THE GILBANE REPORT™

CONTENT, COMPUTING, AND COMMERCE – TECHNOLOGY & TRENDS

SVG – THE FUTURE OF WEB RENDERING?

HTML has been so successful largely because it is (or was) extremely simple. Like many successful technologies, the initial breakthrough happened when a magical "just enough" threshold was crossed – adoption soared, and now we all work differently. However, HTML had critics right from the start. One set of critics attacked the formatting presentation limitations of HTML, and predicted HTML would soon be replaced by a more graphically oriented format. PDF and Flash are the only serious survivors here, and they both allow for more graphically sophisticated content. A second group of critics decried the small, fixed tag set that prevented development of custom Web applications and the integration with enterprise applications that process more complex business data. XML and derivative standards emerged to meet this need.

Yet, there is still a critical gap between graphically-rich content that is difficult if not impossible to integrate with other enterprise data, and XML data that can be integrated with virtually any enterprise application but usually ends up rendered as graphically-challenged HTML. This month we publish an excerpt from *SVG for Designers: Using Scalable Vector Graphics for Next-Generation Web Sites* , a new book by Bill and Kate Binder, published by McGraw Hill and available (soon) at Amazon. In our article Bill looks at why Scalable Vector Graphics (SVG) has the potential to fill this gap. Whether you think SVG will take over the Web or not, it is difficult not to be intrigued with what SVG can do. As an IT strategist, you need to understand the issues and how SVG might help.

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SVG – THE FUTURE OF WEB RENDERING?

It's safe to report that n-*tier* computing is here to stay. Organizations have fully embraced the concept, and have adopted Java 2 Enterprise Edition (J2EE) application servers and related technologies to begin "webifying" existing systems and bring more business process to a browser interface. Indeed, in a stagnant period for software sales, application servers and related consulting and development have been a bright spot. This reflects the emphasis that businesses are placing on infrastructure, and their commitment to centering their enterprise architecture on Web-based applications and workflow.

With all of this n-tier development has come many new realities, though. We've already mentioned Java and the importance of the application server. Organizations are also working very hard on issues such as security, high availability, and performance. Slowly but surely, they are establishing excellent underpinnings for bringing more and more applications to the Web. These underpinnings will set the stage for wide deployment of Web services—or at least for "services-based" application integration.

Significantly, the one area in n-tier development that has lagged has been the client side. In fact, many enterprise applications include Java clients, and portal framework companies, especially, have emphasized Java client development, but client-side Java has simply not gained wide traction. Lacking a consistent programming environment on the client side, Web developers have fallen back on a lowest common denominator approach. As a result, most interfaces to Web-based applications are some combination of HTML and scripting languages (mainly JavaScript).

The result of this extensive reliance on HTML for client development is applications that do most of their processing on the server side, and provide most of their logic there as well. As these applications have evolved developers have begun to encounter problems with performance and scalability. One potential area for improvement, then, is the client side, and both individual companies and standards organizations have stepped forward with proposed technologies for improving the client-side experience for the user and the developer.

Among the proposed technologies is the World Wide Web Consortium's proposal for Scalable Vector Graphics (SVG) and Macromedia's Flash MX for enhancing the visual experience for the client. It's notable that both SVG and Flash MX bring a lot to mobile devices. MIT-based startup Curl Corporation has an intriguing offering—the "Surge" programming tools and runtime environment—that they position as the "client/web platform." And while Microsoft's .NET initiative has, thus far, been server-focused, there is no doubt Microsoft will turn more attention to the client side, and Bill Gates has recently been signaling exactly this trend.

It is far too early to place bets—in truth, little client development has been done with any of these tools. And while it's not hard to imagine Microsoft besting a startup like Curl, and the question of Flash MX *vs.* SVG is a tantalizing one, the likely winner will be combination of tools. Having said that, we are intrigued with SVG for a number of reasons, starting with its XML foundation and its adoption by the W3C.

UNDERSTANDING SVG: THE SVG STANDARD

One could argue that, since the advancement of HTML, no new fundamental technology has emerged to change how Web pages are rendered. We have moved ahead incrementally with better font and style sheet technology, but these have been changes of degree and not of kind. Most Web pages are still done with HTML tags, supported by scripts and static graphical objects like GIF and JPG tags.

