THE GILBANE REPORT

Content, Computing, and Commerce – Technology & Trends

PRIVILEGE MANAGEMENT & RIGHTS MANAGEMENT FOR CORPORATE PORTALS

It may not seem so when you are busy implementing, testing, and collecting the initial reactions from your users, but there is no doubt that it is significantly easier to build applications to deliver customized content from multiple content repositories and data sources than ever before. Whether you buy a 60% solution from an EIP (Enterprise Information Portal) vendor, extend an existing content management or database application, or build your own solution from the ground up, the application and information integration technologies now available allow you to deliver a wide variety of information to a broad audience. Unfortunately, this also makes the challenge of information security more acute than ever before.

Whether the information distributed is owned by you or syndicated, you need to make sure that employees, partners, customers, and the curious have access to what they should, and can reuse content in appropriate ways. Traditional tools and strategies need to be extended and enhanced. This month Bill and David are joined by consultant Larry Gussin to provide an extremely useful overview of the issues and approaches that will help get you jump-started on a strategy.

CONTENTS

PRIVILEGE MANAGEMENT & RIGHTS MANAGEMENT FOR CORPORATE PORTALS

With the quickly growing demand for intranet-based enterprise information systems, as well as for extranet extensions, the enterprise information portal (EIP) is becoming the primary emerging solution to the problem of intelligent user access.

Enterprise information portals extend Web content management (CM) solutions by delivering both enterprise and commercial content and core enterprise and industry information through a single, unified, and usually browser-based interface. An EIP may present Web sites, documents, databases, email, and other information types from multiple servers, and allow users to access this information through its portal server. The key EIP goal is to provide more efficient access to business-critical information for employees, customers, suppliers, and business partners

With content management and portal technologies emerging as a new, robust framework for enterprise and extranet information, the traditional enterprise security solutions, which are predicated on online network sessions and on providing document level access, may no longer be adequate or efficiently manageable. IT managers should wonder, for example, how these firewall-based solutions will be able support the potentially huge emerging requirements for extranet, offline, and more granular access to information.

Equally important is the question of how information access security can be managed. If the rise of EIPs reflects the need to address the growing number of information resources found within enterprises, these information resources still require security decisions from their business line managers. With the numbers and types of users of these information resources also growing in number, as well as being potentially tied to multiple locations and access relationships, the information access management challenges become even more daunting.

With all this complexity, enterprises must address important infrastructure requirements before they can enjoy the benefits of extending enterprise information internally among their business units and departments, and externally among their business participants. Two of these requirements address questions of how enterprise managers can ensure that:

▲   Users effectively access the information they need.

▲   Business rules govern how and by whom information is used.

Two distinct solution categories exist that can address some part of the extended enterprise's need for information and content security control: privilege management and digital rights management. The solutions available today are still caught up in their cultures or origin, but the real-world needs of enterprises may be answered by the right combination of these solutions. Such a combination of approaches would effectively manage both online and offline access to content, and provide a persistent protection and control of information throughout its lifecycle.

ENTERPRISE INFORMATION: CONTENT & DATA

Viewed comprehensively, enterprise information includes "content," which draws upon a publishing model and includes such things as documentation, marketing and sales collateral, and research reports, and "data" from applications involving e-commerce and business processes. The types of information an enterprise must manage usually include unstructured documents such as Word and PDF files, email, and syndicated content feeds, as well as a complex array of media types, such as animation, audio, and video. Structured content—in the forms, typically, of SGML or XML documents and relational databases—also can form a large part of an enterprise's information pool, whether as parts catalogs, indexes, or database reports.

An enterprise's portal-accessed information also includes application data. APIs and middleware let enterprises manage a wide range of information sources such as enterprise and third-party data sources and applications, including legacy applications and ERP systems. Meta-data, or data about information, also plays growing and crucial roles in enterprise portals, and increasingly, XML is forming the basis for meta-data applications.

Many EIP solutions build on CM tools, or integrate with them, because much of the information users require is at the document or web content level, and because enterprises increasingly must manage more electronic content, from an expanding variety of sources and for different types of users. What constitutes "content" in content management systems is changing, largely driven by the benefits of e-commerce that draw enterprises to work beyond their own intranets to exchange content and data with customers, partners, and suppliers. Because of e-commerce requirements, content is increasingly being tied into other applications.

Enterprise Information Portals at the Application Level

But content is only one part of many EIP solutions. The concept of the integrated portal to crucial company information can include access to core enterprise applications themselves. An integrated portal interface can provide applications access, largely through Application Server development environments that support such tools as Enterprise Java Beans, Java 2 Enterprise Edition (J2EE), CORBA, and COM. At the application level, EIPs are being designed to solve information problems in areas as diverse as commerce, support, partner relations, workflow, collaboration, human resources, supply chains, business intelligence, data mining, ERP, and application or system integration.

"Two distinct solution categories exist that can address some part of the extended enterprise's need for information and content security control: privilege management and digital rights management."

The Web has ushered in a model of multi-tier applications, for supporting many of the applications listed above, and for managing such things as product data, inventory control, and customer relationships. Yet these new applications are hard to architect, as they often involve legacy systems, varying data sources, and complex communication needs. Environments such as J2EE mitigate these challenges by providing comprehensive services for deploying different applications as component or modular developments.

But as much as modularizing applications can help in integrating those applications within a portal, application server technology is not the clear answer for every enterprise. Some enterprises are more "content-centric" and so are better served with the focus on content management technologies within their EIP.

Other enterprises may not be prepared for the complexity and investment required to re-engineer a broad scope of business process-related applications at the component development level.

Enterprise Information Portals at the Access Level

For all the wide-ranging attributes that can describe an EIP—from the simple single access point for a company's content, to application-integrating database platforms—and despite the diverse nature of the target users, there are three basic information access business requirements that are widely met by all the solutions:

◢ **Access requires personalization**. Personalization, when coupled with effective search and retrieval technologies and other information categorization techniques, helps to ensure that the right information is presented to the people who need it.

◢ **Access requires security.** Making information accessible is a double-edged sword, in that information accessible to the wrong users can do an enterprise great harm. This issue of information security can also involve compliance, data integrity, and authorization for actions taken on information—whether in terms of financial transactions, strategic planning, or other forms of commercial collaboration between enterprises.

◢ **Access requires network architecture flexibility.** The EIP presents many types of information to many types of users in many types of use conditions. Such complexities raise issues in terms of integrating disparate information into one user interface, but they also raise issues in terms of the network environment through which information is presented. Information should be accessible across client-server and peer-to-peer architectures, so that both online and offline access to and use of valuable enterprise content is available as users' needs require.

PRIVILEGES MANAGEMENT & RIGHTS MANAGEMENT: TWO MODELS OF INFORMATION ACCESS SECURITY

Two distinct but possibly compatible solutions are emerging to manage information access security in the extended enterprise. Each builds on a set of core security technologies, including but not limited to key management, encryption, meta-data, and hardware enforcement. One approach builds on client-server architecture and the other on peer-to-peer, as follows:

Privileges management, which enforces centralized information security by maintaining valuable information—meta-data, transactional or application data, or other content—on secure central servers. Users, based on their hierarchically defined roles, gain privileges to view such information, but not to download from the server except with central authorization. Trust is enforced through control of access to this central information service, as well as through client-side user authentication. E-mail communications and attachments, as well as user-created information, are not typically protected within this kind of trust environment.

Rights management, which distributes valuable information and provides tools for locally enforcing the secure, role-based management of the information. Based on their hierarchically defined roles, users gain privileges to store, view, edit, and share the information. Internal and external owners of information possess and can enforce ownership rights governing the information. Users may become authors by locally creating, enforcing security for, and sharing new valuable information. Each network peer is empowered, depending on roles and circumstances, to act as a server, a client, or both. Trust is enforced at each peer, which works either online or offline in conjunction with centralized authorization management services. E-mail communications and attachments, as well as other types of user-created information, are protected within the trust environment.

Both of these solutions raise questions of security, scalability, efficiency, and adequacy in addressing the information access needs of the extended enterprise. To some degree, however, these solutions grow from different traditions and solve different problems. Privileges management grows from an IT tradition of tightly governing information access and collaboration within client-server environments. Rights management grows from Internet and electronic publishing traditions that view information as interactive and disseminated, information users as potential creators, and communications as open beyond the client-server environment.

To a large degree, rights management (RM) systems functionally overlap with privilege management (PM) systems. Rights management systems could integrate with PM systems components to maintain the primary PM user advantages of easy sign on and personalized views of information. The ways RM systems extend or exceed PM systems in terms of user advantages is defined by the differences between privileges and rights.

In privilege management, once information is defined as valuable, all rights relating to it are executed through secure central servers. Users gain access and viewing privileges, but cannot store information locally or directly share it with other authorized users. In this client-server model, information usage and sharing are restricted in the service of greater control.

In rights management, central control is still maintained through authentication and authorization, but the execution of access and use is extended to a user's local device by means of container-level and peer-level security. The distribution of management services to peers means that rights can reside on user devices and that a user can be hierarchically authorized to create, edit, distribute, and share in the managing of information. Conversely, a party with rights bound to information—an employee, a partner, a customer, a publisher—can, with hierarchical authorization, possess business controls and opportunities in relation to that information that the rights holder can extend directly to the individual user. The central control of authentication and authorization found in both PM and RM systems means that RM systems also can provide the network access and viewing privileges granted by PM systems.

"To a large degree, rights management (RM) systems functionally overlap with privilege management (PM) systems."

PRIVILEGES MANAGEMENT INFORMATION ACCESS SECURITY MODEL

Privileges management systems grow out of an IT tradition of centralized net-
work security, yet they have evolved as Internet communications are making ap-
plication-specific enterprise information and security models inadequate.
Privilege management systems, which build upon a number of core security tools
culminating in policy servers, support authentication and authorization access
models across the extended enterprise. This centralization of privilege policy
management creates efficiency and scalability through several means, including,
most prominently, the decoupling of information applications from security
management. With little or no presence on the local client, however, PM systems
typically cannot extend centralized management to data and communications
on a loosely coupled client device.

