THE GILBANE REPORT™ ◢◢◢

DIGITAL RIGHTS MANAGEMENT: IT'S TIME TO PAY ATTENTION

When we wrote about the complicated issues surrounding copyrights for different types of multimedia in 1993 (*Vol. 1, Num. 5*) the problem seemed so insurmountable that most companies, and virtually all publishers, kept critical content closed-up in vault-like repositories and distributed it mostly on private networks or in print form. At that time (prehistorically pre-web) widespread electronic distribution was rare and corporate digital rights management (DRM) issues mostly had to do with legal liability: "Did you check with the owner *before* you used that graphic on your slide?!"

Things have changed. Keeping content locked away is inhibiting e-business applications. DRM is not just about Napster; it is becoming just as critical for corporate content whether financial, legal, strategic, or just slightly valuable. With useable DRM mechanisms in place there will be more valuable and useful business content available, and new revenue opportunities for corporate and commercial publishers. To date it has been difficult to get either publishers or content consumers to accept DRM solutions. They have been viewed as incomplete and cumbersome. But development is heating up. Even if the technology is not quite ready yet, it is getting close enough that you should be thinking about what DRM will mean to your business.

This month we welcome David Guenette as a contributing author. David works closely with Bill on consulting projects and has been tracking digital rights management for years. His overview of the issues and some of the important players will give you a jump start in understanding when and how to fit DRM into your content management strategies.

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DIGITAL RIGHTS MANAGEMENT:
IT'S TIME TO PAY ATTENTION

DRM is a small acronym for digital rights management which at this early stage represents a large range of technologies, tools, and services. The reason why you need to pay attention is that DRM promise's to change the digital content marketplace — corporate and commercial. The first step for IT departments, corporate publishers, and companies in the business of selling, licensing, or syndicating electronic content, not to mention tool and service vendors servicing these types, is to deal with the confusion that tends to mar every new technology getting applied to business practice.

In the case of DRM, the big story at the moment is digital music and how it may be sold, instead of given away on the Web. However, DRM is directly applicable to the corporate market and is being marketed to IT. DRM can help solve how the latest singles and the perennial backlists get handled post-MP3, but the right DRM solution can also be used to manage corporate information, including supply chain and work flow processes. DRM is very useful when it comes to information security and policy management for the enterprise and secure document exchange applications. Some DRM solutions and services also apply to electronic software distribution; if something is digital, its rights can be managed.

It can be fun following the legal battles and moral outrages pitting the likes of Napster, MP3, Michael Ovitz, the Electronic Freedom Foundation, and a sixteen-year-old Norwegian teenage hacker against the Recording Industry Association of America, Disney, Jack Valenti, and the aging heavy rock impresario or two. There are all the elements of drama: good versus evil, David versus Goliath, Rebel versus Empire, new media versus old. One senior VP at a leading DRM technology vendor described the coming Christmas 2000 season as the "Stalingrad of DRM-enabled music download vendors," an image that seems very apt given the various high-powered alliances that are shaping up to do battle for this potentially huge and lucrative marketplace. But those producing electronic documentation that supports their companies' product lines, serving corporate knowledgebases or sensitive business information and processes across intranets and Internet, or publishing high-value professional content also need to follow DRM as it plays out in the entertainment field.

Microsoft's Media Player play involving ContentGuard (formerly of Xerox; www.contentguard.com) is only the first step for their DRM solution. Their E-book Reader is scheduled to follow in short order, and IE and OS integration are somewhere down the road as end-game plan. InterTrust Technologies (www.intertrust.com), the twelve-year-old "start-up" in the DRM infrastructure segment that has been an instrumental player in the Secure Digital Music Initiative (SDMI), has ambitions no smaller than Microsoft's to build a new world order. InterTrust has been gaining big partners in music and publishing, not to mention their new status as "preferred technology supplier" for AOL. The AOL deal could—no guarantees, of course—put tens of millions of InterTrust's client-side DRM software on to PCs within the year, by finally giving the majority of recipients of AOL's infamous CD generosity an interesting reason for peeling the

disc out of its mailer. And when it comes to DRM, installed base and available supporting infrastructure is the horse before the cart.

InterTrust has a corporate-focused version of its DRM solution, which it calls Enterprise Edition of InterTrust Commerce 1.3. It is designed to work with current enterprise applications such as EDI, administrative and privileges management, certificate authority providers, encryption and embedded security, firewalls, link encryption, and token provision. Although junior members of IT departments may be thrilled to hear that DRM can bring the latest Courtney Love song to their desktops without guilt, what we care about is what DRM can do for business.

WHAT IS DRM?

As acronyms go, DRM serves pretty well.

"Digital" is obvious, and what with the two-plus decades' worth of anxiety on the part of most electronic publishers and would-be electronic publishers about putting their valuable content in digital form only to have it lost to misuse, there's little need to belabor the point.

"Rights" is a more complex issue, with the rights of content creators, the rights of content publishers and others in the "value chain" such as distributors, resellers, and syndicators, as well as the rights of the content consumers all needing to be considered both from legal and practical perspectives. On the corporate side, rights often have to do with access authority and tracking, version control, and business responsibilities.
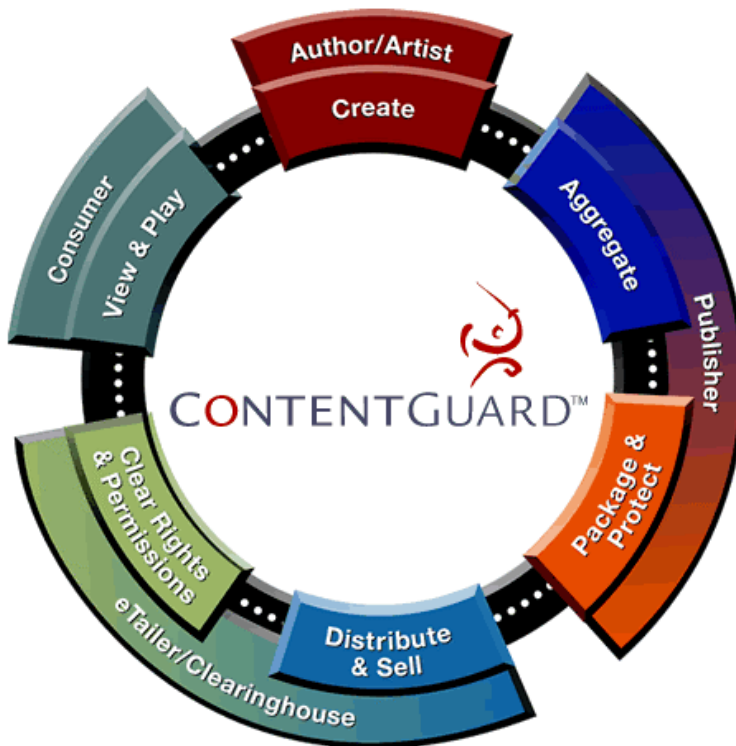

Figure 1. One thing that puts "management" into DRM is that there can be a lot of interests to keep track of. This graphic from the ContentGuard site captures the typical participants in the publishing value chain.

"Management" is what one does with digital content and the rights related to it, not that there is anything simple about what needs to be managed, from who gets what slice of the revenue pie, to who gets what kind of access to the content under what conditions and at what price. Throw in practical considerations like how cash actually gets exchanged for the content and distributed among the rights holders and value chain participants or how the usage of the content can be tracked, and you can start appreciating how much management there can be in digital rights management. Consider too how some DRM solutions can take on security, access, versioning, and workflow tracking functions, and the business need for DRM becomes compelling.

Like almost every other young acronym in high tech, DRM is so widely applied that confusion is guaranteed. DRM is claimed by a wide range of companies to describe tools, systems, and/or practices that fall in different spots along a wide spectrum, from the highly sophisticated to the insufficiently simple.

The Uber Axis: Sophisticated to Simple DRM

InterTrust Technologies is an example of the sophisticated end of the spectrum of DRM, claims to provide a digital rights management architecture that can encompass any type of digital content, apply any kind of business model, and do it for everything from DVD Video and MP3 to enterprise-level data or even financial instruments. It does this across any media, without need for a constant server connection. InterTrust partners supply the practical infrastructure such as DRM-enabling packaging/publishing services, payment clearinghouses, and usage tracking services. InterTrust not only supplies the means to protect content and the business rules regarding the content but also a general transaction architecture that they would like to see become as ubiquitous as Visa or Mastercard for the digital content domain. On the enterprise side, the architecture can replace proprietary or dedicated EDI and transactional/security applications.

InterTrust's intention is that every digital content publisher and enterprise will use the InterTrust technology widely. Content consumers sign up to use any one content type, such as music, and can then use their InterTrust client software for other content or services, with a whole bunch of payment and usage clearinghouses available to handle transactions, and it all (in theory) works smoothly and transparently, while InterTrust takes a tiny little piece of each and every transaction.

Needless to say, Microsoft loves this model too, which is why Dick Brass, the Microsoft VP in charge of their recent ContentGuard investment, couldn't help sounding a bit excited when answering a question about projected revenue from their anticipated DRM play with ContentGuard. "I don't have a figure," Brass replied, "but anything of 300 billion [transactions] is going to be okay."

The opposite extreme is when DRM is synonymous with copy protection, or rather, when DRM is confused with copy protection. Companies that provide watermarking technologies to publishers of all sorts, such as Digimarc, sometimes get described as DRM companies. Copy protection is an element of DRM, as is keeping rights holder information together with the content. While copy protection and persistent rights association are necessary for DRM, they are not sufficient.

A good example of this "simple" end of the spectrum is Alchemedia, which focuses on only one type of digital content, images. Their Clever Content platform

"proactively safeguards digital assets, embeds links to related URLs, and gives image owners and publishers the ability to generate multiple revenue streams." In short, while Clever Content could be used as part of a DRM publishing system for images, all Alchemedia is doing is adding embedded links and attaching attributes to a digital image that lets the content owner or distributor restrict usage such as printing, and copying.

AS THE AXES TURN: CONSIDERATIONS FOR CHOOSING THE RIGHT DRM SOLUTION

The DRM solution markets are more complicated than "sophisticated" or "simple". Different DRM solutions possess different characteristics, and these characteristics define how well the DRM solution can be applied to a your particular situation. The key issues for DRM solutions can be mapped along five axes:

- ◢ Server-client or autonomous peer-to-peer

- ◢ Distributed content or served content

- ◢ Flexible business models or limited rules

- ◢ Multiple media handling or single media focus

- ◢ Multiple platform application or single platform restriction

Axis A: Server-Client to Autonomous Peer-to-Peer

Whether or not a DRM solution exercises control by way of ongoing server-client connection or in a network independent way has significant consequences for the user environment. At one end of this axis is DRM that requires a constant connection between the client (*e.g.*, the PC through which the content is being used) and the server that monitors the use of the content and enforces the rules (*e.g.*, display but do not copy) associated with the content. Authentica's Page-Vault, for example, requires a specific server to present and control what happens to the documents. Since Authentica (www.authentica.com) is directed to the enterprise market where intranets are assumed ever-present, the need to keep connected isn't a problem.