Now Scalable Vector Graphics (SVG) has emerged, with the potential to be the next fundamentally new technology for production and design professionals. SVG-based graphics and Web pages can save time and money, improve quality, and revolutionize the way Web graphics convey information. Moreover, SVG will be able to do this with minimal new costs for software and training, and will result in a better workflow for Web production and for organizations that combine Web and print production.

SVG holds this promise for a few simple reasons. First, vector graphics are a necessary complement to the bitmap graphic formats such as JPG and GIF that now dominate the Web. Vector graphics mean better quality and greater precision for many types of illustrations and artwork, especially technical illustrations and other kinds of artwork created by computer-aided design programs. Second, SVG brings an industry standard approach to creating vector graphics on the Web. Up until now, there have been only proprietary methods for creating vector graphics. Third, and, perhaps most importantly, the SVG standard provides more than vector graphics handling, as it allows for the incorporation of vector graphics, bitmap graphics, text, style sheets, and scripts. Users of SVG cannot only create stand-alone illustrations; they can also create and exercise greater control over the design of entire Web pages. They can also flexibly incorporate other text, other graphics, data, and scripts. And finally, because SVG files are text files, they can be easily generated and manipulated, allowing for applications like data-driven graphics and personalization.

SVG gives the graphic designer, using virtually the current standard industry toolbox, the power to create live Web images. Unlike bitmap images, SVG images can dynamically update as the designer, the Web developer, or the end user enter or change data and otherwise interact with the Web image. SVG files can be scripted to automatically take this information and modify the existing graphic or regenerate the graphic. Importantly, SVG often provides this flexibility using less disk space and memory, providing faster upload and download times, and putting more creative control into the graphic designer's hands than current static bitmap technology.

A HYPOTHETICAL SVG APPLICATION

To see how SVG might revolutionize graphics, commerce, and information flow on the Web, let's take a look at a common Web transaction—buying tickets for an event. With bitmap technology, a fan generally sees a map of the stadium or arena and then has to choose via the static, unchanging map on the screen. SVG, on the other hand, could be used to create an image of exactly the seats the fan is buying, in, say, a seating chart of the stadium; SVG could also be used to create an image that simulates the view that the fan will have of the event.

In this scenario, we have a baseball fan whose father is visiting from out of town for two weeks in August. The fan wants to take his dad to a game. The dad, being elderly, needs easy access to the aisle and to rest rooms. The fan would prefer a day game. The fan isn't a millionaire, so he would need to purchase the lower- and moderate-priced seats. He's only been to this ballpark a few times himself, so he'd like to see how fans rate the seats and what type of view he and his dad would have from each seat. Obviously, he wants two seats together.

With standard bitmap files, it would be impossible—or at least extremely difficult—to create enough graphics to meet this fan's needs to visualize so many details. The Web site would have to anticipate each question this fan planned to ask and then create a graphic to help answer the question before the fan even logged on. For this one fan alone, the Web site would need to have at the ready potentially hundreds of bitmap files to even begin to answer his questions and show the views and seating plans he is interested in.

Not so with SVG. A live text file on the Web site, the SVG can dynamically update an infinite number of times, depending on the data fed into it. Just as the HTML itself is text and can be generated on the fly and intermingled with script and code, SVG is also textual. SVG is, in fact, based on XML. Because it is XML-based, SVG can be liberally mixed with other formats such as XHTML and scripting languages such as JavaScript. Entire Web pages could be rendered with SVG, or individual components such as graphics.

Back to our baseball fan. The basic SVG graphic is a map of the stadium, similar to any map of any stadium through which fans buy tickets. But, this map is different. The map changes as the data behind the map changes, depending on the information the fan wants to see.

Moving from the overall map of the stadium, the SVG-based graphic first changes by showing small "thumbnail" drawings of the seats available for the two weeks the fan's dad is visiting (the first two weeks in August).

Two weeks is a long time, so the fan asks what teams will be playing during that period, and then selects a set of games for the Texas Rangers, Aug. 10–14. The SVG document then changes again, showing only thumbnails for seats available for those dates. The fan then types in other needs: proximity to a men's room, access to the aisle. The SVG document changes again, the thumbnails showing seats available that meet the fan's criteria. The fan specifically asks for a day game. The graphic then shows seats available for two-day games, Aug. 11 and 12. The graphic displays seats for those two days. He decides to go with upper box seats and the map morphs again, showing only those seats that meet all his criteria. The fan then settles on several options, clicking on each of several pairs of seats; with each click, the graphic zooms in on the specific seats and automatically displays a typical view of the field from each seat and an overall fan rating of the seat. The fan then selects his seats, pays, and exits.