Privileges management systems began emerging in 1998, and Bear Sterns pro-
jects this to be a $1.4 billion market in 2002, growing to $2.4 billion in 2004.
While competitors include Baltimore Technologies (www.baltimore.com), Entrust
(www.entrust.com), OpenNetwork Technologies (www.opennetwork.com), and
Oblix (www.oblix.com), the Meta Group calls Netegrity (www.netgrity.com) the
first mover company in PM systems and says that it currently holds a 75% mar-
ket share.

The PM Security Solution: Trust Bound to the Server

Privilege management systems create a trusted environment by binding valuable
information to IT-managed servers, and by giving enterprise or extranet users
role-based access to the information, but no ability to store the information lo-
cally or send it to others.

In essence, PM vendors claim that their systems provide an evolutionary step in
the development of IT authorization mechanisms, improving upon the decen-
tralization of many applications imposing their own security by providing central-
ized access management. By replacing operating system-based authentication
and authorization services, which are built on decentralized access control lists
(ACLs) that govern single applications and manage resources on a single plat-
form, PM systems can reduce significant administrative resources.

The more efficient authorization system, PM vendors claim, is based on providing
centralized governance over who gets access to what resources across multiple
platforms. Using directories and policy servers, the centralized authorization sys-
tem lets administrators set authorization policies based on user roles. There poli-
cies can govern access privileges to multiple applications across multiple
application servers. Authorization governance can also be extended to servers
that reside across the Internet.

Privilege management systems use a number of security and information man-
agement technologies, most of which are themselves in a state of evolution.
These technologies include encryption, keys, key management, certificates, and
hardware security. Sitting above these technologies, the basic components of a
PM system include:

◢ **Directory servers.** Enterprises use collections of directories to hold data descriptive of users, services, devices, applications, and relationships. These directories may be embedded in email servers, firewalls, PBXs, applications servers, and file servers. Directory services provide a mechanism for naming, describing, and finding enterprise or external resources in these directories. Lightweight Directory Access Protocol (LDAP) is a protocol that is emerging as the standard way a directory service accesses a directory listing. It is the mechanism that policy servers use to identify authorization and privileges policies and the users and applications to which these policies apply.

◢ **Policy servers.** Policy servers store role-based authorization data that provide access to network resources. Policy servers can be used to serve authorizations stating who, based on assigned user class in relation to a specific request, can access what information, and in what way. Role-based policy management systems can support personalized user interface, organizational hierarchies, multiple roles for individual users, and organizational ownership or roles.

◢ **Meta-data.** Meta-data is used to enable machine-readable processing across heterogeneous systems. XML-based markup languages are becoming the accepted mechanism for creating meta-data standards. To scale their systems, PM systems will need XML-based meta-data standards in a number of domains, and most PM vendors are very involved in standards work. The meta-data standards efforts most directly important to the success of privileges management include OSSML (securing authentication and authorization data transmission), XACML (an access rules language), XKMS (for key management), and XML Encryption.

◢ **Virtual Private Networks.** A virtual private network (VPN) is an encryption configuration that enables the secure exchange of information across the Internet in the apparent form of a WAN. It allows remote users to connect to enterprise servers, and also supports exchanges of information between an enterprise and its customers and partners. PM systems can use VPNs to provide access privileges across the firewall.

While ensuring information security, PM systems also provide administrative efficiencies and scalability, by removing security management from applications and embedding it in a centralized, shared services infrastructure. PM systems build on existing and emerging IT infrastructures, allow for the delegation of management tasks across administrative networks, and support auditing and accounting.

The User Experience: Role-Based Server Access Privileges
The user environment within a privileges management system is one of easy authentication and easy, personalized access privileges, but no real support for offline security, authoring, or collaboration. Characteristics of the user experience within PM systems include:

◢ **Single Sign On authentication.** PM systems allow user authentication techniques that go beyond password protection for single applications and other weak and inefficient enforcement methods. Using their centralized infrastructure, PM systems enable Single Sign On, in which users log on once to obtain authentication and authorization to their role-based privileges across application servers and VPNs. Single Sign On improves user capabilities, re-

"The user environment within a privileges management system is one of easy authentication and easy, personalized access privileges, but no real support for offline security, authoring, or collaboration."

duces administrative load, and supports the use of scaleable, weak-to-strong underlying authentication security mechanisms, which are tied to the value of the information that must be secured.

▲ **Personalized views.** PM systems support personalized portals. A user may have a single view that opens onto all of the valuable information that the user is authorized to see, possibly distributed across multiple enterprise applications servers and VPNs.

▲ **No store or forward privileges.** With valuable information centrally protected on servers and no way to protect information stored on the local device—client-side trust only governs authentication—users are provided minimal interactive access to valuable information. They may not store it locally or forward it to other users. This may be a significant liability to productivity in the increasingly collaborative environments of the cross-departmental enterprise and the extended enterprise.

DISTRIBUTED RIGHTS MANAGEMENT INFORMATION ACCESS SECURITY MODEL

Rights management (RM) systems grow from two impulses: one is to support the Internet and electronic publishing tradition of interactive, open access to information; the other is to protect digital forms of information that can allow easy editing, copying, and disseminating. Rights management research began in the 1980s and the first systems appeared in 1997. The 1999 advent of Napster introduced publishers, creators and users to consumer-markets RM issues, but RM has also become an enterprise topic, especially following on peer-to-peer networking.

The earliest RM systems, and still the apparent market leaders, are Intertrust (www.intertrust.com), ContentGuard (www.contentguard.com), and Microsoft (www.microsoft.com) which through an investment has access to Content-Guard's patents, though many new competitors have appeared. Authentica (www.authentica.com) and RightsMarket (www.rightsmarket.com), for example, offer enterprise solutions that provide limited client-side extensions to PM systems, while TrustData (www.aspsecure.com), an Intertrust-based solution, builds ASP-like RM solutions. While RM market sizing is quite preliminary and largely based on consumer sectors, IDC projects an overall $2.02 billion business in 2004.

The Security Solution: Trust Distributed to the Peer

Rights management systems largely build on the same security tools and meta-data tools as do privileges management systems, and in enterprise deployments they may also use some of the same policy server and directory-based authentication and authorization techniques as do PM systems. Yet RM offers a very different control environment from PM: it lets authorized users view, edit, create, and share content, and achieves this capability by persistently protecting any content (or content meta-data) that resides on peer devices or moves over a network. Rights management vendors say that their distributed protection systems provide the security, efficiency, and scalability support that extended enterprises require, including peer-to-peer and online or offline environments, as follows:

◢ **Information delivery is by secure communications.** Different from PM systems, which provide secure server access within the firewall and use VPNs to extend server access beyond the firewall, RM systems use cryptographically secured containers to protect information as it travels over a network. A container can hold, in any combination, single or multiple content elements, as well as meta-data, such as audit data, or role-based rules, possibly derived from policy servers, that govern how the content can be used. Users can share information via the same protocols.

◢ **Information can be persistently protected locally.** RM systems persistently protect information on the local device, extending management control to that device, by providing a secure local environment in which encrypted containers are processed and information is used. The secure environment contains or interoperates with tools for unpacking or packing containers, evaluating usage rules, and viewing or editing content. It supports local and even offline management by means of a database that contains information such as role-based viewing and authoring privileges, audit data, and budget allowances. The database is modified through the transmission of update information in a new secure container.

◢ **A distributed services architecture extends to the peer.** A network in which every peer device—from PCs to phones to media production hardware—and every user application is secure creates an architecture that supports a distributed services environment. Rights management vendors claim that enterprises or contracted providers can use this network to provide scalable, efficient online or offline services for clearing and reporting financial, usage, rights, licensing, and compliance information, as well as for other operations. Vendors also claim that, where authorized by an enterprise, publishers and other commercial agents can use the scalable and efficient distributed trust architecture to market and provide products and services directly to individual users or collaborative groups.

RECENT DEVELOPMENTS WITH PM & RM VENDORS SUGGEST SOME INITIAL STEPS TOWARD INTEGRATION

As enterprises move beyond the islands of information that have separated discrete data and content applications and move to make business critical information available to the wide range of users both in and outside the enterprise, the benefits of integration produce significant challenges for the management and security of the information. Fortunately, vendors will increasingly be working towards integrated solutions.

For example, Adobe (www.adobe.com) has embedded InterTrust's DRM technology into just-released Acrobat 5.0, and InterTrust and Artesia (www.artesia.com) have announced a deal to integrate InterTrust's technology into Artesia's Digital Asset Management product for media, publishing, entertainment as well as for corporate enterprise applications.

In truth, information access and security vendors are just starting to think through many of the enterprise-oriented issues, as the complexity of the information sets presented through EIPs create the market. Recently, for example,

"In truth, information access and security vendors are just starting to think through many of the enterprise-oriented issues, as the complexity of the information sets presented through EIPs create the market."

Netegrity (www.netegrity.com) announced a bold though sketchy partnership program comprised, somewhat hopefully, of over forty vendors who work collectively in the portal solution, application, CRM, personalization, user provisioning, web services infrastructure, content management, authentication, and core security spaces. Among these partners is Authentica (www.authentica.com), one of the few digital rights management-based enterprise content security companies with product shipping.

There are a few other signs of the convergence of PM and RM. Earlier this year, RightsMarket joined the Entrust Alliance Developer Program, with the aim of making the company's RightsVault work with the security infrastructure provided by Entrust's trust solutions. The goal is to extend their security to file-level use, including text, audio, email and HTML formats.