Figure 2. Robust access control, usage tracking, and copy protection are easier to implement if content consumers are always connected to a DRM server, as is the case for Page-Vault, an enterprise-oriented system from Authentica. But can everyone be connected all the time?
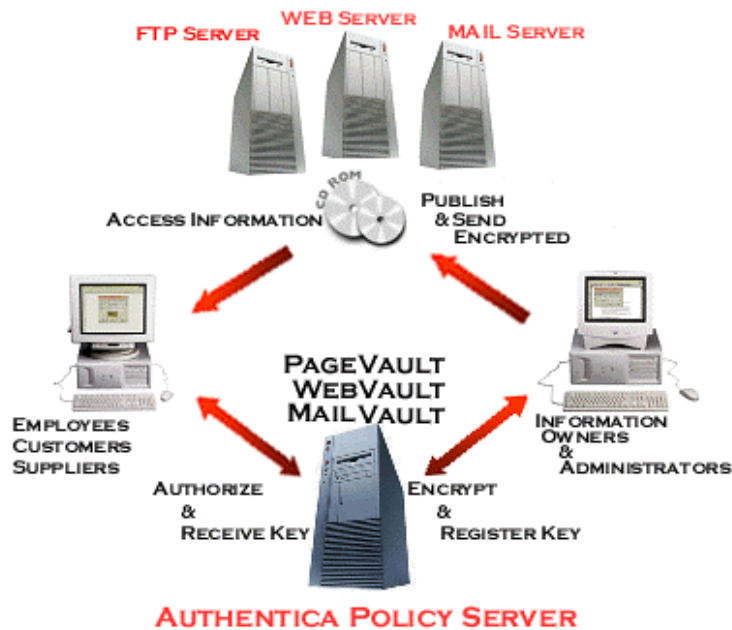
While Authentica looks to provide content rights control across the networks corporations require their employees and partners to be on, this situation isn't appropriate for many kinds of publishing. Yet many digital rights management systems require the customer to maintain a constant connection to the Internet while accessing the content, and it is easy to see how this set-up falls short, whether for employees who travel or for consumers of many kinds of content uninterested or unable to meet the overhead of ongoing Web access.

Most other DRM solutions currently require persistent or regular connection, including ContentGuard, the recent Xerox spin-off that saw some investment from Microsoft when it became a separate company in April this year. While certain of the press releases from the company have intimated that a server connection would not be required, this development is still unrealized.

In addition to InterTrust technology, DigitalOwl.com's Kinetic Edge product does not require consumers to have persistent Internet connection. DigitalOwl (www.digitalowl.com) persistently protects content and applies business rules by having client-side software that is robust enough to carry on DRM functions locally in the form of keys unlocking content and enforcing restrictions about actions such as display always, print *x* times, or do not copy. Better yet, protection and keys for the content are tied to the consumer not the device, permitting the consumer to use different PCs.

Axis B: Distributed Content to Served Content

A variant of the persistent server connection for some DRM solutions is the serving of content from a specific site from "online library" services, such as netLibrary (www.netlibrary.com) and Ebrary (www.ebrary.com). These services offer electronic publishers DRM-enabled vending of their content. The sophistication of the DRM itself is low in these services, offering not much more than copy protection at a gross document granularity level for purchase options due to the reliance on PDF as the content format.

With the popularity of PDF for digital publishing, it isn't surprising to find many DRM solutions based on it, typically using PDF Merchant (www.adobe.com) to assign usage restrictions and handle the server side of the transactions, with the Web Buy element of Acrobat Reader (version 4.05) used as the client-side. Currently PDF limits the flexibility of DRM solutions because of the difficulties in tagging very small sections of a PDF document as discrete objects for sale or for other usage-related business rules. The consequence is that PDF is much better suited for selling whole documents than parts of documents such as a high-value table or diagram that might be found within a market analyst's report.

Figure 3. SoftLock is a DRM service using protected PDF, and selling though both its own online store (iStore, shown here), and through affiliates. The connection between many DRM publishing services and *de facto* syndication comes through such affiliate programs.

Companies like SoftLock (www.softlock.com) and MediaDNA (www.mediadna.com) share some traits with the protected library model, but these solutions focus more on marketing the content their customers want protected. Indeed, MediaDNA calls its solution "digital content marketing." MediaDNA's eLuminator indexes hidden company content, *e.g.*, behind firewalls so that it shows up on general Web search engines. The second product, called eMediator, is what actually provides this content to those who now can find it. eMediator is a DRM-enabled server complete with transaction and access controls, and coupled with persistent copy protection enforced by a client-side program installed by the consumer.

Axis C: Flexible Business Models to Limited Rules
There's a huge difference between a DRM solution that manages PDF Merchant transactions and a DRM solution that can be applied to any kind and any part of digital content. If a publisher only intends to market individually priced PDF documents these differences aren't going to be important, but PDF can easily prove too clumsy if the documents are complex and composed of elements that can carry their own distinct value to different customers.

With DRM solutions that can support more flexible business models, publishers can match their content with the interests of multiple niche markets while automating the application of alternate rule sets to leverage these markets. A DRM solution that can apply a wide variety of business rules can also lower the cost of license administration and compliance, while enabling a diverse and much larger user base for content assets. Small companies that are traditionally under-served due to higher cost of sales and support and normally passed over by fixed pricing schemes now become approachable. Electronic publishers who have been stuck with gross licenses based on a specified number of seats regardless the level of actual usage get to offer more attractive and appropriate pricing choices such as accurate pay-per-use.

Distribution options also can be expanded, most notably by using *superdistribution*, where publishers can market directly to end-users or to re-publishers, such as other professional publishing organizations or consultants who can in turn act as value-added resellers. Resellers can pass along selected but still protected pieces of the publisher's original content or software to others. This content can be as a redistributed item, or it can be included as a portion of a larger collection of content, with the DRM solution handling payment for such "pass-along" sales efficiently and automatically.

Figure 4. "Superdistribution" is a term fiercely battled over in the market. This Inter-Trust graphic shows superdistribution as a means to have content consumers pass DRM-protected content to others who might wish to access it. With the enforcement system and business rules applying to such access, passing content to others becomes a potential new sale, not loss.
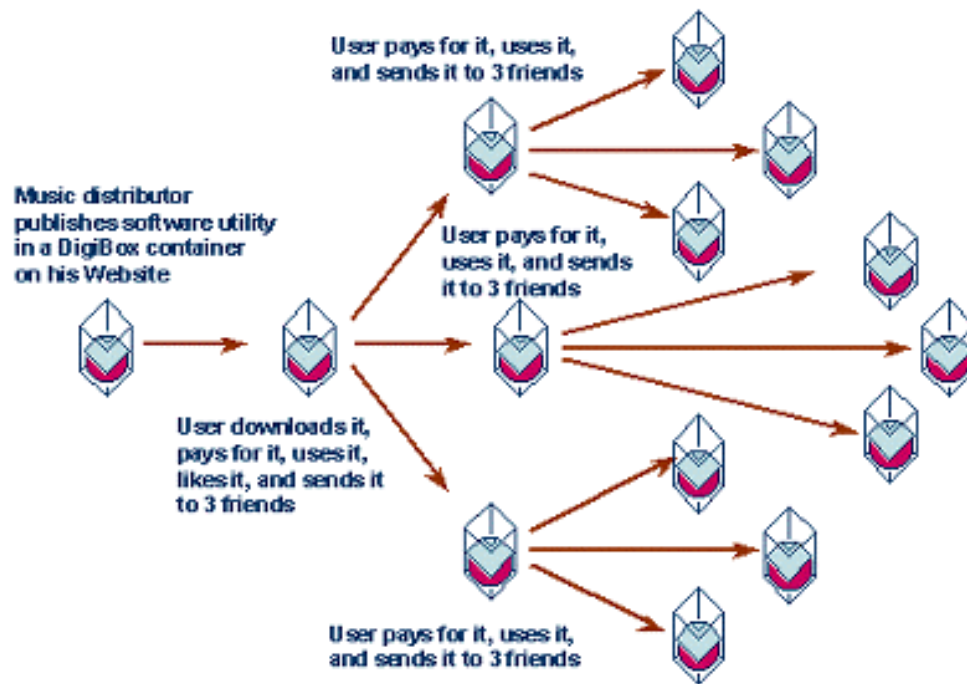
Usage tracking can be another important characteristic of flexible business models, especially if the DRM solution enables the publisher, its distributors, and its customers to share usage information. Not only might corporations leverage usage tracking for department- project- or individual-level charge back accounting support, but customers could allow all of their usage data to flow back to the publisher—to use, for example, in conjunction with personalized publishing services based on user or organization profiling, or as part of the value exchange itself, in creating new and valuable market information.

Axis D: Multiple Media to Single Media

Some DRM solutions are agnostic when it comes to the types of content and media supported, while others are downright dogmatic. But even if you only ever intend to publish electronic documents in PDF, and never see the need to get fancier than one price/one document business models, you should still be interested in more sophisticated DRM platforms. The reason is simple: even though you may have few plans to expand your menu of offerings, your customers may have plans for content use that are more complex. If they have to create clumsy workarounds your content better be extra critical.

One of the major complaints levied against InterTrust's approach is that the InterRights Point client is too big and too much of a hassle for the user (although the jury is still out, since InterTrust-based DRM hasn't really been rolled out yet). While the user convenience and transparency issues are important, it is fair to ask whether it is more onerous to install one client to service multiple content types and flexible business relationships, compared to addressing the many likely challenges from installing multiple limited DRM clients that could be individually less demanding, but in aggregate more aggravating.

Axis E: Multiple Platforms or Single Platforms

While there is the potential of having a DRM client that can do everything being too big, InterTrust answers this charge with hardware-based solutions aimed at portable content platforms. To date, there is Rights/PD, a chip-based client embedded system for digital music players, set-top boxes, and Win CE systems. Rights/PD is already being incorporated into Samsung and Rioport players, among others. And then there is Rights/Phone to enable the secure delivery of content such as music and ebooks on mobile phones and PDAs.

Even as the momentum behind dedicated E-book reader devices has dissipated, digital music download devices are being proclaimed a multi-billion dollar business in the year or two ahead, WAP is bringing Web-based content to cellular telephones, and PDAs are becoming Internet-connected devices. Net- and home network-connected consumer electronics are emerging, and the general category of Internet appliance seems inevitable, even if the success of specific products remains somewhat a matter of conjecture.

What isn't conjecture is that Gemstar, the company that brought TV Guide to VCR, has purchased NuvoMedia and SoftBook Press, that AOL TV is coming to market, and that Sony is building ISP content services for its digital music efforts and Web-connected Dreamstation DVD game console. In short, there are plenty of reasons for electronic publishers to consider that the PC may not be the only platform of significance.

With so many emerging choices and options for getting content to customers, choosing a DRM solution that only addresses Web-connected PCs could prove limiting.

