and host product Web sites, conduct custom publishing, provide content integration, perform document management, and provide data conversion services to a wide variety of industries. In forming this division, IHS Group is leveraging the services of seven existing companies within the IHS umbrella. Together, the companies that make up IHS Enterprise Solutions Group employ over 350 people in 10 countries. The companies that make up the new group include: NexData Solutions (www.nexdata.com), IHS Information Integration (www.solutions.ihs.com), IHS Technologies (www.ihs.de), IHS Publishing Solutions (www.ihspsl.com), Technical Indexes Ltd. (www.techindex.co.uk), IHS Enterprise Solutions (www.ihs.com.au), IHS Nordic (www.ihsnordic.com). IHS Enterprise Solutions Group also includes the IHS Web Hosting facility in Englewood, Colo., and the IHS Conversion Centers in Mexico, Malaysia and India, which provide data conversion services and programmer training. www.solutions.ihs.com

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CALENDAR

Fall Internet World, October 4-8, Jacob K. Javits Center, New York, NY 800.500.1959. The largest of the Internet events which these days means one of the largest general-purpose IT shows. Lot's of E-commerce stuff this year, but also everything else internet-related.

Documation Canada, November 15-18 Holiday Inn, Toronto, Canada, 1 514 288 7501. The larger of the 2 Canadian versions of this event. Run by Interdoc.

XML/SGML Asia Pacific '99, October 18-21, Hotel Mercure, Sydney, Australia. 1 703.519.8159. The Asia/Pacific version of the US and European conferences by the GCA.

XML '99 - Enabling Business Innovation on the Web, December 5-9, 1999 Pennsylvania Convention Center Philadelphia, Pennsylvania, 1 703 519 8160

Markup Technologies '99, December 5-9, 1999 Pennsylvania Convention Center Philadelphia, Pennsylvania, 1 703 519 8160. The annual GCA gathering. The Markup conference is more technical.

XML for Information Resource Managers, Oct. 27-29, Wyndham Anatole Hotel, Dallas, 310-393-5338

XML Application Development, Nov. 3, UC Extension Downtown, San Francisco, 510-642-4111

eBusiness Conference & Expo, Dec 14-17, Jacob K. Javits Center, New York, NY, (800) 652-2578 ext. 2. "...the only event dedicated to business and technology managers focused on the strategic and deployment decisions of electronic business."

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