Closely watched P2P software provider Groove Networks Inc. (www.groovenetworks.com), has just announced the availability of Groove 1.0, which includes support for a wide range of firewalls, reduced resource requirements, support for secure roles and permissions, Microsoft Office and Net-Meeting integration, and Enterprise Network Services. Groove has partnered with Digital Goods (www.digitalgoods.com), an early DRM vendor (as SoftLock) that now focuses on using DRM as part of its digital content marketing services. The initial focus of the Digital Goods-Groove application is subscription-based sales of digital content for the business marketplace, such as financial and investment research, corporate intelligence, and other time-sensitive products, as well as business training and education materials. But Digital Goods sees other enterprise-oriented applications becoming enabled through the Groove partnership, including protected one-to-one or group sharing of sensitive content with real-time collaboration capabilities. With the relatively easy integration of currently separate applications' information access through LDAP management, this early-stage market and concept confusion may soon begin to yield to reliable and useful control over the increasingly complex information enterprises must share with wider and wider audiences. The advent of enterprise-oriented peer-to-peer network services suggests the mixing of client-server and peer-to-peer content access and use strategies. Once the tools are really available business managers will learn if their increasingly complex efforts to control access to and share content get a little simpler—and more appropriate for different network situations.

David R. Guenette, Larry Gussin[1], and Bill Trippe

Information Access & Security Requirements

IT managers who are building information access and security requirements for an EIP can use the following, admittedly daunting sets of questions to guide their thinking:

Content value and types. Is all content high-value or sensitive? Are there fiduciary, regulatory, or compliance requirements that must be supported in regard to the content? What are the types and amounts of information to be presented? How varied are the sources of the information, among applications, servers, and internally and externally to the enterprise? How are inter-enterprise legacy systems integrated and presented? What is the role for emerging, non-PC information platforms? Are rich media to be supported?

[1] **Larry Gussin** (ldgussin@home.com) is a consultant specializing in rights management B2B and B2C infrastructures.

How does email, instant messaging, and other "ephemeral" communications fit? What security and/or auditing is beneficial?

Content actions. What level of content management and/or groupware collaboration needs support? What is the role of workflow, versioning, updating, authority in managing the creation and maintenance of the enterprise's content, including intra-document or compound document management, and do these actions need or benefit from being performed offline? What security issues arise within dynamic page presentations? Can URL-level security resolve most access challenges? What demands does contextual content delivery make on information access security management? Will syndication and/or aggregation of content into or by the EIP need to be supported? Can information search and retrieval take place offline? Are the categories and taxonomies that support retrieval, personalization, and contextual presentation of information available offline?

Persistent protection and securely associating business rules with content. What types and in which situations might content demand offline access? Are mechanisms for content value chain participation without participation in an enterprise's client-server network useful, important, or valuable to some business situations? Are super-distribution and controlled content dissemination important and valuable tools in some business situations? *Cont.*

Support for mixing of PM and RM models. Can privilege management and rights management models co-exist within the same EIP? Are there efficiencies, expanded business models, or other benefits to mixed models for information access management in the extended enterprise?

Support for mixing client-server and peer-to-peer models. How well does client-server network architecture meet the requirements of the extended enterprise? What are the advantages and disadvantages of peer-to-peer security models? Can a peer-to-peer network-based model of rights management be applied to authentication-based trust within a client-server network architecture? What role might rights, payments, and/or usage clearinghouses play?

Centralized information access management tied to directories, and especially LDAP. Does the policy management or rights management system address LDAP, or provide or support "directory smart APIs"? Depending on the type of EIP and the type on enterprise platforms, other directory forms, such as NDS or AD may need to be considered. Personalization engines will also need to address LDAP, or links from LDAP to user profiles.

Appropriate privilege or rights assignment authority. Who sets information access permissions and/or rights policies? How flexible and granular is the user class or role definitions? How are policies determined across various business departments and areas of business responsibilities? Who defines users classes and roles, granularity of information for access and privileges, and who implements the management of these privileges and/or rights? Does the solution permit *ad hoc* authentication or authorization by managers? What is the PM and/or RM systems' capacity to address privacy, especially in industries where regulation of privacy is becoming law?

Auditing requirements must be supported. What levels of audit/usage tracking is required now, and how might that grow a year or two down the road?

Other, required technologies and services must be identified. Determine the integration required with other networks or platforms within the enterprise. Is an ASP a viable way to build an EIP capability? What is required to use extranet technology, such as VPN? Can the EIP securely interact with an e-marketplace exchange or vertical industry portal to support extranet e-commerce functions? What is the management overhead, services, and technologies available for PKI, digital certificate, or other required security foundations?

Interoperability and standards are crucial areas to watch. What are the interoperability issues of content management and application data? Does the EIP solution work with XML-based data, content, security, and interchange standards? What level of application server technology is needed to integrate legacy information systems?

INDUSTRY NEWS

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

EPRISE & INXIGHT PARTNER
3/29/01

Eprise Corporation and Inxight Software, Inc. announced a partnership to deliver solutions that enable organizations to increase the value, effectiveness, and manageability of their Web site content. This joint agreement enables Eprise and Inxight to market and cross-sell Inxight products with Eprise Participant Server. The Eprise-Inxight combined offering makes it easier to classify new and existing Web content so site visitors can find what they are looking for. By combining Inxight solutions with Eprise Participant Server, users will experience easier navigation through Web sites, faster access to pertinent information and increased productivity. www.inxight.com, www.eprise.com

PERCUSSION EXPANDS PARTNER PROGRAM
3/28/01

Percussion Software announced the expansion of its partnership program to include solution partners. This partnership category will focus on collaborating with regional systems integrators (SIs), who will provide their expertise to integrate Percussion's Rhythmyx Content Manager as part of a larger system, or with the products from Percussion's technology partners. The goal of Percussion's partner program is to improve customer service to current users and generate new business for Rhythmyx. The partners being targeted - primarily regional SIs with e-Commerce experience - will extend Percussion's professional services for customer implementation. Additionally, the partner program will enable Percussion to expand its reach into numerous vertical markets, such as financial services, publishing, pharmaceutical, healthcare, cross media, government and manufacturing. Percussion is targeting mid-tier SIs to handle specific regions of the country and/or specific vertical markets in order to provide the strongest customer service possible. The Company will work with the partner to build its Rhythmyx practice with Percussion selling the software and the partner providing the service. Currently, Percussion has signed partnerships with Wellstream, Noblestar, e-Partners and Bond Technologies. www.percussion.com

THOMASTECH & DOCNET.COM IN STRATEGIC PARTNERSHIP
3/28/01

Thomas Technology Solutions, Inc. and DocNet.com, Inc. have announced a strategic partnership agreement. The companies offer complementary services to similar markets such as publishing, manufacturing, and other industries that distribute content-rich information. Through this partnership DocNet will provide an outsourced solution to ThomasTech clients for producing and distributing documents from the Internet. ThomasTech will now be able to offer DocNet's content delivery platform for both digital and hardcopy documents. In turn, ThomasTech will provide data conversion, XML/SGML, and content management services to DocNet clients. www.DocNet.com, www.thomastechsolutions.com,

SDL ANNOUNCES PARTNERSHIP WITH VIGNETTE

3/28/01

SDL International announced a strategic partnership with Vignette. The partnership integrates the SDLWebFlow solution with Vignette's content management product, Vignette e-Business Application Platform. Vignette's content management system enables users to dynamically develop, control and maintain the content of their website. SDLWebFlow provides corresponding capabilities for the management of multilingual content. As a result of the partnership with Vignette, SDLWebFlow extends the content management process into the synchronization of multilingual content. SDL's customers also benefit from a suite of additional tools to fully manage the content of their host language sites and hence deliver multilingual versions. www.vignette.com, www.sdlintl.com

eBT RELEASES ENGENDA 4.7

3/26/01

eBT International, Inc. announced the release of engenda 4.7. The latest version of eBT's content management and workflow automation solution features new functionality to simplify workflow development and enhance personalization through advanced integration with BEA WebLogic Personalization Server. Included in engenda 4.7 are: Microsoft Visio Workflow Solution: Based on a prototype eBT announced last year, this drag-and-drop, graphical interface allows anyone to create workflows from within Microsoft Visio. The workflows are stored as XML, without requiring users to learn the markup language; LDAP Support; Localization tools and guidelines enable global organizations to easily configure engenda 4.7 for non-English speaking locales; and Apache support. engenda 4.7 is available immediately with prices starting at $75,000. www.ebt.com

Note that this is a very different product than entrepid, their newer content management product.

DIGITAL GOODS & TEXTERITY PARTNER

3/26/01

Digital Goods and Texterity, Inc. announced an agreement that will extend Digital Goods' Amplifi content marketing/eCommerce solution from the publisher's desktop to storefronts across the Internet. Under the agreement, Texterity's TextCafe, an automated service that converts PDF, Quark or Word files to XML and Open eBook formats, will be offered by Digital Goods to its content partners. Texterity's service bridges the digital document preparation gap between publishers' systems and Digital Goods' Amplifi Internet distribution/sales tools and services. Texterity also will make Digital Goods' Amplifi the recommended digital content marketing solution for its content conversion customers. Both companies are partners of Reciprocal, the digital rights management leader that is enabling those popular reader formats for content offered through Digital Goods. www.digitalgoods.com, www.texterity.com

VITRIA TO ACQUIRE XMLSOLUTIONS

3/26/01

Vitria announced that the company has entered into a definitive agreement to acquire XMLSolutions Corporation. Vitria believes that there is a substantial market opportunity for EDI/XML integration. Given the complexity and cost of EDI software, most companies only use EDI to communicate with the top 15-20% of their trading partners. The remaining 80-85% of trading partners need a simpler, less expensive solution that leverages the emerging XML standard for information exchange over the Internet. The total purchase price for the transaction will be ap-

proximately $15 million, of which $7 million will be paid at the closing in cash to preferred shareholders, and $8 million will be used to retire short-term debt and other liabilities of XMLSolutions. The closing of the acquisition is subject to the approval of the shareholders of XMLSolutions, as well as the satisfaction of certain customary closing conditions. Vitria will account for the acquisition as a purchase and expects to complete the transaction in early April. www.xmls.com, www.vitria.com

This is a good fit since the kind of integration XMLSolutions provides arguably belongs to an application integration server anyway.