IS DRM READY FOR PRIME TIME?

While one danger facing electronic publishers is to implement a DRM strategy based on tools that are too limiting, another danger is to pursue tools and services that aren't, to be blunt, here yet.

"Some DRM solutions are agnostic when it comes to the types of content and media supported, while others are down-right dogmatic."

For instance, InterTrust Technologies is actually in the business of supplying technology for building content-oriented e-commerce infrastructures and not in the business of working directly with corporate or commercial publishers. PublishOne, a partner of InterTrust focused on directly serving the professional publishing market, is only starting trials now.

Looking for service suppliers on the basis of the DRM technology they use can easily lead to confusion at this early stage of the DRM market development because there is a lot of promiscuity on the part of the DRM service companies. For example, Reciprocal (www.reciprocal.com), perhaps the biggest and oldest of the DRM service companies, has partnerships and agreements for DRM technologies from InterTrust, Adobe, and Microsoft, and with ContentGuard offers the ePCS, or electronic Publishing Clearing Service. Reciprocal's areas of effort are also quite promiscuous, and include not just publishing – e-book, professional, educational, and corporate – but also music, video, and software.

Another important question that proves surprisingly hard to get answered concerns the availability of tools. Reciprocal actually provides services not toolsets, which means that if you're thinking you'd like to tag your content for DRM yourself — and who knows the value breakdown of your content better, right? — well, you better look elsewhere. There are tools available for publishers, such as Flying Media, from InterTrust, but reviews are mixed in terms of the ease of use and capabilities of this new class of DRM-enabling editorial and production software. For publishers who want to roll up their sleeves and get some sophisticated DRM work done today, DigitalOwl.com has tools (including support for superdistribution) ready to sell, as well as services and even a syndication network of affiliated portals.

Authentica offers a solid and smart platform for answering corporate-side DRM concerns, and their MailVault application has e-mail control capabilities. MediaDNA is also for the corporate market, but the part of the market that needs to make deeply buried company content available outside, while maintaining control.

There are other unresolved issues, including the importance of standards. ContentGuard has fired its salvo with XrML, with InterTrust answering back with OpenRights. If ContentGuard's XrML does what it sets out to do, which is to serve as the open basis for DRM interoperability, then InterTrust should easily enough be able to interoperate with it. With the advent of XML as the general tagging scheme for content fed into databases that support content management, the issues of DRM standards may be largely moot. There is relatively little additional work to perform to map XML elements to associated business rules (such as access, price, and usage) to make XML-based DRM solutions work with content management systems.

Syndication and DRM seem a natural fit, too, although standards would presumably play a central role. Initiatives like ICE, which serve content "payloads" in a conforming manner into content management systems don't define the content itself, and DRM-enabled content could be as easily sent as any other. The biggest problem with syndication has always been on the serving end, and the question to pursue is whether applications like Vignette's StoryServer or Kinecta's Interact will avail themselves of DRM components to strengthen their business model offerings. Unfortunately, with DRM solutions based on proprietary and persistent server-client relationships, the challenges of executing syndication for

the subscribers get more complicated, not simpler, especially without a DRM interchange standard in place. As for now, only DRM solutions that support the concept of peer-to-peer superdistribution can play a role in syndication, but without ties to syndication-specific applications this capability remains more theoretical than practical. Still, it seems only a matter of time, especially given the raison d'être of syndication to maintain control over the distribution and use of digital assets, while simplifying and streamlining the receipt and deployment of those digital assets. DRM helps and expands on syndication, just as it helps and expands access and control and tracking for content management.

Clearly, the market pressure for DRM and ties into content management and syndication will continue to grow. Recently, for instance, Kinecta announced it was working with Worldweb to integrate Worldweb.net's Expressroom I/O with Interact, to enable Expressroom I/O customers to receive online information — such as syndicated content — through their cell phones and other wireless devices. [*See our News section for more on the integration of syndication functionality and content management. Ed.*]

The potential in DRM to address the final concerns of publishers and IT departments in regard to control of the content by supplying the means to enforce and execute business models addresses the question of direct and practical benefits for sending content and critical business processes out among the many device — PCs, phones, PDAs, stereo systems, and even refrigerators — coming online. The benefits are increased revenue, expanded markets, and reduced infrastructure costs.

--David R. Guenette
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SUMMER SCHEDULE

Just a reminder that we don't publish a full report in August. We will continue to collect news and publish our email "top ten" once or twice during the month. Our regular publication schedule will resume in September.

INDUSTRY NEWS

Current news, old news (to January 1999), and commentary is available at www.gilbane.com/

ORACLE ANNOUNCES ORACLE8I RELEASE 3
6/28/00

Oracle Corp. announced the pending availability of Oracle8i Release 3, the third generation of their Internet database. The new release will incorporate the latest Java and XML technologies as well as advanced, triple Data Encryption Standard (Triple DES). The combination of Oracle8i Release 3, Oracle Internet Application Server 8i (Oracle iAS) and Oracle Internet Developer Suite comprise the next generation of the Oracle Internet Platform, Oracle's complete platform for Internet computing. The Oracle Internet Platform-including virtually all the technology software needed to become an e-business-is available today. With Oracle8i Release 3, Oracle has added: Common Java and XML Services between Oracle8i Release 3 and Oracle Internet Application Server 8i; Oracle8i (JVM) Java Virtual Machine capabilities across server tiers including common EJB support for Entity Beans. Java Servlets and JavaServer Pages; Java 2 Enterprise Edition APIs includes Java Messaging Services (Java JMS), Java Transaction Services (JTS) and JDBC. Oracle8i JVM Accelerator provides native compiled Java code for greatly enhanced Java performance. XML SQL Utility makes reading and writing XML documents in their native formats easier than ever before. Oracle8i Release 3 also allows relational data to be searched, queried and retained in its original XML format. Oracle plans to make Oracle8i Release 3 available in Summer 2000. At that time, Oracle8i Release, both Standard and Enterprise Edition, will come bundled with business-to-business workflow and standard management packs free-of-charge. These former options to the database were previously priced and sold separately. www.oracle.com

These releases are coming fast and furious. Fortunately it may be due to the importance Oracle attaches to it than to bugs.

MICROSOFT & INTERWOVEN ANNOUNCE CONTENT EXPRESS FOR MICROSOFT COMMERCE SERVER 2000
6/28/00

Microsoft Corp. and Interwoven Inc. announced the beta release of Content Express for Microsoft Commerce Server 2000. Microsoft and Interwoven worked together on Content Express, which is designed to enable business users to easily create and manage content for e-commerce solutions built using Microsoft Commerce Server 2000 and the Microsoft Windows DNA 2000 platform. In a related announcement, Microsoft Commerce Server 2000 beta release was announced today. Content Express software provides business users with easy-to-use content management functionality and is integrated with the Commerce Server Business Desk management application. Business users can enter and modify content on the fly and kick-off predefined workflow approvals. Content Express also provides companies with the ability to perform whole site versioning and rollback. Together, Content Express and Commerce Server 2000 enable organizations to significantly reduce both time and costs for Web-site development and management. Businesses that adopt Content Express and need to further scale their Web operations will be able to upgrade to Interwoven TeamSite, Interwoven's enterprise-class content-management solution. TeamSite provides scalability by enabling the following: empowering technical developers in addition to business contributors; managing sophisticated Web operations including complex workflows; and integrating diverse Web assets such as application code, XML and streaming video and audio. Interwoven TeamSite is available for the Windows 2000 and Windows NT operating systems. www.interwoven.com, www.microsoft.com

Now this is interesting. Site Server has always had some content management, but a level of functionality in between that and TeamSite could be just the ticket for many. Note that this helps protect InterWoven from competitive attacks from below.

BROADVISION ADDS ONE-TO-ONE PUBLISHING TO SUITE
6/27/00

BroadVision, Inc. introduced BroadVision One-To-One Publishing, a new offering for next-generation content management. One-To-One Publishing combines BroadVision One-To-One e-commerce

applications with a content management solution to provide a structured, and convenient publishing solution for a wide range of media, including Web, wireless, and print. This introduction marks the completion of the marriage between BroadVision One-To-One Enterprise and Interleaf's XML-based content management tools. The new package represents BroadVision's integration of XML-based capabilities to its e-commerce application suite and the fruition of its acquisition of Interleaf in April of this year. By storing written and graphical content in a central repository as XML, BroadVision One-To-One Publishing provides personalization of this information for a specific audience, purpose, medium or device. Adding this new offering to its enterprise application suite meets current customer demand to deploy and customize business information and prepares for the near-term need for content delivery to wireless devices. BroadVision One-To-One Publishing transforms static business information into dynamic, structured and reusable content, thereby increasing timeliness and reducing cost. The One-To-One Publishing customer will create new content and edit existing content using familiar applications such as Microsoft Word and PowerPoint. Once created, this information can be broken down into manageable pieces so that multiple users working on separate contributions can combine sections and publish to one Web site, printed document or other medium. The content can also be versioned, meaning that new and old versions of information can coexist for reference and other purposes. Key Features of BroadVision One-To-One Publishing include the capacity to: Create complex content with Microsoft Word and PowerPoint which enables easy translation for use with Web, wireless and print for anytime, anywhere delivery without IT support; Manage the publishing process with graphical workflow administration; Optimize content for multiple touch points; and Re-use and re-purpose content by recombining information in different ways to tailor to additional audiences. One-To-One Publishing will be available in August 2000.
www.broadvision.com

Now we have part of the answer about how Broadvision is integrating the Interleaf technology it acquired.

KINECTA & WORLDWEB.NET UNITE SYNDICATION & CONTENT MANAGEMENT
6/27/00

Kinecta Corporation Worldweb.net announced a joint partnership to offer content providers a fully integrated solution to manage and syndicate content in order to reach broader e-business audi-

ences. As part of the agreement, Worldweb.net will integrate the ICE-based Kinecta Interact syndication platform into the company's Expressroom I/O content management system. The two companies will also provide joint sales product training and co-branding of the Kinecta Interact platform to Worldweb.net customers. Worldweb.net and Kinecta worked together to tightly integrate the Expressroom I/O and Kinecta Interact solutions. This will enable any customer of Expressroom I/O to utilize the syndication components and quickly ramp up their content distribution networks. As a result, customers can immediately realize the benefits of content syndication. Because Expressroom I/O supports WML, customers can receive online information – such as syndicated content – through their cell phones and other wireless devices. www.worldweb.net, www.kinecta.com

At some point all content management systems used for distribution will have some syndication capability.