INTERWOVEN LAUNCHES TEAMCATALOG
3/26/01

Interwoven, Inc. announced the release of Interwoven TeamCatalog. Combined with Interwoven TeamSite, TeamCatalog offers a comprehensive platform to enable customers to automate both their product and Web content processes to power multiple eBusiness initiatives. With TeamCatalog, customers will be able to assemble and manage catalog content, while automating the processes necessary to ensure product information is "transaction-ready." Interwoven TeamCatalog provides a software platform for managing product data that meets the demands of enterprises, B2B marketplaces, wholesalers, distributors, and retailers, who need to aggregate, create, categorize, refresh and distribute eCatalogs. This content includes information such as product name and description, stock keeping unit (SKU) code, price, and other data, which is stored in legacy systems, databases and ERP systems such as SAP, PeopleSoft and Oracle. TeamCatalog is a development-side eCatalog content management solution that is compatible with leading transactional catalog products from BEA, IBM, ATG, BroadVision, Microsoft and others. TeamCatalog features include: Easy-to-use administrative tools facilitate schedule updates, define process checkpoints, set validation criteria, and manage versions of catalog files for tracking and automatic rollback as needed; Aggregation, normalization, and rationalization capabilities make product content from one or more sources `transaction-ready' for eCommerce sites; Creation and management of multiple taxonomies, such as UNSPSC and industry-specific taxonomies. The combination of Interwoven TeamCatalog software, with B2B Edition and TeamSite software, provides the necessary content infrastructure for enterprise eBusiness initiatives. Enterprises can represent their product information accurately and merchandise their products with rich information, graphics and metadata. www.interwoven.com/products/teamcatalog

E-catalogs are big business and are at the heart of all e-commerce. This may seem obvious, but all the repercussions are less clear. One thing you can be sure of is that every *content management vendor will have some kind of e-catalog story before long. There will still be a market for specialized catalog applications, but some of the weaker players won't last long.*

OPEN MARKET SELLS FOLIO TECHNOLOGY TO NEXTPAGE
3/26/01

Open Market, Inc. announced that NextPage has exercised its option to purchase the Folio technology, which it had been licensing from Open Market. NextPage will pay Open Market $6.6 million in cash in the first quarter 2001, to complete the sale. Open Market began licensing the Folio technology to NextPage in June of 1999. The technology delivers advanced search and navigation of large data files as part of the Search Services component of NextPage's core NXT 3 e-Content Platform. The purchase completes NextPage's three-year product license agreement. www.nextpage.com, www.openmarket.com

Or, more accurately, back *to NextPage.*

INTRANET SOLUTIONS PARTNERS WITH LEXIQUEST
3/26/01

IntraNet Solutions, Inc. announced it has formed a strategic alliance with LexiQuest. Under the agreement, IntraNet Solutions will co-market LexiQuest's natural language search technology with its Xpedio Content Management system. The technology will enable IntraNet Solutions' customers worldwide to perform natural language search queries on their Xpedio-powered business Web sites. Natural language technology allows users to search for information by submitting a question to search engines, rather than key words or phrases. This process generates more relevant, accurate search results than traditional methods, and is easier to use for general business users. The new search capability will enable Xpedio customers to find and access business content on Web sites more quickly and easily. www.intranetsolutions.com, www.lexiquest.com

DOCUMENTUM RELEASES 4I B2B CONTENT MANAGEMENT EDITION
3/22/01

Documentum announced the general availability of Documentum 4i B2B Content Management Edition. This new Edition provides a standard, integrated content management platform that enables rapid development and deployment of content-rich B2B applications across a common content framework. At the heart of this edition is the XML-enabled eContent Server. Enhanced by Engagement Services, Syndication Services, Collaboration Services, and Documentum Developer Studio, this edition extends the production and exchange of content among and between organizations. The 4i eContent Server, designed for global scalability, provides content repository services, native XML component management and robust process automation. Documentum XML capabilities enable storage, validation and transformation of B2B XML schemas, including popular electronic marketplace schemas, such as cXML, and xCBL. Engagement Services is an ebXML-ready multi-protocol server that extends process automation and workflow across trading networks, enabling secure inter-enterprise content exchange. Syndication Services is a tightly integrated content distribution facility for publishing content directly from one or more repositories to an unlimited number of subscribers. Collaboration Services provides real-time project-based collaboration between employee and partner teams across the extended enterprise. And, for rapid development of content-rich B2B applications, Developer Studio is a mature development environment with a comprehensive API set compatible with all popular Web-based development standards. Now, catalog management applications can integrate structured catalog information (such as pricing and SKUs) with rich unstructured information such as images, product descriptions, datasheets, maintenance and operating manuals. In addition, with the new B2B Edition capabilities companies can accelerate product availability to market by enabling suppliers to directly maintain and manage their catalog content. On-line Contract management and strategic sourcing applications can now manage the content lifecycle around contracts, proposals, and quotations. Finally, collaborative commerce applications can exchange rich content and engage partners during design, marketing and sales cycles gaining increased time-to-market advantage. www.documentum.com

IPLANET EXTENDS PORTAL SERVER OFFERING
3/22/01

iPlanet E-Commerce Solutions extended its portal platform with the addition of four new products, including fully integrated wireless capability via the iPlanet Portal Server: Mobile Access Pack. The product lets service providers offer a full spectrum of portal services through any Internet-based device and allows enterprises to channel corporate services and applications to mobile employees. Mobile Access Pack is fully integrated with the iPlanet Messaging, Calendar

and Directory Server software products. It provides support for WAP and i-mode, and the most requested wireless services such as SMS, notification and location-based services. There are two editions. Standard Edition is a completely self-contained, easy-to-install product to enable rapid portal pilot development and deployment. It includes the iPlanet Application Server 6.0: Standard Edition and iPlanet Directory Server for use only with the iPlanet Portal Server. Enterprise Edition provides enhanced availability and scalability on a J2EE-certified application platform with robust integration capabilities. Designed for customers requiring high transaction integrity and continuous up-time, it eliminates single points of failure through application fail-over and load balancing. It requires the separate purchase and installation of the iPlanet Application Server: Enterprise Edition or iPlanet Application Server: Enterprise Edition Pro. The iPlanet Portal Server product family is expanding to include additional capabilities via portal solution packs. Each pack can be installed and deployed on top of either iPlanet Portal Server edition. In addition, multiple packs may be deployed in conjunction with one another. They include: Mobile Access Pack, Secure Remote Access Pack, and Personalized Knowledge Pack. The iPlanet Portal Server Standard Edition and the Secure Remote Access Pack are available immediately. The Personalized Knowledge Pack will be available by the end of this month. The Wireless Access Pack will be available Summer 2001 and the Enterprise Edition will be available in the Fall. Pricing of the iPlanet Portal Server begins at $25,000. www.sun.com/software/sunone, www.iplanet.com

NOKIA DEMONSTRATES XHTML MICROBROWSER ON STANDARD MOBILE PHONE
3/21/01

Nokia is now demonstrating an XHTML microbrowser on a standard mobile phone. The new browser is shown running on the modified Nokia 6210 and Nokia 7190 handsets. The demonstration is meant to show that important advances in consumer services can be made very quickly and implemented in real-world phone designs. Nokia plans to start incorporating the browser in its handsets by the end of this year. Nokia's WAP service delivery platforms are already designed to enable access to XML-based languages such as XHTML. The server infrastructure will be ready for testing with XHTML-handset later this year, and future releases of service delivery platforms will be deployed in time for commercial roll-outs of XHTML-based services. As is the case with Nokia's current WAP browser, Nokia will license the browser source code to other handset manufacturers, mobile phone operators, service providers, and others. Licensing information is available from www.forum.nokia.com. The new software will support current WAP content, WML, as well as the new XHTML standard, ensuring both backward compatibility and next generation services. In addition, the software is designed to be extendable, so that its functionality can grow along with the capabilities coming in GPRS networks and new phone hardware designs. The demonstration also shows the use of cascading style sheets and a new rendering engine, which together enable a GUI for content delivery. This GUI, a standard feature in the wired world, will significantly improve usability for consumers and convenience for operators. The style sheets themselves are a major advantage, as they will make it possible to easily tailor content specifically to different handsets. Nokia will collaborate with a number of companies on XHTML application technology and content creation tools. The first XHTML developer's kit from Nokia will be available this summer. An online version of the XHTML browser demonstration is available at www.nokia.com/xhtmldemo. www.nokia.com

As we suggested in Vol 9, Num 1, XHTML is going to be the web language of the future. The question is how soon it will become a requirement. We don't think WAP will disappear very quickly, but this demonstration by Nokia says something about the future of both XHTML and WAP.

INTRANET SOLUTIONS & CORECHANGE FORM ALLIANCE
3/21/01

IntraNet Solutions and Corechange, Inc. announced a strategic alliance to offer content management and portal solutions worldwide. Under the alliance, the companies will integrate and market IntraNet Solutions' Xpedio Content Management system with the Corechange Coreport 3g access framework. Coreport 3g provides customers with a customizable portal interface through which they can access critical business information and applications. The integration of Xpedio enables portal users to contribute content to Web sites in a variety of formats, such as word processing documents, spreadsheets or graphics. Xpedio also automatically publishes this content to a variety of Web formats, such as HTML, XML, PDF or WML. In addition, users can access content stored in the Xpedio Content Server through Coreport 3g. The integrated product also includes Xpedio's version control feature that allows users to track and save previous versions of business files, as well as a workflow function that enables users to route content for review and approval. Through the Coreport and Xpedio technology, users can also access the corporate portal and its content from a wide array of wireless devices to get information from the portal and to transact business. www.intranetsolutions.com, www.corechange.com

MEDIABIN INTRODUCES IMAGING CONNECTOR TO CONTENT MANAGEMENT SYSTEMS
3/21/01

MediaBin, Inc. announced the availability of the MediaBin Deployment Agent, a new option for managing and automating the production and accelerated delivery of correctly formatted images directly to web sites, or via general-purpose Web Content Management offerings from companies such as Interwoven, Vignette and others. The Deployment Agent combined with the MediaBin platform extends the functionality of web content management systems to include the aggregation, production, management, and tracking of product photography and brand images. eCommerce sites and B2B exchanges that work with thousands of images can use the MediaBin Deployment Agent to automate the production and delivery of new and updated content to their sites on a scheduled basis (e.g., daily, weekly, monthly). The MediaBin Deployment Agent can also be used to automatically regenerate all affected web images whenever a page template is changed, a task that would take hours or even days using manual processes. The Deployment Agent can also be used to generate images based on database criteria. For example, if a product line or group of products is going to be put on sale, MediaBin can regenerate all affected product images to include an appropriate sale label, such as "25% off! Today only" in an artistically-rendered translucent type face. The Deployment Agent is available for purchase as an add-on to the MediaBin platform. www.mediabin.com

PLUMTREE & ACTUATE ANNOUNCE AVAILABILITY OF NEW GADGETS
3/20/01

Plumtree Software announced availability of the Plumtree Gadget Suite for Actuate and a partnership with Actuate Corporation. Plumtree Portal Gadgets are plug-in portal components that deliver services from enterprise applications and Internet sites to the business desktop. The Plumtree Gadget Suite for Actuate is designed to integrate services from e.Reporting Suite 5, Actuate's Information Delivery capabilities, into the Plumtree Corporate Portal. Users can now access Actuate business reports and content including 401K statements, performance reports and other corporate information from the same personalized Internet desktop they use to check e-mail, sales leads and market news. Users can browse the Actuate Encyclopedia, a list of folders that contain e.Reports. Users can select which e.Reports they wish to view from the folders and can easily drill down and review the report content. Users can specify which e.Reports they wish

to view and search the reports or download them in PDF, XML, or DHTML format. Users can subscribe to select channels based on associated e.Reports to find out when information is new or changed. When an e.Report is modified, subscribers are informed of any updates. Plumtree-Actuate channel partner Blackstone Technology Group created the gadgets in JSP. The gadgets are currently available. www.actuate.com, www.plumtree.com

ARBORTEXT ANNOUNCES EPIC EDITOR 4.2
3/20/01

Arbortext, Inc. announced the upcoming release of the next version of its Epic Editor software, Epic Editor 4.2, which will offer expanded support for software developers who require the openness and power of JavaScript, DOM and XSL. Epic Editor 4.2 expands the ability of sof t-ware developers to build on the company's Single Source Publishing Architecture to create cus-tomizations through the new enhancements. Built in support for JavaScript empowers sof tware developers who are already familiar with it. JavaScript support is in addition to Epic Editor's ex-isting support for compiled languages, including Java, C and C++, as well as any language that talks through COM, including Visual Basic. Epic Editor 4.2 provides a GUI-based configuration for associating scripts with events. This enhancement gives developers an easy way to add cus-tomizations to Epic Editor. In addition to fully supporting the DOM Core, Epic Editor 4.2 ex-pands that support to include dynamic DOM Ranges and most DOM Level 2 events. Epic Editor's built-in GUI-based stylesheet development tool now uses XSL as its default native for-mat, which extends Arbortext's support for this standard underneath its easy-to-use stylesheet design interface. Previously offered only as a technology preview, Arbortext has upgraded its support for XSL-FO (XSL Formatting Objects) to support the most recent XSL-FO specification and is now a standard part of Epic Editor 4.2, providing a robust way to apply style to content that's intended for paper publishing. Epic Editor 4.2 will ship in July 2001. All Arbortext cus-tomers under maintenance are eligible to receive the Epic Editor 4.2 upgrade at no charge, and the upgrade will be automatically shipped to them. www.arbortext.com

W3C ISSUES CANONICAL XML AS A RECOMMENDATION
3/19/01

The World Wide Web Consortium (W3C) announced the release of Canonical XML 1.0 as a W3C Recommendation. This specification defines a method for serializing XML documents such that it eliminates incidental variances in their syntax as permitted by XML 1.0. This functionality is necessary to XML Signatures, which requires documents to be consistently serialized for digi-tal signature processing, so that these incidental variances do not invalidate the signature. Digi-tal signatures provide integrity, signature assurance and non-repudiatability over Web data. Such features are especially important for documents that represent commitments such as con-tracts, price lists, and manifests. XML Signatures have the potential to provide reliable XML-based signature technology. However, various processors may introduce incidental changes into a document over the course of its processing. Canonical XML 1.0 provides a method of se-rializing an XML document into its canonical form. If two documents have the same canonical form, then the two documents are logically equivalent within the context of this specification. This relationship combined with XML Signature is critical for electronic commerce because it ensures the integrity of documents and protocol messages that travel between multiple XML processors. This is the first recommendation produced by the joint W3C/IETF XML Signature Working Group. Contributors include representatives from Ariba, Baltimore Technologies, Done360, IAIK TU Graz, IBM, Microsoft, PureEdge, Reuters, and the W3C technical team. The Working Group is still at work on XML Signatures, which already enjoys significant implementa-tion, and will have more with the completion of the work on Canonical XML. www.w3.org

RADIO USERLAND BRINGS INTERNET PUBLISHING TO DESKTOP USERS
3/19/01

UserLand Software announced the release of Radio UserLand, software that brings the power of Web Services and XML to the personal computer desktop. UserLand is working with Microsoft and others to facilitate both XML-based interoperability conventions and a new generation of Web Services built on those standards. Radio is a powerful news publishing and routing tool that runs on the desktop, patterned after the easy to use "weblog" concept, and supports web services protocols such as SOAP and XML-RPC, co-developed by Microsoft, Developmentor, IBM and the open source development community. Radio comes with a built-in XML-based application that streams news from publications such as Red Herring, Wired News, Salon, CNN, Reuters, the San Jose Mercury-News, Motley Fool, Internet.Com, and from news sites such as Tomalak's Realm, AppleSurf, Slashdot.Org, XML.Com, Freshmeat and Scripting News. Thousands of compatible XML-based news feeds are available in RSS format, co-developed by UserLand and Netscape. Radio UserLand is available for free download at http://radio.userland.com/. A subsequent version to be released in Q3 2001 will be available as a commercial product. www.userland.com

OPEN MARKET PARTNERS WITH SCREAMING MEDIA
3/15/01

Open Market, Inc. announced that it has formed a strategic technology partnership with ScreamingMedia. The companies have integrated Open Market's Content Server Enterprise Edition with ScreamingMedia's SiteWare, a technology platform for the aggregation, syndication, processing and integration of digital content. By using this scalable solution, joint customers can have a single, standards-based platform for managing and publishing customized, targeted content. The companies have developed an adapter to integrate ScreamingMedia's SiteWare and Open Market's Content Server Enterprise Edition. With this solution, businesses can aggregate content such as news, features, photos, audio and video from thousands of publications and filter them by using ScreamingMedia's solutions. Open Market's Content Server Enterprise Edition assembles content from a variety of sources, manages the Internet publishing workflow process and delivers dynamically personalized content or static content to users via Web browsers or wireless devices. Because Open Market's applications are built on top of J2EE application servers (BEA Systems' WebLogic Server, IBM's WebSphere Application Server and iPlanet's Application Server), enterprise customers can take advantage of an open, extensible platform for managing and delivering their information assets. www.screamingmedia.com, www.openmarket.com

J.D. EDWARDS EXPANDS REACH INTO GLOBAL ENTERPRISE CONTENT MANAGEMENT
3/14/01

J.D. Edwards & Company announced the limited general availability of Content Manager, a tool that allows enterprises to manage multi-lingual content with standard desktop tools like Microsoft Office. Content Manager allows "single sourcing" – creating a single content repository that can be used by a company's network of offices, partners and customers anywhere in the world. Slated for general availability this spring, Content Manager expands on the existing enterprise content management technology with three unique features: The product allows different departments to share and reuse content components, not just whole documents, for multiple output formats such as print, web and CD-ROM; Content Manager uses Microsoft Office to manage content components; and Content Manager is designed to facilitate multi-lingual content development and publishing. With its Microsoft partnership, J.D. Edwards' Con-

tent Manager provides immediate user-friendliness and content adaptability. The product's architecture is geared to work with translation technologies such as Trados Inc., leveraging memory and terminology translation tools that result in significant cost savings. Content Manager, part of J.D. Edwards' knowledge management offerings, features data-based content with flexible metadata, intelligent searching, check-in/check-out of content, output to compound documents and HTML for web content, content relationship management, link management, revision and version control, configurable workflow and integrated translation strategy. Content Manager is also designed to integrate with existing information workflow processes for maximum efficiency. www.jdedwards.com

NEW SEARCH ENGINE FROM HIAWATHA ISLAND TARGETS METADATA
3/14/01

Hiawatha Island Software, Inc. released Hi-Search, a metadata-only search engine technology that yields significantly faster and more accurate matches than today's full text search engines. Hi-Search operates independently or in conjunction with full-text search engines and portals. It is the first search tool to provide database-like, "fielded" searches for all metadata- and XML-packaged documents on a network, an intranet or the Internet. Key features of Hi-Search include: Rapid Fielded Search; Support for Web Documents, Microsoft Office Documents, & XML Packages; Automated Scheduling; HTML Index Builder; XML Catalog Builder; and Web Search Interface Support. Hi-Search Server pricing starts at $2,995.00. GSA pricing is available. A Software Developer's Kit (SDK) is also included. Hi-Search Server requires Microsoft Windows NT 4.0 (service pack 4 or greater) or Windows 2000. Minimum hardware requirements are a PC with Pentium 75 MHz (or equivalent) or greater; Pentium II 500 MHz processor or better recommended; SVGA (256 color) graphic display capability. www.hisoftware.com