MICROSOFT UNVEILS BIZTALK FRAMEWORK 2.0
6/27/00

Microsoft Corp. released a draft of the Microsoft BizTalk Framework version 2.0. This newest version of the BizTalk Framework has been redefined to be SOAP 1.1 compliant, thereby allowing BizTalk Framework XML documents to travel over a network in the form of SOAP messages. In addition, version 2.0 has been extended to include specifications for reliable server-to-server messaging, guaranteeing exactly-once delivery of business documents over the Internet. Multi-Part MIME encoding guidelines also have been added to the framework to support the inclusion of one or more non-XML attachments within a BizTalk message. Microsoft BizTalk Server 2000 will support BizTalk Framework 2.0 as the protocol for reliable interoperability over the Internet. The BizTalk Framework takes advantage of XML and MIME to provide the specifications for XML-based integration within and between organizations. The support for the SOAP 1.1 specification, which was recently submitted to and acknowledged by W3C, will allow developers to create applications and services that can be more easily integrated, independent of operating system, programming model or programming language. The new reliable messaging capabilities defined in BizTalk Framework 2.0 allow organizations to reliably transmit information via the Internet using standard transport protocols such as HTTP and SMTP. The inclusion of support for Multi-Part MIME, an alternative to inline encoding of binary information, provides guidelines for encoding and decoding of one or more non-XML attachments

within a BizTalk XML message. The BizTalk Framework 2.0 specification is available for review at www.microsoft.com/biztalk

DOCUMENTUM & SOFTQUAD INTEGRATE PRODUCTS
6/26/00

Documentum, Inc. and SoftQuad Software, Ltd. announced the integration of Documentum 4i eBusiness Edition with SoftQuad's XMetaL 2.0 to bring the advantages of XML to enterprise content management. As a result, users will now be able to create and edit XML content using XMetaL while managing content lifecycle from creation through Web deployment, via 4i's XML-enabled content repository. Documentum 4i eBusiness Edition provides native support for XML content management from content capture and creation through component management, format transformation and content delivery. XMetaL enhances these capabilities by offering an integrated authoring solution that empowers users to easily complete all authoring tasks required for contributing XML content to the Web. www.softquad.com, www.documentum.com

Also note SoftQuad's integration with Vignette (see below).

IONA DELIVERS IPORTAL SERVER
6/26/00

IONA shipped the final element of the iPortal Suite by delivering the iPortal Server. IONA's iPortal Server is the web-facing component of an enterprise portal that aggregates back-end applications and manages content to provide customers, suppliers, partners and employees with a single point of access to all of an organization's business processes and software applications. The iPortal Server ships with IONA's iPortal Application Server and Orbix 2000 offerings, providing an integrated J2EE-, SOAP-, XML- and CORBA-compliant environment. Further integration with IONA's iPortal OS/390 Server and the rest of the iPortal Suite enables organizations to build and deploy portals that leverage mainframe, ERP and proprietary enterprise applications. The iPortal Server provides a structured web design process for building, deploying and managing portal applications. By separating content, presentation, business logic and data layers, the iPortal Server's XML/XSL-based design ensures that web content is architecturally separated from the presentation layer, enabling new business logic or protocols to be added without affecting data or web content, unless desired. This capability

enables organizations to scale their Web applications as they evolve. The IONA iPortal Server 1.0, Standard Edition ships this week and is available from IONA and from partners including Compaq, CIBER, SAIC and others. US list pricing starts at $50,000. The iPortal Server supports Windows NT and Solaris 2.7 immediately, and will support Tru64 UNIX in the third quarter. The iPortal Server supports Oracle, Microsoft, Informix, Sybase and IBM databases. The iPortal server, Commerce Edition, featuring a B2B and B2C commerce portal, entered beta today and is expected to be available in the second half of this year. This offering will expand on the plug-in capabilities of the 1.0 Standard Edition, providing additional functionality in the areas of catalog management, inventory management, order management, payment processing, profiling capabilities, search capabilities, auction functionality, price quote management, message board capabilities, Java mail integration services, and others. www.iona.com

OPENPAGES ANNOUNCES CONTENTWARE WITH XML & JSP SUPPORT
6/26/00

Openpages, Inc. announced a new version of Openpages ContentWare. ContentWare 2.5 is designed to help commerce and e-media organizations more effectively create, manage and deploy timely, accurate and compelling content. Openpages, Inc., provides a high level of integration with popular desktop applications for deployment to any channel, including Web, print and wireless. The new version includes enhanced support for Java, XML and the Apple Macintosh OS. It also features direct integration with leading desktop software packages, including Microsoft Word, Adobe Photoshop, InDesign, Macromedia's Dreamweaver, Microsoft's FrontPage, SoftQuad's XMetaL and QuarkXPress, giving organizations–and their individual content creators–greater flexibility to produce, change, archive, deploy and re-use business-critical content. New Features include: Enhanced XML Support; Integration with SoftQuad's XMetaL; Added support of XSL templates; Integration between ContentWare and XML content created using Word; And support for Java Server Pages. Openpages ContentWare 2.5 is shipping immediately to selected sites with volume shipping to begin in the third quarter of 2000. U.S. list pricing begins at $150,000 for multi-user configuration. www.openpages.com

METACODE ADDS DYNAMIC LINKS TO ISYNDICATE'S 'SMARTCONTENT'
6/26/00

Metacode Technologies Inc., announced that iSyndicate will incorporate Metacode's Metatagger technology in its SmartContent initiative to dynamically link any public company's ticker symbol appearing in news articles to relevant information about that company. Metacode's Metatagger scans iSyndicate text to identify company names and ticker symbols. Metatagger draws from a Metacode company vocabulary to automatically recognize company names. Currently, Metacode's company vocabulary contains over 10,000 automatically generated company names. These are harvested from a variety of sources, including stock exchange records. Metacode enhances the vocabulary set by adding company nicknames and abbreviations. SmartContent is scheduled for release on June 26, 2000. www.isyndicate.com, www.metacode.com

EBT ANNOUNCES ALLIANCE WITH BEA
6/26/00

eBusiness Technologies announced a technology alliance with BEA Systems, Inc. and the integration of eBusiness Technologies' engenda content management and workflow automation solution with BEA WebLogic Server. This relationship provides customers the advantage of a Web content management solution combined with BEA WebLogic Server, delivering performance and reliability for powering e-commerce applications. engenda's centralized content management core maintains content, tracks versions, and provides an architecture that scales and integrates with other third-party applications. Centralized content gives all users immediate access to an enterprise's most valuable assets without impractical, slow synchronization between the content core and users' desktops. engenda's XML architecture separates content from business logic and presentation, enabling dynamic page assembly. Once approved by engenda's workflow process, BEA WebLogic Server can serve HTML, other structured file formats, and any other file type from engenda's content core. www.ebt.com

This should help EBT gain some visibility in the e-commerce space where they have been significantly less visible than Vignette and others.

MICROSOFT UNVEILS VISION FOR NEXT GENERATION INTERNET WITH XML
6/22/00

Microsoft Corp. unveiled the vision and road map for its next generation of software and services, the Microsoft .NET platform. Microsoft .NET (pronounced "dot-net") will provide easier, more personalized and more productive Internet experiences by harnessing constellations of smart devices and Web sites with advanced software through Internet protocols and formats. This new family of Microsoft .NET products and technologies replaces the previous working title of Next Generation Windows Services (NGWS) and includes software for developers to build next-generation Internet experiences as well as power smart Internet devices. Microsoft also announced plans for new products built on the .NET platform, including new generations of Windows, Windows DNA servers, Microsoft Office, the MSN network of Internet services and the Visual Studio development system. .NET will give users a more productive and purposeful experience through greater user control over personal information and preferences, new user interface technologies, a new breed of smart Internet devices, and the ability to harness multiple devices and services toward a common goal. .NET facilitates the continuous delivery of software to customers via a distributed computing model for the Internet that uniquely exploits the abundance of both computing and communications. .NET is based on Internet protocols and standards for interactions between devices and services, and in particular relies on XML. Bill Gates announced the new .NET platform, consisting of the following technologies: .NET User Experience. A new set of technologies for building next- generation user experiences, including the new Universal Canvas XML- based compound information architecture, natural user interface, integral digital media support, privacy-enabling technologies for management and control of personal information, and the new Dynamic Delivery system for secure and seamless installation, updates, roaming and offline operation. Visual Studio 7.0 will provide comprehensive support for XML-based Web service development, including developers who use Visual Basic. The new BizTalk Orchestration tool simplifies business process integration over the Internet. The .NET Infrastructure and Tools build off the XML-enabled family of Windows DNA 2000 servers. .NET Building Block Services. A new family of highly distributed, programmable developer services that run across standalone machines, in corporate data centers and across the Internet. And .NET Device Software. An array of software to

power smart Internet-connected devices that can take maximum advantage of the .NET platform and fully participate in next-generation user experiences. This software will XML-enable any device, support intelligent interaction with the network and .NET services and serve as a foundation to bring .NET User Experience technologies to non-PC devices such as Pocket PCs, set-top boxes, cellular phones and game consoles. www.microsoft.com

The central role of XML is key, but there is a lot of other stuff going on here worth thinking about.

NOETIX WEB QUERY SUPPORTS MOBILE PHONE DATA ACCESS THROUGH XML AD HOC REPORTING
6/22/00

Aris Software Inc. announced Noetix Mobile Query, a mobile telephone extension to its XML reporting product, Noetix Web Query. Noetix Web Query users can now run and build ad hoc queries from an Internet computer or mobile telephone with a mini-browser. Both Noetix Web Query and Noetix Mobile Query are available today. Noetix Web Query is a solution that enables people to run and view live reports over the Internet, with no client requirements except a browser or mobile phone. At the heart of Noetix Web Query is the ability to retrieve and manage data from multiple, disparate databases, allowing for enterprise-wide data access. Noetix Web Query uses XML-powered ad hoc database queries to deliver real-time data access. Noetix Web Query has been shipping since January. Noetix Mobile Query uses mini-browser technology and services from Phone.com. Visit www.noetix.com and follow the links for complete instructions on how to build and run a query from your phone. www.noetix.com

BOWSTREET SHIPS SECOND VERSION OF BUSINESS WEB FACTORY
6/22/00

Bowstreet announced the immediate, commercial availability of its XML platform, the Bowstreet Business Web Factory 2. The Business Web Factory 2 is an XML platform that enables on-the-fly assembly and mass-customization of any and all XML-based web services, including those compatible with software from Microsoft, Sun, IBM, Hewlett-Packard and others to build dynamic B2B market-

places. Bowstreet also announced the Business Web Exchange that will work in tandem with the Business Web Factory to usher in the third generation of e-business - interconnected business webs built upon thousands of web services. Bowstreet's Business Web Factory and Business Web Exchange let non-technical businesspeople create and customize an unlimited number and variety of online business relationships simply by pointing and clicking. Available today through Bowstreet's direct sales force and selected system integrators, the Bowstreet Business Web Factory 2 supports unlimited concurrent users and runs on Windows, Linux and Solaris platforms. Average deployments start at $250,000. Bowstreet also began offering a free version of the Business Web Factory to encourage companies to gain experience with creating and publishing web services. The free version is downloadable via the Business Web Exchange to qualified business and software professionals. In addition to integrating support for SOAP, the Business Web Factory also supports many XML schema definition languages, such as Microsoft's XML-Data Reduced (XDR), the preferred syntax for Microsoft's BizTalk framework, and the W3C's XML schema definition language. The Business Web Factory supports emerging XML schema definition languages and all schemas written in those definition languages, including the Directory Services Markup Language (DSML) 1.0 specification, RosettaNet and future Wireless Markup Language (WML) standards. www.bowstreet.com