ENFISH LAUNCHES IMPROVED ENFISH ONESPACE, VERSION 3.0
3/14/01

Enfish Technology, Inc. announced the launch of Enfish Onespace Version 3.0. Version 3.0 of Enfish Onespace enhances the Microsoft Windows operating system by adding a customizable desktop that is automatically personalized for each user as it installs. Enfish Onespace creates a cross-referenced index that gives users easy access by subject to all their e-mail, tasks, appointments, favorite websites, contacts and documents in one secure, convenient place. The major functional areas of Enfish Onespace have been separated into easy-to-use modes, which are represented by toolbar buttons on the top of each page. Selecting one of the modes will take users to specific areas that will help them get the most out of Enfish Onespace. Each mode now features an action bar to enable users to quickly share, or respond to, an item. Performance has been greatly improved with faster loading of the application and pages. An improved architecture refreshes data as it changes, creating a more seamless environment. Users can select their preferred search engines for Internet-based searches. Users can retrieve email addresses and send correspondence quickly and easily with a new Rolodex feature that brings instant access to important contact information. Enfish has added several shortcuts to version 3.0 to make sending e-mail even easier, including an action button on top of every page for sending, and a mail drop-down arrow displaying all contacts for quick and easy selection. Enfish Onespace Version 3.0 is available from select partners and the Enfish web site. Enfish Onespace was initially available as a free download from the company's web site. With the release of the enhanced Version 3.0, Enfish Onespace will now be available for $69.95. Current users of Enfish Onespace will be given the opportunity to upgrade to Version 3.0 at no charge. Enfish works with partners to customize Enfish Onespace for specific companies and integrate Enfish Onespace with enterprise portal and Customer Relationship Management solutions. www.enfish.com

INKTOMI UNVEILS NEW SEARCH SOFTWARE
3/14/01

Inktomi Corp. announced significant enhancements to the Inktomi Search/Web service, providing its customers with a more advanced software infrastructure for delivering highly relevant, comprehensive search results to Internet users. Inktomi now incorporates new relevance modeling, content blending and Internet crawling technologies into its Web search platform to offer users continually enhanced search relevance, easier access to the most accurate search results from multiple content sources and a fresher, broader search index. Built upon Inktomi's core relevance and link, text and click analysis technologies, the enhanced relevance modeling also measures statistically significant samples of search results and compares them with human judgment. Inktomi offers new content blending capabilities that combine query results from disparate databases, serving the most relevant results up front. Content blending allows directory categories, standard Web pages and other premium content to be ranked in order of relevancy without being segmented by file type, making it easier for users to find the link they want. Inktomi's new distributed crawling architecture scans the Web more frequently, revisiting missed content and refreshing updated pages more often. Inktomi recently announced it is also working directly with content providers to ensure its database has the most current collection of Web documents, including hard to crawl pages such as those containing XML or dynamic content. www.inktomi.com

BEA EXPANDS CONTENT MANAGEMENT PARTNERSHIPS TO 11 WITH NEW INTERFACE
3/14/01

BEA Systems, Inc. announced an expanded group of content management partners that integrate with BEA WebLogic Personalization Server through a newly published interface. The expanded partnerships help businesses reduce both the time and cost for e-commerce and mobile-commerce content development and management. Now content management systems from Documentum, Interwoven, eBT, eGrail, Eprise, FatWire, FileNET, Gauss Interprise, IntraNet Solutions, Openpages and Starbase can help automate content production, personalization and delivery on the BEA WebLogic Personalization Server. With the expanded number of partners using BEA's newly published content management service provider interface, BEA WebLogic customers have a greater choice of content management solutions. BEA currently bundles versions of Documentum 4i Web Content Management Edition and Interwoven Content Express for BEA to help provide businesses with an e-commerce solution that addresses virtually all aspects of content personalization. In addition, BEA WebLogic customers now can choose from the following list of integrated content management packages: eBT's engenda, eGrail's Publishing System, Eprise's Participant Server, FatWire's UpdateEngine5, FileNET's Panagon Platform, Gauss' VIP Platform, IntraNet Solutions' Xpedio, Openpages' ContentWare, and Starbase's eXpressroom. The new content management service provider interface, which allows BEA partners to integrate with BEA WebLogic Personalization Server in a standardized format, is available through the BEA Star Partner Program. All 11 content management partners are members of the recently announced BEA Star Partner Program, which is designed to foster strong alliances between BEA and its partners with program initiatives tailored to their specific business models and needs. www.bea.com

OPENPAGES & KPMG CONSULTING FORM ENTERPRISE CONTENT MANAGEMENT PARTNERSHIP
3/13/01

Openpages, Inc. announced that it has formed a strategic partnership with KPMG Consulting, Inc. The two companies have formed a global partnership to provide enterprise content management solutions to KPMG Consulting customers worldwide. The partnership pairs KPMG's Consulting experience in Internet-based business solutions and systems integration with Openpages' enterprise content production products. The worldwide partnership will help companies conducting e-business obtain a long-term competitive advantage through automating the enterprise content production process–empowering users to more efficiently manage content assets and deploy content to Web sites, print and wireless channels. To speed the roll-out of such joint implementations, Openpages and KPMG Consulting will collaborate on extensive training for KPMG Consulting professionals and establish a practice around ContentWare specialization for the design and implementation of content management solutions. ContentWare will be deployed at KPMG's U.S. Solution Centers in Dallas, Texas; Denver, Colo.; Liberty Corner, N.J.; Mountain View, Calif.; and McLean, Va. and the Openpages practice will be rolled out worldwide. www.kpmgconsulting.com; www.openpages.com

LIGHTSPEED INTRODUCES iENGINE
3/13/01

Lightspeed Interactive, Inc. introduced iENGINE, a new XML-based platform. With this platform, Lightspeed enables companies to access, maintain and dynamically deliver personalized, up-to-the-minute content to anyone – anytime – anywhere. Lightspeed combines their iENGINE with their interface design to provide a rich user experience. Lightspeed's platform differentiates itself by allowing an organization to dynamically deliver content to a broad range of delivery mechanisms, such as Web, print, CD-ROM, or wireless through a common platform, increasing company productivity and reducing business costs. Lightspeed Interactive has developed and delivered personalized Internet software solutions targeted at sales support, e-learning, e-commerce, vertical portals, product marketing and product support for large, blue chip technology companies. www.lspeed.com

NCOMPASS LABS RELEASES RESOLUTION 4.0 & CONTENT CONNECTOR FOR COMMERCE SERVER
3/13/01

NCompass Labs Inc. announced the release of NCompass Resolution version 4.0,and Resolution Content Connector for Microsoft Commerce Server 2000. Version 4.0 extends Resolution's capabilities by enhancing Resolution's scalability, versioning and site-maintenance features. Key Resolution 4.0 enhancements include: a new dynamic server clustering feature that allows multiple NCompass Resolution servers to be clustered; extensible object properties and content meta tagging; significantly improved team collaboration with the ability to track content, object and code revisions on all site pages; expanded archiving to include dynamic site archiving to increase site management; and integration with Microsoft .NET - Resolution 4.0 integrates fully with Microsoft's .NET enterprise servers including Commerce Server 2000, Windows 2000 Advanced Server and SQL Server 2000. Resolution 4.0 is available on March 31, 2001. Resolution Content Connector enables enterprises to use the full functionality of NCompass Resolution to manage Web content for e-commerce sites built using Microsoft Commerce Server 2000. The out-of-the box integration between Resolution's automated content publishing, workflow and content-sharing capabilities and Commerce Server's product catalog, profiling engine, transac-

tional processing, shopping cart, and Business Desk application allows businesses to quickly deploy powerful e-commerce sites. Content Connector offers full-featured content authoring, versioning, deployment, templating, workflow, site management, wireless device support, an open COM-based API and more. www.ncompass.com

ADOBE INTRODUCES ACROBAT 5.0
3/12/01

Adobe Systems introduced Adobe Acrobat 5.0 software, a major upgrade. With Acrobat 5.0, Adobe is enabling organizations to reduce cycle times and increase the efficiency of business processes across their extended enterprises of customers and partners. Acrobat 5.0 offers a number of key benefits that enable business, graphic arts and IT professionals to excel in this new Network Publishing environment where they must work efficiently at Web speed. Tight Web integration based on WebDistributed Authoring and Versioning (WebDAV) and Open DataBase Connectivity (ODBC) allows teams to simultaneously share comments on Adobe PDF files from within a browser. Support for XML makes it simple for users to integrate data, such as metadata and forms data in Adobe PDF files, with back-end systems. And stronger integration with enterprise deployment tools enables IT professionals to auto-install and maintain Acrobat 5.0 over a network to thousands of multi-user or lockdown desktop systems. Acrobat 5.0 software for Windows 95 OSR 2.0, Windows 98, Windows NT 4.0 with service pack 5 or 6, Windows ME and Windows 2000, and Macintosh OS 8.6 (all Web-based capabilities are not available due to Apple OS limitations), 9.0.4 and 9.1, is expected to ship in the United States and Canada in the second quarter of 2001 for an estimated street price of US$249. Registered users of earlier Acrobat software versions can upgrade to Acrobat 5.0 for US$99. French, German and Japanese versions of Acrobat 5.0 are expected to be available shortly after the initial release. Information about other language versions, as well as pricing, upgrade and support policies, is available online. www.adobe.com

We're especially interested in the XML metadata and the InterTrust DRM software as they would both be useful for us!

GLIDES PARTNERS WITH ILANGUAGE TO OFFER WEB GLOBALIZATION SOLUTION
3/12/01

Glides Inc. announced that iLanguage will become an integrated translation provider for Glides' UniSite customers. As a result of the partnership, iLanguage translators will become fully integrated into UniSite's XML-based automated workflow process, which manages the editing, review, translation and Web content publishing process. Based in Los Angeles, iLanguage specializes in translating to and from English, Spanish, French, Italian, German, Portuguese, Swedish, Dutch, Russian, Japanese, Chinese and Korean for eCommerce, news, finance, entertainment, sports, and other Web sites. The partnership combines Glides' UniSite workflow and content management software service with iLanguage's translation and localization capabilities. UniSite's workflow manages the entire translation process, including automated content exchange with translators at iLanguage. By delivering content directly to iLanguage's translation workbenches, Glides' XML-based workflow ensures the highest level of transparency, consistency and accuracy for Glides' clients. www.ilanguage.com; www.glides.com

INTRANET SOLUTIONS ANNOUNCES XPEDIO 4.6
3/8/01

IntraNet Solutions, Inc. announced the release of Xpedio 4.6, the latest version of its Xpedio Content Management system. Xpedio 4.6 includes a Java 2 Platform Enterprise Edition (J2EE) compliant Enterprise JavaBean (EJB). The new EJB enables companies to easily integrate Xpedio's content management capabilities into e-business applications built on J2EE application servers, such as commerce sites, corporate portals, customer relationship management applications and net markets. Xpedio 4.6 will be available March 21, 2001 and is priced from $50,000 to $240,000 USD. www.intranetsolutions.com

GAUSS NAMED ADVANCED BUSINESS PARTNER BY IBM
3/6/01

Gauss announced they have been named as an Advanced Business Partner by IBM through the end of 2001. The IBM Advanced Business Partner designation is part of the PartnerWorld program, which consists of three membership levels – Member, Advanced and Premier. This approval is for the Systems and Services track, which is available to all IBM Business Partners approved to market IBM eServer, IBM Network Integration, Point of Sale, Printer Systems and Storage Products in the United States and Canada. The program recognizes loyal IBM Business Partners for their commitment to building IBM product certifications or equivalent skills and dedication to customer satisfaction processes. Advanced status is awarded to a select group of IBM Business Partners, and they must earn renewal of the designation each year. Approximately 15% of IBM Business Partners-Systems in North America have qualified for Premier or Advanced recognition in 2000. www.gaussinterprise.com

COVIA INTRODUCES VERTICAL COMMUNITY PORTAL SOLUTION
3/6/01

CoVia announced the general availability of Vortal, the newest addition to CoVia's suite of enterprise portal solutions. CoVia Vortal enables companies to quickly create industry specific, personalized portals that can be entirely managed by non-technical users who can quickly produce, update and sustain fresh, relative content for any targeted community – all without IT support. Supporting such features as self-registration and password protected access, Vortal enables any organization to add "MyOrganization"-like functionality to their publicly facing web sites in less than 30 days. Using iChannel content syndication and delivery technology, Vortal delivers organization and industry specific news content and information directly to targeted users desktops and enables them to customize their view to suit their particular objectives and interests. Organizations can intersperse company content with syndicated news feeds included with the Vortal application to produce a robust information destination for customers, prospects and partners. Since Vortal also uses many self-service technologies developed as part of the InfoPortal platform, managing and updating the site can be done by anyone capable of operating a web browser. No specific experience or knowledge of XML, HTML or other programming languages is required for day-to-day users to keep the site fresh and valuable. The result is low cost of ownership and more relevant and timely information delivered directly to customers. CoVia Vortal is available now. For additional information, please visit www.covia.com

OPEN MARKET ANNOUNCES CONTENT SERVER ENTERPRISE EDITION
3/5/01

Open Market, Inc. announced a new product family, Content Server Enterprise Edition (CSEE), adding new e-marketing and business-to-business integration (B2Bi) capabilities to its content management and delivery system. CSEE is designed, developed, and deployed as Java components built on Java 2 Enterprise Edition (J2EE) application servers now including the IBM WebSphere Application Server, as well as BEA WebLogic Server and the iPlanet Application Server. CSEE is based on two approaches. The first, called the PowerAssets information architecture, maximizes the value of an enterprise's content by extending its use and re-use for a broad range of e-business initiatives, including catalogs, personalization, self-service applications, and e-marketplaces. The PowerAssets information architecture treats enterprise content, such as images, articles, product information, and audio files, as dynamic independent content objects that can be extended for multiple applications by non-technical users. PowerAssets enable enterprise content to be kept in a "presentation neutral" format so it can be easily reused across multiple Web sites and delivery devices as well as facilitating efficient XML document exchange to trading partners. Open Market's second approach is based on J2EE application servers, Java components, Java Server Pages (JSP) templates, and XML-based services. Because CSEE solutions are built directly on leading J2EE application servers, customers benefit from fast development of content-driven Internet applications using mainstream Java technical tools, simple integration with legacy systems, and technologies. Open Market's Content Server Enterprise Edition is available now. Each product is priced individually on a per CPU basis. Pricing begins at $29,000.00 per CPU. Customers add modules based on business needs and purchase additional CPUs based on scalability requirements. www.openmarket.com

SEQUOIA PARTNERS WITH BANTU TO PROVIDE INSTANT MESSAGING
3/5/01

Sequoia Software Corporation announced a partnership with Bantu, Inc., a Washington, D.C.-based provider of instant messaging and presence management technology for enterprise applications software and services companies. Sequoia is integrating Bantu's instant messaging application, Bantu Messenger, into its XML-pure portal software product, XPS. Once combined, Sequoia customers will have the option of providing users with a confidential mechanism for instant messaging with other portal users, as well as the millions of individuals using Bantu and other popular instant messaging platforms such as ICQ, MSN, and Yahoo! In addition to enhancing the collaborative capabilities of XPS, Sequoia selected Bantu Messenger because it protects user confidentiality, encrypts all messages, integrates presence detection and instant messaging seamlessly into the XPS portal, and is interoperable with other instant messaging systems. www.bantu.com, www.sequoiasoftware.com

BLUE MARTINI SOFTWARE SHIPS BLUE MARTINI 4 SUITE
3/5/01

Blue Martini Software, Inc. announced that it is shipping its Blue Martini 4 suite of products. The tightly integrated suite consists of four new applications: Blue Martini Marketing, Blue Martini Commerce, Blue Martini Channels and Blue Martini Service. Blue Martini Marketing, a comprehensive marketing solution that allows companies to create a unified picture of customers, analyze customer behavior for patterns and insights, and implement those insights through personalization and outbound marketing. Blue Martini Commerce, an e-commerce application for selling direct to businesses and consumers via multiple touch-points such as a website or mobile device. It offers companies out-of-the-box capabilities that provide a solid foundation for effective selling. Blue Martini Channels, a complete channel management application that helps

companies to manage profitable relationships with partners, and drives sales through partner extranets, or portals, and online marketplaces. Blue Martini Service, a customer service application that enables companies to drive revenues and achieve customer satisfaction through their customer service representatives (CSRs) over the phone or on the web. The Blue Martini 4 suite provides 24-by-7 availability, legacy integration and ease of management. The Blue Martini 4 suite offers visual tools and pre-built adapters for integrating external systems through Enterprise Java Beans (EJB), XML, CORBA, Microsoft's COM/DCOM and IBM's MQ Series interfaces. It provides integration with SAP, Agile, Oracle, PeopleSoft and Siebel. The Blue Martini 4 suite and its four applications are currently available. Each application is available separately or all four can be purchased as an integrated suite. Pricing starts at $250,000 per application. www.bluemartini.com

SYBASE ANNOUNCES ENTERPRISE PORTAL 2.0
3/5/01

Sybase, Inc. announced Sybase Enterprise Portal 2.0 (EP), which extends portal functionality to mobile and wireless users, business partners and e-marketplaces. The new portal functionality uses Sybase's wireless technology along with new business-to-business application integration, XML/EDI transformations and globalization. Key components include a J2EE-compliant application server, LDAP directory support, an integrated security framework, concept-based searching and a powerful data server with data synchronization capabilities. Sybase EP supports the Wireless Application Protocol (WAP). Sybase EP includes bi-directional mobile messaging capabilities that enable users to both queue outbound messages and receive messages delivered from the network. These messaging services include store-and-forward messaging queuing; push messaging for communications from the network; and user authentication and encryption. Messages can be used to alert users or to initiate an action, such as data synchronization. XML/EDI transformation enables non-EDI-enabled business partners to be quickly integrated into the enterprise's processes. Enterprise integration adapters allow collaborative data to be directly served into data management systems or applications. Sybase EP's content management features allow portal users to quickly add, categorize and deploy information for end users. The customizable presentation services allow portal users to interact with applications in their preferred manner. Sybase EP also provides advanced features like automatic currency conversion and language translation. www.sybase.com/ep

SEMIO CORPORATION RELEASES INTEGRATION TOOLKIT
3/5/01

Semio Corporation announced the availability of Semio Integration Toolkit. The toolkit is a software development kit and partnership program designed to support the integration of Semio's content categorization technology into corporate portals and customized applications – such as personalized content delivery or communities of interest. By using Semio's toolkit, partners and customers quickly build applications that can organize and manage virtually unlimited amounts of unstructured digital information. The Semio Integration Toolkit offers application interfaces to Semio's Tagger software, which organizes large amounts of corporate data by finding conceptual and practical relationships between any digital document stored on a server. These interfaces enable partners and customers to build solutions with automated cataloging and categorization of unstructured information, offering faster access to the right information in today's complex business environments. With the release of the Integration Toolkit, partners and customers have multiple possible integration points with the Semio categorization solution. Some partners use the XML generated by Semio Tagger as input for publication and syndication processes. The API published with the Integration Toolkit lets portal vendors and others create tightly integrated solutions leveraging Semio's automated categorization capabilities. The Semio Integration Toolkit documents the Semio Integration API and the Semio Bundler API, as

well as the XML and database formats. It includes sample applications, source code, database, and text corpus, as well as detailed documentation. The Semio Integration Toolkit requires Semio Tagger 4.1 and is available now. www.semio.com

PORTAL WAVE ANNOUNCES NEW PRODUCTS
3/5/01

Portal Wave, Inc. announced three new products that allow enterprises to build EAPs that connect multiple internal systems and connect partner applications. Portal Wave XML B2B Server allows information and transaction exchange across enterprises via XML. Portal Wave Visual Development Studio provides a visual development environment for building Wavelets, plug-in software modules that run within the portal. Portal Wave Application Portal Server (APS) 2.0 is an upgrade to the initial version that enables companies to integrate enterprise solutions into a common e-business platform with a single Web interface. XML B2B Server is an XML messaging server that provides guaranteed, secure delivery of business information and transactions over the Internet in the form of XML documents. Delivery is guaranteed via message queuing and XML return receipt. A simple log allows users to monitor the delivery status of documents such as purchase orders, invoices and inventory levels. XML B2B Server offers support for HTTP and HTTPS for secure document delivery and uses the same browser-based EAP interface for managing and monitoring delivery status. It supports industry standards for XML exchange between partners and is compliant with RosettaNet standards. EAPs provide functionality through Wavelets, plug-in software modules that encapsulate business logic and can provide value from displaying syndicated Internet content to coordinating complex B2B functions across multiple enterprise applications. Visual Development Studio is a Java-based product that leverages the latest JavaBean technology and Java Swing classes. Its main feature is the separation of the user interface from business logic. The new XML B2B Server leverages the enhanced EAP functions now available in APS 2.0. The 2.0 upgrade features an improved user interface that uses style sheets. From selecting content to determining how it appears, improved personalization features allow users greater flexibility to customize their own portal. XML B2B Server, Visual Development Studio and APS 2.0 are available now. www.portalwave.com