EXECUTRAIN & ELEMENT K TO PROVIDE XML-BASED LIBRARY & ONLINE UNIVERSITY
6/22/00

ExecuTrain announced that they have joined forces to offer ExecuTrain customers a platform-independent library of on-line content for information technology. Under the agreement, Element K will acquire ExecuTrain's existing content library and license it on an exclusive basis to ExecuTrain. Element K will create a fully-hosted XML database that will allow ExecuTrain to vastly expand its library of standard and customizable training courses. ExecuTrain instructional designers and editors will adopt Element K's XML editing tools with on-line access in order to fully leverage the capabilities of Element K's database of XML learning objects. ExecuTrain will also introduce ExecuTrain University, an on-line university hosted by Element K, which will offer over 400 self-paced and instructor-assisted on-line courses. These on-line learning offerings will be complementary and consistent with ExecuTrain's classroom-based courses. ExecuTrain can now combine multiple delivery methods,

based on the same content and learning methodology, to provide customized learning solutions. With Element K's proprietary content, ExecuTrain will significantly increase the number of technical courses it offers to IS professionals in areas such as programming, network administration, and Internet technology. The combination of Element K's content library with ExecuTrain's assessment technology, on-line university and instructor-led services, enables ExecuTrain to offer a fully-blended technical curriculum to its clients. www.elementk.com, www.execoutrain.com

STARBASE ACQUIRES GENITOR
6/21/00

Starbase Corp. announced it has acquired Genitor Corp.; a privately-held company located in Ann Arbor, Mich. Genitor is a provider of advanced development tools for the documentation of Web applications, workgroup collaboration, rapid object development and re-engineering. The Genitor acquisition provides a technology that will accelerate Starbase's XML-based product development. Starbase will integrate Genitor's technology and products into Starbase's family of eBusiness application development products. Genitor's core technology analyzes critical Web application code and content to provide a higher level of detail and analysis than is possible with more traditional tools. Genitor's technology will become an integral part of Starbase's XML technology foundation. In addition, Genitor's original products, Surveyor and Object Construction Suite, will be incorporated into the StarTeam family. www.starbase.com

INTALIO ANNOUNCES XML BUSINESS PROCESS MANAGEMENT SYSTEM
6/21/00

Intalio, Inc. announced Intalio n3, an XML based Business Process Management System (BPMS) for modeling, deploying and managing complex business processes that span multiple enterprise applications, corporate departments, and business partners behind the firewall and over the Internet. This enterprise software infrastructure will help customers achieve greater levels of efficiency, create additional revenue opportunities, and enter new markets. Scheduled to ship in Q4, the first beta version of Intalio n3 will support XML-based business-to-business collaboration protocols like RosettaNet and BizTalk, manage real-time distributed transactions, and offer connectors to leading databases and packaged enterprise applications. Intalio n3 will allow companies to embrace eBusiness op-

portunities by integrating, automating and managing business processes including corporate procurement, demand-chain/supply-chain integration and enterprise relationship management. Intalio n3 will enable business analysts and software developers to collaborate throughout the life cycle of business processes, from modeling through deployment and management. Intalio n3 will provide a productive environment and manageable platform allowing business processes to evolve over time, without any disruption in the operating business or major modification of existing IT infrastructures. www.intalio.com

XML.ORG GOES LIVE WITH REGISTRY FOR XML SPECIFICATIONS
6/20/00

OASIS announced public access to the first phase of the XML.ORG Registry (http://xml.org/registry), an open registry and repository for XML specifications and vocabularies. Designed to foster collaboration and enhance communication within industries, the XML.ORG Registry provides the community with a resource for accessing the fast-growing body of XML specifications being developed for vertical industries and horizontal applications. Committed to open industry standards, the XML.ORG Registry offers a vendor-neutral forum for developers and standards bodies to publicly submit, publish and exchange XML specifications and vocabularies. Operated as a non-commercial venture, the XML.ORG Registry is a self-supporting resource created by and for the community. Industry groups and other organizations that have developed XML specifications can freely register their work at the XML.ORG Registry. The OASIS "no strings attached" submission policy ensures that developers receive the benefits and recognition they deserve while retaining all the rights to their work and control over its use. From its inception, the XML.ORG Registry has been a consensus-based effort to ensure interoperability with existing and emerging XML initiatives. The XML.ORG Registry developers continue to work with the OASIS Registry & Repository Technical Committee to define a specification for a global network of repositories. This specification is intended to allow interoperable registries to be created for use within industry organizations, communities and corporations. Ultimately, the XML.ORG Registry will link to standards-compliant repositories as they become available, as well as provide resources on its own site. The XML.ORG Registry was made possible by the donation of resources from Documentum, Sun Microsystems, Oracle Corporation, IBM and DataChannel and demonstrates their commitment to providing the community with an open, inde-

pendent resource for publicly available XML speci-fications. Sponsors of XML.ORG include DataChannel, Documentum, Commerce One, GCA, IBM, Mercator Software, Oracle Corporation, SAP, SoftQuad and Sun Microsystems. www.oasis-open.org

INFORMIX DELIVERS MEDIA360 ENTERPRISE CONTENT MANAGEMENT SYSTEM
6/20/00

Informix Corporation announced the release and broad availability of Media360, a complete content management solution designed to help businesses manage all types of digital assets throughout the enterprise. Media360 addresses the growing need among Internet-driven organizations to digitize and manage video, audio, text and other valuable content. The enterprise-level technology efficiently manages any kind of content, anywhere and at anytime. To build the most complete and tightly integrated media asset management solution avail-able today, Informix has partnered with system in-tegrators, key technology partners and independent software vendors such as SUN (Media Central video server), EMC (Celerra Video Server), Integrated Software (desktop publishing integra-tion), Microsoft (Windows Media Player), Sony (PetaSite storage), StorageTek (storage), Virage (video and audio cataloging) and Usoft (rights and royalty management). Media360 is tightly inte-grated with an object-relational database, content creation tools, Web publishing, e-commerce and analytical solutions. Informix shares content with solutions from many media technology partners, including Avid, Compaq, EMC, Associated Press/ENPS, MATE, MCI WorldCom, Omnibus, Op-tibase, Pro-Bel, Silicon Graphics, Sintec, Sony, Stor-ageTek, Sun Microsystems, Telemedia, Verity, Virage and Wam!Net. Media360 enables the re-use of existing content and media assets by creating a central, corporate repository that is accessible throughout an organization via the Web. www.informix.com

Content management or media asset management? Votes…?

FRANCE TELECOM LAUNCHES WOKUP! FOR PORTING WEB CONTENT TO MULTIPLE PLATFORMS
6/20/00

France Telecom launched another startup led by group employees. Wokuup!, is a new startup that began at France Telecom R&D labs. The venture will market a unique multi-access server technology that enables dynamic publication of content on the Internet and other platforms (wireless handsets, personal digital assistants and TV, for example). Wokup! expects to see tremendous demand for this technology given continued booming growth in web-based services, coupled with the advent of Internet access via WAP handsets and PDAs. Wo-kup! is targeting its technology at web content providers, content aggregators, portals, hosting services providers, ISPs and telecom operators. Wokup! currently counts a team of 30 specialists in multi-access Internet content, with a strong focus on wireless Internet. Initial funding of the venture raised 30 million francs, with Galileo Partners, Guil-lemot Ventures and France Telecom's Innovacom venture capital unit each taking equal shares. Other investors include business angels Marc Las-sus, co-founder of Gemplus, and American Hubert Zimmermann, creator of Chorus Systems. The funds will be used to support international devel-opment with the creation of an export team and recruitment of local representatives to cover key markets. Wokup! Server is a multi-access server used to publish content on the Internet or other platforms. It dynamically recovers content from an existing website or database and translates it into another format without modifying the source site. Based on XML Wokup! it contains a navigation component for easy publishing of different content tailored to the type of access device. www.francetelecom.com

SEQUOIA SOFTWARE DELIVERS PORTAL SERVER 3.0
6/19/00

Sequoia Software Corporation announced the re-lease and immediate availability of its next-generation XML Portal Server (XPS) version 3.0. To help businesses operate at Internet speed, Sequoia has totally re-engineered XPS, creating an e-business command center that integrates three critical feature sets necessary for a true e-business solution including: personalized content delivery

on browsers or any Internet-enabled wireless device; business process automation; and an integration framework that enables businesses to easily communicate, share information and support interactions among employees, customers, trading partners, and suppliers across the value chain. XPS 3.0 is built upon Sequoia's new XML-based e-business platform that enables faster and easier integration of previously incompatible applications, guaranteed delivery of messages and transactions, load balancing, and simplified administration through a centralized management console. Other new features include robust workflow capabilities, allowing XPS to integrate automated business processes; Smart Spiders that automatically gather and aggregate content from directories and databases within corporate networks and via the Internet; and meta search, a user configurable search process that executes parallel searches on any external search engine including XPS indexed content. Sequoia XPS 3.0 is available immediately for Windows NT Servers. Pricing starts at $500/user for a minimum of 100 users. Discount pricing begins at 250 users. www.sequoiasoftware.com

AUTONOMY LICENSES TECHNOLOGY TO INTRANET SOLUTIONS
6/15/00

Autonomy Corporation plc announced that IntraNet Solutions, Inc. has licensed Autonomy's concept-based technology for their Xpedio Content Management System. By embedding Autonomy's technology, Xpedio customers will be able to automatically categorize, process and deliver dynamic, personalized content for intranet, extranet and internet solutions. The integrated solution is scheduled for availability in the third quarter of 2000. Autonomy's technology "reads between the lines" to analyze and rank the ideas within any piece of text, regardless of its language or format. This ability enables Autonomy to automate the most time-consuming and costly functions involved in deploying a web site, including categorizing, tagging, hypertext linking and personalizing the delivery of content. www.autonomy.com, www.intranetsolutions.com

INFORMATION ARCHITECTS & ATG PARTNER FOR SYNDICATED PERSONALIZED CONTENT
6/14/00

Information Architects and Art Technology Group, Inc. announced a strategic alliance that will enable the delivery of customized syndicated content in

eBusiness applications. As a result of the partnership, eBusinesses can combine the rules-driven personalization platform of ATG Dynamo with iA's SmartCode ability to dynamically distribute customized information from disparate backend data sources. eBusinesses will benefit from this product integration as they aggregate, syndicate and deliver content from one source or Web site to multiple other Web sites or devices as personalized, highly relevant information. Used together, Dynamo and SmartCode allow companies to deploy e-commerce applications that can dynamically manage and personalize catalog information, order status, and inventory control to maximize customer satisfaction and return on investment. Both companies adhere to a standard of open and extensible architecture based on Java and XML that offers customers the flexibility to readily adapt their online business initiatives to rapidly changing business requirements. www.atg.com, www.ia.com

Notice a trend this month? (Syndication & content management, in case you missed it).

ARBORTEXT ANNOUNCES ALLIANCE WITH EXTENSIBILITY
6/13/00

Arbortext, Inc. and Extensibility, Inc. have announced a technology and marketing alliance. XML Authority, Extensibility's solution for the creation and management of XML DTDs and schemas, will be integrated within Arbortext's Epic e-content management solution. With Extensibility's technology embedded within Epic Architect, end users benefit from an intuitive and user-friendly graphical tool to design and build DTDs. The integration of XML Authority into Epic Architect's user interface enables customers to use free-form editing in Epic Editor or Epic Editor LE (Light Edition) to perform rapid prototyping. This rapid prototype feature helps reduce development time by up to 80% over traditional methods. The Arbortext and Extensibility alliance also enables users to convert SGML DTDs to XML DTDs, or any other commonly used XML schema dialect, through Arbortext's Epic e-content software. Arbortext has tested the integration of XML Authority with Epic Architect to ensure its compatibility with Arbortext-supported DTDs and methodology. The integration of XML Architect into Epic Architect is seamless; providing Arbortext customers with all the benefits and features of Epic Architect and XML Authority without having to work with multiple vendors. XML Authority, bundled within Arbortext's Epic Architect, is provided at no charge to Epic Architect customers currently on maintenance and will be included at no additional cost in future releases of Epic Architect.

All Arbortext customers are eligible to receive this capability within Epic Architect as part of the Epic 4.0 upgrade that will ship in July 2000. www.extensibility.com, www.arbortext.com

BROADVISION & TUMBLEWEED ANNOUNCE ALLIANCE
6/13/00

Tumbleweed Communications Corp. announced that Tumbleweed and BroadVision, Inc. have entered into an alliance to integrate Tumbleweed Integrated Messaging Exchange (IME) and BroadVision One-To-One. The companies will also jointly market and sell the integrated solutions. Tumbleweed and BroadVision will first focus on the financial services industries, where the combination of BroadVision's e-business applications and Tumbleweed's communications platforms will provide an end-to-end solution for deploying financial services e-businesses. www.broadvision.com, www.tumbleweed.com

HUMMINGBIRD ANNOUNCES NEW RELEASE OF DOCS OPEN WITH SEARCHSERVER
6/13/00

Hummingbird Ltd. announced the release of the latest version of its DOCS Open document management solution. This latest version delivers significantly enhanced functionality, augmenting an enterprise architecture and product family from Hummingbird that is designed to enable organizations to customize their document management environment. A highlight of the new release is the full integration of SearchServer, the leading full text indexing and retrieval engine from Hummingbird. DOCS Open Release 3.9 includes new application integration offerings, enhanced desktop functionality, and updated documentation and online help. DOCS Open 3.9 is available immediately. www.hummingbird.com

OPEN TEXT UNVEILS CORPORATE PORTAL STRATEGY
6/12/00

Open Text Corporation announced the next evolution of BASIS and Techlib-the document collection and library automation components of the Livelink product family- myBASIS, the collaborative portal interface. The customizable portal framework of myBASIS allows users to organize multiple information sources. With the interface, library users can

define on a single page, different areas to deliver internal news channels, external news feeds, content subscriptions and favorite URLS. myBASIS also provides search access to predefined resources like the organization's Techlib library catalog, any BASIS or Livelink repository or content from b2bScene.com's Content Services (www.b2bScene.com/contentservices). Users personalize their own page according to individual need and preference. The optional development toolkit can be used to configure new content choices for internal and external sources. This announcement follows last year's release of the Livelink Cataloged Library, an integration of the Techlib OPAC (Online Patron Access Catalog) with Open Text's Livelink collaborative enterprise application. Continuing Open Text's strategy to advance an organization's ability to organize multiple information sources, a second-generation Web OPAC is planned. Available independently or as the Advanced Search option from the portal interface, this new OPAC uses Java Database Connectivity (JDBC) for data access and includes a fully standardized Java Development Toolkit (JDK) to support local extensions and customizations to integrate library collections with other enterprise information assets. www.opentext.com

CHRYSTAL SOFTWARE ANNOUNCES ECLIPSE
6/12/00

Chrystal Software announced the availability of Eclipse, a solution that incorporates traditional Web pages with dynamic, personal content. With Eclipse, businesses can precisely manage their Web-based information and assemble personalized information for each site visitor. The software provides rich support for XML to structure information for dynamic content delivery to the Web and to other formats including graphics, PDF files and HTML pages. Eclipse also provides specific capabilities to users who are involved in creating, managing and delivering Web content. The system is very flexible and requires few additional resources because it allows the use of familiar tools and applications. It provides full content management and is compatible with existing Web pages, Web design tools, Internet browsers, Web servers, and XML authoring software. With its multi-lingual support, Eclipse also addresses the growing need for Web sites that are presented in multiple local languages. www.xerox.com

ENGAGE TO ACQUIRE MEDIABRIDGE
6/12/00

Engage, Inc., a majority-owned operating company of CMGI, Inc. announced a definitive agreement to acquire privately held, Acton, MA based MediaBridge Technologies, Inc. This acquisition is expected to advance Engage's marketer-focused strategy by connecting web site software applications for merchants with Engage's large online advertising network. Upon the close of the acquisition, which is expected by late summer and subject to MediaBridge shareholder approval, MediaBridge will operate as a wholly-owned subsidiary of Engage. Bob Angelo, MediaBridge's president and CEO, will report directly to Paul Schaut, president and CEO of Engage. Under the terms of the agreement, Engage will issue approximately 14.5 million shares of Engage common stock to the shareholders of MediaBridge, subject to adjustment under certain circumstances. MediaBridge currently has over 200 customers and employs 185 people in offices in Acton, Mass., Los Angeles, Chicago and London. The company's fiscal year 1999 revenues were $17.8 million. Many marketers that run both offline and online promotional campaigns spend a significant amount of time and money managing two separate programs. A combined Engage and MediaBridge solution will allow the marketer to bridge all programs through a single solution set: The MediaBridge content.server solution allows media, retail and catalog marketers to efficiently manage and reuse product information, including images, descriptions and SKUs, and plan both online and offline promotions based on this product information; Engage ProfileServer allows marketers to build permission-based profiles and anonymous interest profiles by observing customer behavior across their web sites and using that information to deliver more relevant promotions and offers; Engage AdManager allows marketers to manage multiple campaigns overtime targeted at any individual audience. www.mediabridge.net, www.engage.com

SOFTQUAD ANNOUNCES XMETAL 2.0
6/12/00

SoftQuad Software, Ltd. announced XMetaL 2.0, a major upgrade to its XML content creation solution. The new version of XMetaL makes it easier for everyone to create XML content, and provides integrators even greater flexibility in deploying effective content solutions for real world production environments. Key features to this upgrade include well formed editing, a new Structure view, support for more advanced XML constructs and expanded customization options. XMetaL 2.0 provides new features and functions for deploying effective content creation environments that integrate seamlessly with an organization's applications and workflow processes. XMetaL 2.0 features built in access to script engines and a Script Editor that supports code coloring and pretty printing. XMetaL 2.0's Forms Editor facilitates the creation of custom dialog boxes to bring windows dialogs and behaviors right into the document interface. XMetaL provides support for inline ActiveX controls and features an extended object interface that allows embedded ActiveX controls to be hosted within a Resource Manager tab. Plus, XMetaL 2.0 features enhanced support for advanced XML constructs like internal subsets, parsable external entities, the DOM, OASIS catalogs, and UTF-16 (Unicode) encoding. XMetaL 2.0 also supports well-formed editing, so users can open and edit documents without associated DTD and work with document fragments. As well, XMetaL 2.0's new Structure View provides a quick way to navigate and edit documents. XMetaL 2.0 will be available in late June 2000. New users can purchase XMetaL 2.0 for $495.00 (US) per single user license. Registered owners of XMetaL 1.0 or 1.2 with a support and maintenance contract can upgrade to XMetaL 2.0 for $75.00 (US). Without a maintenance contract, the upgrade price is $195.00 (US). The product is sold directly and through VARs and OEMs. Volume discounts, site licenses, partner programs and on-site training are all available. www.softquad.com

PUREEDGE & XMLSOLUTIONS JOIN FORCES FOR EDI-XML
6/12/00

PureEdge and XMLSolutions have signed an agreement to combine PureEdge's award-winning InternetForms Commerce System with XMLSolutions' XEDI Translator. Together, PureEdge and XMLSolutions will allow organizations to leverage their investment in EDI by integrating legacy systems with partners and processes that were previously excluded from EDI-based relationships. The PureEdge-XMLSolutions integration will enable organizations using EDI to establish full trading relationships with partners of any size. InternetForms provide a legally binding XML front end to EDI systems, and appear as human-readable and familiar form interfaces to trading partners accessing them from Web browsers. A partner at a small or medium-sized enterprise can use a browser to open an InternetForm – such as a purchase order, invoice, or other contractual agreement – and fill,

save, sign, and submit it for processing, thereby interacting with an EDI system that was previously available only to other EDI systems.
www.PureEdge.com, www.xmls.com

ORACLE & WEBMETHODS PARTNER
6/8/00

webMethods, Inc. and Oracle Corp. announced a partnership to provide solutions for the rapid deployment of global B2B exchanges. As part of the agreement, webMethods will be a preferred solution provider for integrating buyers and suppliers to trading networks and exchanges built on the Oracle Exchange platform. Oracle and webMethods have integrated the Oracle Exchange platform and webMethods B2B to enable secure, reliable Internet-based delivery of XML messages. Oracle-powered exchanges, including OracleExchange.com, will use this integrated message hub to integrate buyers and suppliers. webMethods B2B will route mission-critical business documents, such as purchase orders and order confirmations, through the Oracle-powered exchanges to enable real-time business transactions among diverse trading partners. By using webMethods B2B to provide an integration solution, Oracle will be able to build a solution that is easily replicated across all of its B2B exchanges, which include industry specific exchanges, company branded exchanges and OracleExchange.com. WebMethods will provide integration support and services to buyers and suppliers connecting to Oracle Exchange through their webMethods' B2B Rapid Integration Team, which includes the Internet industry's leading systems integrators. This rapid deployment strategy provides customers with an experienced implementation team dedicated to providing cost-effective solutions for implementing B2B e-commerce initiatives. Customers will have their choice of integration firms to help connect to any number of Oracle Exchange marketplaces.
www.webMethods.com, www.oracle.com