OASIS RELEASES XML CONFORMANCE TEST SUITE, SECOND EDITION
3/5/01

OASIS, together with NIST, the National Institute of Standards and Technology, announced that the second edition of the popular OASIS XML Conformance Test Suite would be publicly available March 15, 2001. The new OASIS conformance test suite, updated to be in sync with XML Second Edition, includes more than 1,000 new tests. Users and vendors may download the OASIS XML Conformance Test Suite Second Edition from the Consortium's web site, www.oasis-open.org beginning March 15. www.nist.gov, www.oasis-open.org

MICROSOFT DELIVERS XML-BASED PROTOCOL FOR CROSS-PLATFORM ANALYTICS
3/2/01

Microsoft Corp. made available a beta version of the XML for Analysis software development kit and an updated XML for Analysis protocol specification. This is an online analytical processing protocol that enables the transfer of information between analytical databases and client applications, regardless of the computer language used to write the application. Leveraging XML, SOAP and HTTP, XML for Analysis is a new protocol that is designed to standardize the data access interaction between a client application and an analytical data provider (OLAP and data mining). With input from more than 50 vendors, XML for Analysis is a vendor – and platform –

independent extension to Microsoft's OLEDB for OLAP and OLEDB for Data Mining protocols. Developers are now able to provide analytic capabilities to any client on any device or platform using any programming language, such as the Microsoft Visual Basic development system, C++, C# and Java. A beta version of XML for Analysis is available for download at www.microsoft.com/data/xml/XMLAnalysis.htm

OPEN MARKET & CAPUT TO JOINTLY MARKET EJB SOLUTIONS
3/1/01

Open Market, Inc. announced a relationship with Caput. The relationship is intended to enable e-businesses to quickly implement an integrated, solution for content, community and com-merce. Caput's solutions generate traffic and loyalty to web- sites. Open Market's solutions are designed to allow those companies to convert these prospects into customers by allowing them to take maximum advantage of their content as a marketing and sales tool. Content can be personalized to customer segments or individual customers. The application platforms offered by the two companies consist of a set of Enterprise Java Bean (EJB) components. The software is written completely in the Java and XML programming language and the architecture adheres to the Sun Java 2 Enterprise Edition (J2EE) specification. This enables both Caput and Open Market solutions to run on the same application server, offering an environment intended to optimize integration, scalability and fail-over. www.caput.com, www.openmarket.com

PRELIMINARY PROGRAM AVAILABLE!

ecm series — enterprise content management

We are in the process of sifting through all the abstracts proposed and designing the program. We have many more proposals and topics to cover than we can fit, but the list below will give you a good idea of what we are trying to cover in our two and a half day conference. Some of these topics will be sessions with multiple speakers and some will be single presentations. Our website has descriptions of these topics and will have regular updates. **www.ecmseries.com**

- *What is 'Enterprise Content Management' & What Strategies Make Sense?*

- *Migrating from Document Management to Enterprise Content Management*

- *E-catalogs & Content Management*

- *Content Management & Syndication for Enterprise Applications*

- *Wireless Content Management Strategies*

- *Integrating Content Management with Enterprise Data Systems*

- *Content Management & Collaboration*

- *Enterprise Content Management Architectures*

- *Developer Choices*

- *Categorization & Content Taxonomies*

- *Open Source Content Management*

- *Personalization & Content Management*

- *Code & Content Management*

- *Startup Session*

- *XML & Enterprise Content Management*

- *Content Management & Enterprise Portals*

- *Global Content Management*

- *Managing Content for Multi-channel Delivery*

- *Content Management & the Supply Chain*

- *Content Management & E-commerce Platforms*

- *Enterprise Portal Strategies*

- *Repository Choices for Content Management*

- *Search Technologies for Content Management*

- *Content Transformation & Integration*

- *Digital Asset Management & Content Management*

- *Managing promotional content*

- *Managing Content for Financial Applications*

- *European Vendors fight back*

Continued…

- *Single Source Content Management*

- *Choosing a Content Management System*

- *Is Hosted Content Management an Option?*

- *Content Management, Enterprise Portals, & Security*

- *Product Data/Content Management*

- *Implementing a Content Management System*

- *Relevant Standards for Enterprise Content Management*

- *Metadata Strategies & Information Architectures for Content Management*

GILBANE REPORT SUBSCRIBERS RECEIVE A *SPECIAL DISCOUNT* TO THE SINGLESOURCE 2001 CONFERENCE

Organized by SingleSource Associates. This is the 3rd annual conference focused on strategies for content management through single sourcing. Case studies and return on investment strategies will be covered.

The conference is at the Westin San Francisco Airport on April 23-24. For additional information call (303) 232.0210. or see www.singlesource2001.com. Just tell them you are a *full* subscriber. Sorry, this is only available to paid subscribers.

XML & CONTENT MANAGEMENT DAYS

These day-long sessions organized by *Gilbane Report* with *AIIM* and the *GCA* are hosted by Associate Editor Bill Trippe, and will introduce you to XML, provide a basic tutorial, and incorporate the lessons learned from case studies presented by guest speakers who have implemented solutions. What you will learn:

◢ What XML is and how it relates to content management

◢ What implementation strategies have been used and which make sense

◢ How to get started

April 29th at **AIIM in New York City**, and May 22nd at **XML Europe in Berlin**. To register or see more detail on the programs see: www.aiim.org/events/aiim2001/conference.html or www.gca.org/attend/2001_conferences/europe_2001/specialinterest.htm

BACK ISSUES

Issues from 1993 thru 1998 are $15 *if* in print. More recent issues are available in PDF for $20 and *may* be available in print form for $30. See www.gilbane.com for more information.

Volume 9 — 2001

Number 2   **Choosing an Architecture for Wireless Content Delivery,** *Girish Altekar, Regan Coleman*

Number 1   **XHML: What You Should do About it, and When,** *Sebastian Holst, David R. Guenette*

Volume 8 — 2000

Number 10   **XML: The State of the Union** *Bill Trippe, David R. Guenette*

Number 9   **E-books: Technology for Enterprise Content Applications?** *Bill Trippe, David R. Guenette*

Number 8   **What is Content Management?** *Frank Gilbane*

Number 7   **Syndication, Actionable Content and the Supply Chain,** *Bill Trippe, David R. Guenette*

Number 6   **Digital Rights Management: It's Time to Pay Attention,** *David R. Guenette*

Number 5   **E-catalogs: Strategic Issues for Suppliers,** *Frank Gilbane*

Number 4   **Content Management: Application vs. Application Server Solutions,** *Bill Trippe*

Number 3   **XML on the Front End: Connecting People & Processes in B2B E-commerce Environments,** *Mary Laplante*

Number 2   **ASPs, Content, & Code,** *Frank Gilbane*

Number 1   **XML, EDI, Content, & Commerce,** *Bill Trippe*

Volumes 1 thru 7, — 1993 thru 1999

See www.gilbane.com

SUBSCRIPTION FORM

☐ Please start my subscription to the Gilbane Report (10 issues/year). Back issues and site licenses are available. Call for further information. All subscriptions include access to HTML and PDF versions at www.gilbane.com

☐ Print & Electronic (PDF): $179.   **OR**   ☐ Electronic (PDF) only $99.   *(Call for site license prices)*

☐ I am eligible for an affiliate discount* _____ Affiliate organization   _____ Tracking #

☐ My check for $_____ is enclosed   ☐ please bill me
Please charge my credit card   ☐ MasterCard   ☐ Visa   ☐ American Express

Name as on card: _____   Number _____
Signature _____   Expiration date _____

Name_____   Title_____
Company_____   Department_____
Address_____
City_____   State/Province_____Zip/Postal Code_____
Country_____   Tel._____Fax_____   E-mail_____

Checks from outside the U.S. should be made payable in U.S. dollars.
Funds may be transferred directly to our bank, please call for details.
Mail this form to: Bluebill Advisors, Inc. 763 Massachusetts Ave., 2nd Floor, Cambridge, MA 02139, USA.
You can also place your order at www.gilbane.com or by phone (+617.497.9443), or fax (+617.497.5256).

CALENDAR (OF EVENTS WE ARE INVOLVED IN)

XML DevCon Spring 2001, April 8-11, 2000, New York Marriott Marquis, New York City, (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. **www.xmldevcon2001.com**

SingleSource 2001. April 23-24, The Westin San Francisco Airport. (303) 232 0210. Organized by SingleSource Associates. This is the 3rd annual conference focused on strategies for content management through single sourcing. Note that *full subscribers to the Gilbane Report receive a discount* to this conference. www.singlesource2001.com/

XML & Content Management Special Interest Day at *AIIM 2001,* April 29 in New York 2001.
XML & Content Management Special Interest Day at *XML Europe 2001.*). May 22 in Berlin.
The Gilbane Report, AIIM, and the GCA host a "special interest day" on XML and content management. Gilbane Report editor Bill Trippe moderates these very popular seminars. Be sure to see the AIIM and GCA websites for additional information on the full conference and expositions. *The Gilbane Report* is on the program committee (for content management) for the AIIM conference, and is a co-host of XML Europe.
www.aiim.org/events/aiim2001/conference.html, www.gilbane.com/Events.htm,
www.gca.org/attend/2001_conferences/europe_2001/specialinterest.htm