SOFTQUAD & VIGNETTE ANNOUNCE INTEGRATED XML SOLUTION
6/8/00

SoftQuad Software, Ltd. and Vignette Corporation announced that they have partnered to provide e-businesses with a comprehensive platform for implementing and deploying XML-based content solutions. Through the integration of SoftQuad's XMetaL content-creation platform, and the Vignette V/5 eBusiness Platform, businesses can now leverage the use of XML technology. This partner-

ship allows for the deployment of Web-based solutions that capture content from a wide variety of sources and integrate it with both internal and external systems. SoftQuad Software has become a Vignette Technology Partner and will also become a Vignette V2B Services partner. Vignette V2B Services streamline the process of purchasing, implementing and using e-business applications. Vignette V2B Services are provided via the Vignette V2B MarketPlace and Vignette V2B Communities. The integration of the two products gives e-businesses the ability to efficiently create and work with XML documents within a productive workflow environment, enabling the delivery of personalized content that attracts customers and builds successful e-relationships more quickly than ever before. With XMetaL's word processor-like interface, more people within an organization can quickly create content directly in XML, or convert documents from other formats including Microsoft Word and Microsoft Excel, into XML. Content creators can then save XML documents directly within the Vignette V/5 eBusiness Platform production workflow. To further streamline the approval and revision process, XML content can be retrieved and submitted to Vignette's Web-based workflow management interface or directly from within XMetaL. The transparency of the integration dramatically decreases the costs associated with providing an XML content solution and accelerates the speed with which e-businesses can deliver customized content to their customers. www.vignette.com, www.softquad.com

BEA ANNOUNCES NEW BEA WEBLOGIC COLLABORATE
6/7/00

BEA Systems, Inc. announced details on BEA WebLogic Collaborate, including an accelerated date for general availability. BEA WebLogic Collaborate is scheduled to be available to additional customers as a Beta release in July, and is scheduled to ship as a generally available product with full functionality in the fall of 2000. Announced in November 1999 under the code name "Project E-Collaborate," BEA WebLogic Collaborate is B2B integration software that provides an open, scalable and dynamic way to rapidly create and manage multi-party trading exchanges, Internet e-markets and supply chain process switches. BEA WebLogic Collaborate is built on BEA's BEA WebLogic Server platform to manage the large volume of B2B transactions and processes that e-markets and process switches must coordinate, and is fully compliant with Java J2EE, XML, RosettaNet and other emerging standards to provide a powerful, standards-based platform for rapidly integrating with customers,

partners and suppliers. BEA WebLogic Collaborate allows companies to model and simultaneously co-ordinate the diverse range of complex interactions that must be managed in B2B settings. Comprised of an XML collaboration hub, downloadable access enablers, and administrative management tools, BEA WebLogic Collaborate is bundled with BEA's recently announced BEA WebLogic Process Integrator, a full Java process flow engine. BEA WebLogic Process Integrator supports decentralized, centralized, and hierarchical workflow models, so complex trading processes specific to individuals or groups of participants as well as shared business processes can be coordinated by BEA WebLogic Collaborate's interaction management layer as business transactions. BEA WebLogic Collaborate uses a complete set of X.509 digital certification, SSL and PKCS7 access controls to deliver a secure, standards-based B2B e-market environment. BEA WebLogic Collaborate's enhanced publish and sub-scribe messaging supports sender, receiver and content filters to provide an ability to manage the flow of trading exchanges. Implemented in Java, the product supports Electronic Data Interchange (EDI) and XML to capture systematic – as well as dynamic – trading partner relationships and lever-age IT investments in existing systems and pro-gramming skill sets. www.beasys.com

SUPPLIERMARKET.COM ANNOUNCES XML INTEGRATION TOOLKIT & SERVER
6/7/00

SupplierMarket.com announced the availability of its XML Integration Toolkit, its dedicated XML in-tegration server, and new enhancements to the site. Include capabilities are: New commodity tem-plates placed in registration that allows the supplier to register and give more information specific to their business; An ability to see the bidding type (unit price or total price) and bidding method (line or RFQ and line) easily on the RFQ; A new XML In-tegration Server facility that links purchasing de-partment applications directly with SupplierMarket.com; And an XML RFQ/Quote Toolkit that supports bi-directional integration with SupplierMarket.com through the XML Integration Server. Based on Open Application Group stan-dards efforts, the toolkit enables entirely seamless integration. Operations include RFQ and Quote transfer along with binary documents such as CAD drawings, automatic registration and instant login to the site. SupplierMarket.com's integration goal is to develop partnerships with ERP, collaborative product commerce and supply chain companies so that the majority of buyers and suppliers gain fully-integrated supply chain operations. Buyers and

suppliers will be able to directly submit RFQs and receive quote results seamlessly and significantly speed up their procurement process. Over the coming weeks and months SupplierMarket.com will be forming new partnerships and integrating buyers and suppliers with the XML Integration Server. www.SupplierMarket.com

INFORMATION ARCHITECTS LAUNCHES SMARTCODE
6/6/00

Information Architects announced the availability of SmartCode, the next generation of iA's core product offerings that supersedes their introduc-tory framework, Metaphoria. SmartCode will be available as a suite of the following four unique products: 1. Aggregation Framework: applies the power of metadata to dynamically aggregate user-critical content and functionality from a wide range of sources without replicating the original source to a content repository. Using a mapping process, it combines user-defined templates, business objects, and information into a wide range of presenta-tions, including browser applications, XML docu-ments and wireless interfaces. 2. Dynamic Syndication Server: provides a simple interface for subscriber partners to define both the look of their Web sites as well as which SmartCode Framework data or functionality will be presented to the end user. Business users can define their own informa-tion views by simply using the appropriate sub-scription template and selecting the information that most pertains to their needs. 3. Converters: used as part of a complete solution or individually, PDF and Word documents are converted into XHTML that is ready to be displayed directly on the Web or parsed as part of an overall Web presenta-tion. And 4. Watcher: identifies changes to tar-geted source data, thereby allowing only the most current and accurate information to be available to the system. Also can be used to notify users of changes or to trigger the SmartCode Framework to apply specific business rules based on the change. www.ia.com

ADOBE ANNOUNCES AVAILABILITY OF SVG VIEWER
6/6/00

Adobe Systems Incorporated announced the im-mediate availability of the Adobe Scalable Vector Graphics (SVG) Viewer, a browser extension that enables current versions of popular web browsers such as Microsoft Internet Explorer and Netscape Navigator to render SVG. The Adobe SVG Viewer is included with Adobe Illustrator 9.0 software, which

began shipping June 2, and is also available for download from Adobe's web site at: www.adobe.com/svg/viewer/install/. SVG is the W3C's emerging, open language for describing two-dimensional graphics in XML. Because it expresses vector graphics in XML and is compatible with other W3C initiatives, SVG's impact on the design, development and ultimately the customer experience of highly sophisticated e-commerce web sites could be profound. Using SVG, web site architects enjoy a more compelling authoring environment for creating rich, multi-channel, dynamically generated content. Graphics can be customized, modified, scripted, and adapted during design or at run-time by a server, then distributed in an optimized form to multiple platforms. SVG also integrates seamlessly with existing Web workflow and standards, allowing IS professionals to incorporate content from numerous back-end databases, servers and e-commerce engines without the limitations of a proprietary data format. Most importantly, customers will have a more compelling web experience, including faster downloads, better navigation and true interactivity. SVG is being developed by the W3C and its members, who include Adobe, Apple, Corel Corporation, Hewlett-Packard Company, IBM, Kodak, Macromedia, Inc., Microsoft Corp., Netscape Communications, Quark Inc., Sun Microsystems, Inc., and Xerox Corporation. The specification is currently in its eighth working draft and Last Call phase. The most recent public draft was released on March 3, 2000. For more information on SVG, please visit the W3C web site at: www.w3.org/Graphics/SVG/. The Adobe SVG Viewer ships with Adobe Illustrator 9.0 software and is expected to be included in upcoming versions of additional Adobe products, including Adobe LiveMotion. It is also available for download from the Adobe.com web site at: www.adobe.com/svg/viewer/install/. Adobe is providing an SVG overview and tutorial with numerous SVG examples at: www.adobe.com/svg/.

Hmm… This is the first SVG news in a while.

EXTENSIBILITY LAUNCHES XML INSTANCE
6/6/00

Extensibility, Inc. announced the commercial release XML Instance, a schema-driven data editor for XML-based application business documents. XML Instance is the first in a series of products that will focus on the design, processing, and management of XML infrastructure assets within an enterprise. Organizations can embed their XML-based business rules in an XML Instance document so

that internal, trading partner, and industry standards are achieved. XML Instance supports the major XML schema dialects, creating a bridge for the widespread adoption of XML within an enterprise and its partners. XML Instance features include: User configurable architecture for fully customizable views; Schema-aware XML business documents; Support for major and emerging schema dialects including DTD, XDR, BizTalk, SOX v2.0, and a sub-set of XML Schema; Real-time validation and editing facilities against an XML schema or DTD; Drag-and-drop editing within the user interface; And an intuitive graphical interface for the design and navigation of long or complex XML business documents. XML Instance is available for immediate download from www.extensibility.com/products/. Licensing is available for single users ($99.95) and in multi-user x-packs (5-user $449.95; 10-user $849.95; 50-user $3995.00). www.xmlschema.com/.

INFORMIX ENABLES FAST JAVA & XML DEVELOPMENT
6/6/00

Informix Corporation announced major enhancements to its Java and XML development tools strategy, which make it much easier for developers to build and deploy multi-tier, standards based, enterprise applications with Informix databases. The company introduced the Informix Object Translator, a data integration tool for transparently mapping objects from Java and Visual Basic programs to Informix Foundation.2000 database server, as well as a partnership with Sun on the Forte for Java Community Edition IDE. Informix will add value on top of this IDE for Java developers building applications for Foundation.2000 and Cloudscape database servers, as part of an overall focus on enabling fast and easy Java development. Informix Object Translator is a development and runtime tool for multi-tier Web applications serving dynamic content. The front end GUI enables users to visually map Java objects to relational tables without writing code. The runtime component, written entirely in Java, enables these objects to run in a middle tier application server. Informix Object Translator enables developers to build high performance, data-driven Java and Visual Basic applications very quickly. Version 1.0 is being released with Foundation.2000 (v. 9.21), the company's high performance, fully extensible data and content management platform for the Internet. Informix Object Translator version 1.1, due to ship this month, adds support for the saving of XML objects from a Java application to relational tables, as well as the creation of XML objects from existing relational tables. This bi-directional mapping capability

makes it easy to represent relational tables as XML objects in data exchange applications, and to store XML objects in the database in content management solutions. These XML capabilities, complemented by Ardent DataStage XML Pack, deliver the core technology and support for building high-end XML data solutions. www.informix.com

eBusiness Technologies Announces engenda
6/5/00

eBusiness Technologies announced engenda, a Web content management and workflow application that enables customers to integrate with any application server to dynamically deliver and personalize content. engenda features eBusiness Technologies' core content management capabilities – including workflow, editions, templates, and dynamic assembly – while leveraging the strengths of application servers to provide personalization, transaction processing and other delivery related capabilities. Key features of engenda include: Secure, intuitive, scalable, Web browser-based workflow system; Easy, collaborative content contribution with forms-based authoring and templating; Transparent Microsoft Word-to-XML conversion for non-technical users; A centralized content repository and content management engine; Separation of content, logic and presentation for dynamic page assembly; and integrated deployment capabilities to move approved files to the application server. engenda is serviced and supported by eBusiness Technologies' Professional Services Group and several application server vendors through the company's Technology Alliance Program. engenda is available immediately with prices starting at $70,000. www.ebt.com

Good move given the trend towards putting applications servers in place before *adding content management. See our May issue.*

Bluestone Announces Total-e-Server
6/5/00

Bluestone Software, Inc. announced Bluestone Total-e-Server, the next generation of Bluestone's Sapphire/Web Application Server, and the Application Server edition of Bluestone's comprehensive, standards-based Total-e-Business platform based on Sun's J2EE specification and using XML for internal communication and external integration services. Among the Total-e-Server highlights are

implementations of J2EE, including EJB 1.1, Java Servlets 2.2, and JavaServer Pages (JSP) 1.1, including Taglib support. Bluestone enhances standard EJB functionality with global-class services not yet defined by the EJB specification, including XML persistence mapping, Dynamic XSL Stylesheets, load balancing, application management, security, and Universal Listener Framework (ULF) scheduling services. The Bluestone Universal Business Server for TeB also employs a Dynamic XSL Engine that lets users automatically detect client device types and generate the proper delivery format, whether it is a cell phone, palmtop device, desktop browser, application, or other client type. Bluestone Universal Business Server for TeB relies on XML for a number of services, including the persistence map that permanently stores the state of an application. XML gives the Bluestone Universal Business Server for TeB high-performance support for fine-grained objects in an EJB. Bluestone XML-Server for TeB provides XML and legacy integration services. The server also features a transformation engine that performs XML-to-XML document translations and DTD-to-DTD translations to facilitate communications with customers and partners via disparate DTDs and documents. Bluestone Connector Capability provides a broad array of application integration services to legacy systems such as SAP, PeopleSoft, and IBM mainframe IMS, CICS, and MQSeries applications. Bluestone Connectors are also available for commerce systems, such as CyberCash, Taxware, Verity, OpenMarket, UPS Worldship, and others. Bluestone's Total-e-Server will be generally available on July 1, 2000 with pricing starting at $60,000. www.bluestone.com

Art Technology Group Acquires Petronio
6/1/00

Art Technology Group, Inc. announced the acquisition of Boston-based Petronio Technology Group, a provider of educational training and consulting services. ATG's acquisition of Petronio provides it with Java, J2EE, and XML courseware, as well as other enhanced technology training capabilities. Additionally, it was announced that John Petronio, the founder and President of Petronio Technology Group will serve as ATG's new director of customer education. ATG currently provides a broad selection of training for customers and partners, including programming classes to accelerate productivity and ensure maximum benefit from its Dynamo Product Suite. The addition of Petronio Technology Group will serve to meet increasing market demand for dedicated, customized training services required to develop personalized eBusiness applications on Dynamo and will strengthen ATG's exist-

ing worldwide curriculum development and delivery capabilities through the addition of both seasoned trainers and curriculum developers. www.atg.com

VISUAL EDGE ANNOUNCES GOLDENGATE FOR COM/CORBA
6/1/00

Visual Edge Software Corp. announced the immediate availability of Visual Edge GoldenGate for COM/CORBA – a server product to integrate and extend Component Object Model (COM) and Common Object Request Broker Architecture (CORBA) environments for e-Business. GoldenGate is a Distributed COM (DCOM) solution - not only does it provide direct interoperability between components developed for COM, CORBA, Java and RPC environments, it also extends enterprise applications beyond firewalls, enabling business interactions to span the Internet. GoldenGate for COM/CORBA combines UML-based modeling and OMG-compliant action specification to enable both COM, CORBA and DCOM-CORBA internetworking. GoldenGate for COM/CORBA allows development teams to assemble a range of components – including COM, DCOM, CORBA, EJB and Automation – across the enterprise into value-added Internet-enabled applications. GoldenGate enables COM/DCOM-to-CORBA server-to-server integration; it also COM- or ASP (Active Server Page)-enables CORBA-based servers. Visual Edge COM/CORBA integration products share a set of features designed to enhance the developer experience, reduce distribution costs and make the most of time-to-market opportunities. GoldenGate for COM/CORBA is available immediately. www.visualedge.com

WEBXI INTRODUCES SYMMETRY XCHANGE INTEGRATION SUITE FOR XML MESSAGING
6/1/00

WebXi, Inc. introduced Symmetry Xchange integration Suite (SymmetryXi), a B2B integration solution to integrate corporate data sources and legacy systems with a cost-effective, scaleable and flexible open standards architecture. SymmetryXi is a solution for portals and application server vendors. SymmetryXi provides reliable, commercial-grade XML messaging - critical for emerging XML-based e-markets and trading exchanges. Using SymmetryXi, companies can integrate the business processes of customers, suppliers and distributors, reducing development and implementation costs

and speeding time-to-market. SymmetryXi is a Java-based solution that uses XML technology as a backbone to deliver a scaleable B2B integration solution. SymmetryXi provides a flexible architecture utilizing XML adapters and also provides a software development kit so that companies can create custom XML adapters to integrate in-house systems and to incorporate emerging standards. Symmetry Xchange integration Suite is available now. Pricing varies depending on components and configurations purchased. Volume discounts may apply. www.webxi.com

XMLSOLUTIONS & BTRADE.COM FORM ALLIANCE
6/1/00

XMLSolutions Corporation announced a partnership with bTrade.com, Inc. Together the companies will expand their Global 2000 product and service offerings through shared technologies and systems integration. XMLSolutions' XEDI Translator provides an expansive, completely customizable EDI solution, expanded trading communities and cost reduction in trade transaction process and fulfillment. XEDI supports every ANSI X12 and EDIFACT document produced by major EDI Translators from GE Global Exchange Services, Harbinger, Sterling Commerce, and SPS Commerce. bTrade.com offers a comprehensive suite of services and solutions that can be integrated easily into existing, new and emerging business processes. Their component-friendly approach to e-business technology creates an optimal "plug and play" environment that maximizes customer flexibility and freedom of choice. XMLSolutions and bTrade.com will deliver a comprehensive e-business network that will allow customers to rapidly integrate 100% of their customers and suppliers into a secure digital trading community. The combined solution will offer guaranteed message delivery and complete customer profile capability, including support for open standards and protocols, such as RosettaNet, xCBL, cXML, ebXML and FpML and BizTalk. www.xmls.com, www.bTrade.com

IBM DONATES ADDITIONAL XML TECHNOLOGY TO APACHE SOFTWARE FOUNDATION
6/1/00

IBM today announced its contribution of a cornerstone technology to the Apache Software Foundation, which will help developers create applications for e-business services using a vendor-neutral, open

process. IBM is contributing its Simple Object Access Protocol (SOAP) technology, built in Java, to the Apache's open source XML project. IBM and Lotus are among the co-authors of the SOAP v1.1 specification, which defines a simple, Internet-friendly way of using XML to send messages and access dynamic Web services across distributed networks. Web services are business services conducted via the Web, such as Internet-based shipping and delivery. IBM's SOAP4J, is now available on the Apache Web site (http://xml.apache.org). This IBM technology enables applications to process SOAP messages such as an electronic invoice or purchase order. Since it was posted on IBM's alphaWorks (www.alphaWorks.ibm.com) last month, SOAP4J has been downloaded more than 6,000 times. The contribution of SOAP4J adds to IBM's previous XML contributions to the Apache Software Foundation, including the XML4J Parser, XML4C Parser and Lotus XSL.
www.software.ibm.com

QUARK, QUILL TO PROVIDE CONTENT MANAGEMENT SOLUTIONS
6/1/00

Quark Inc. and Quill Communications announced an alliance intended to increase efficiency and margins for companies that produce and publish advertising, direct marketing, and manufacturing product catalogs in print and Web formats. Quill will integrate Quark Digital Media System with CATPUB (Content, Approval, Tracking, Publishing), Quill's Web application for managing workflow, content approval, tracking, and publishing. Quill's integration of the two systems will result in a Content Intensive Media Management solution that hopes to eliminate the challenges of managing and publishing large amounts of content. QuarkDMS is a solution that lets customers manage a virtually unlimited number of text files, images, and other digital resources. It combines a Oracle8 relational database with a scalable three-tiered architecture capable of serving hundreds of concurrent users. The QuarkDMS clients offer secure access to assets from both Windows and Mac OS platforms, as well as from standard Web browsers.
www.quillcom.com, www.quark.com

INFOGLIDE BRIDGES XML DATA BARRIERS
6/1/00

InfoGlide Corporation announced the availability of its XML Similarity Engine for cross-consortia and industry data exchange. The patented XML Similarity Engine is technology that offers cross-industry, B2B integration of software solutions. In the recent past, B2B firms have been forced to choose between BizTalk, OASIS, RosettaNet, ACORD and other leading industry consortia to enable interoperable XML applications. According to InfoGlide, XML was intended to solve many of these interoperability issues for data. However, XML has not been able, until today, to solve two critical data problems left over from the 1970's: schemas in unlike formats and "dirty" or imperfect data. Neither XML nor the standards imposed by these consortia can bridge the two key barriers to applications working together. While XML enables data segments across different databases to be shared, what the XML Similarity Engine does differently is share entire databases for all common data segments, presented in an untransformed data model. Because the databases do not have to undergo any transformation, they retain all their richness and context. The XML Similarity Engine does not alter the source database or database structures. The XML Similarity Engine gives immediate results while consortia-imposed standards focus only on exchanging data in a very painful and limiting manner. For example, B2B applications must use XML documents with virtually identical schemas or file layouts, or they will not interoperate. For instance, a purchase order from one firm cannot "talk to" a bill-of-materials from another because they have completely different formats. XML cannot solve this problem so the industry has been looking to consortia to develop models and rules as standards, or worse, a rigid transformation technology is required. With InfoGlide's XML Similarity Engine, companies are freed from the need to painfully model their data independently, or through a consortium. Now they can just use the data and schemas as they exist in their industries-and these can easily communicate with any other XML schema in any other industry. InfoGlide's patented XML Similarity Engine also enables legacy databases to be fully accessible to XML applications without any data conversion. Any relational, flat file, or hierarchical structure becomes XML enabled through use of the XML Similarity Engine.
www.infoglide.com

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CALENDAR

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

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

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

The 8th Dublin Core Metadata Initiative Workshop, October 4-8, Ottawa, Canada, +1 (613) 947 0617. Hosted by the National Library of Canada and the International Federation of Library Associations and sponsored by OCLC, the Coalition for Networked Information, and the National Science Foundation, and will help shape the future of metadata, implementation and evolution of the standard.

XML DevCon Fall 2000, November 12-15, 2000, Doubletree Hotel, San Jose, (212) 251 0006. A conference and expo covering XML issues and tools for the developer community. The *Gilbane Report* is a sponsor of this event.

XML & e-business Integration Forum, November 20-22, Palais de Congrès, Paris, France, + 33 (0) 1 43 48 05 25. The third annual TechnoForum event covering the use of XML for all kinds of e-business applications. The focus is on application and information integration. The *Gilbane Report* partners with this event.