Finally, the fan can even print out a view of the seats that he can take with him to the game so he can find the seats more easily.

Meanwhile, the SVG-enabled Web site remains ready for the next fan and the next set of parameters. This fan only wants Sunday games and to sit in the bleachers behind the home bullpen…

Comparing the SVG Approach with the Traditional Web-Based Approach

Compare the SVG ticket-buying experience with options available on a Web site with conventional graphics and the advantages SVG offers become even more obvious.

Some Web sites don't even offer a floor plan for the arena or stadium because the downloads take so long—remember, SVG uses far less memory than do bitmap graphics so downloads are much faster and easier.

If the site does offer a floor plan, it is static—a mere picture of the seating. It never changes. Fans can't zoom down to a pair of seats and get a view of the field from those seats. They can't get pop-up graphics that give more information about the stadium or the specific seats. Instead, the fan must move on to another page to receive additional information. Fans don't receive real-time, up-to-date information regarding the availability of seats as other fans are buying their tickets. They can't print out the stadium or arena map, if it exists, because the bitmap graphic is prohibitively large for downloading (100 to 150KB), can't be effectively zoomed, and likely won't reproduce accurately on their printer.

SVG, on the other hand, provides all these features and more. For the end user, SVG-based graphics are

> *Higher graphic quality*, for the screen as well as for printing
>
> *Zoomable* (using Adobe SVG Viewer, if you zoom in on, say, the seats you've selected and the nearest entrance, you can print out this exact view to take with you to the venue)
>
> *Searchable*, allowing you to quickly find seat JJ-398 because the text label is actually text and not rendered pixels; copy and paste any pertinent info such as directions, phone numbers, etc. that may be embedded in the layout
>
> *More informative* (dynamically updated content shows information that is up-to-the-minute current—that is, seating availability)
>
> *Interactive* (ToolTips on mouseover, drill-down for more detailed info right in the graphic, as opposed to having to read info from another window or page)

Just as importantly to the graphic designer and developer, SVG allows for richer, more detailed graphics on the Web page even as it makes the site more accessible to the user.

SVG graphics are overall much faster because the download is smaller (vectors are more efficient than rasters)—zoomed in views are *not* new downloads, but simple transformations that take place on the client side (as well as additional data that may be hidden on first load, but is revealed on interaction or animation).

SVG graphics can be richer looking, as there are a great number of filter effects that can be applied (filter effects create raster-style blurred drop shadows or 3-D bevels, custom font faces that allow text to remain as text for accessibility).

SVG graphics are manageable as an asset much like HTML. A designer can style a graphic using the same Cascading Style Sheet (CSS) as for the rest of the site. For example, background color for the graphic may be a color specified in the style sheet for the entire site. Say for a Giants game, the primary colors should be orange and black. The SVG image can dynamically be made orange and black by a simple change to the style sheet along with other elements in the HTML—a simple change cascades through the SVG along with the HTML.

These SVG assets can be reused for multiple applications (as suggested above, the graphic can be customized for different events; also use the same graphic for printing brochures, handouts, tickets, or other devices such as handheld browsers).

SVG's Potential Impact

The above example shows only one way in which SVG could help advance commerce on the Internet. Imagine graphics that change at the user's whim. The implications for everything from financial services to catalog sales are tremendous. SVG-based graphics would give consumers more choices and more confidence in those choices because SVG gives the consumer control and more ability to visualize the transaction they are making. And e-commerce is only one potential application (more are discussed at the end of this article). The potential applications are endless.

In September of 2001, the World Wide Web Consortium (W3C) published the W3C *Recommendation* for SVG 1.0, paving the way for software developers to begin, in earnest, developing products that support SVG. Adobe, Sun, Corel, and IBM, among others, are all over it. Adobe, significantly, has already built SVG capabilities into major products like Illustrator and GoLive, and they claim to have distributed over 35 million copies of their SVG Viewer.

The very presence of a format for vector graphics on the Web is significant. For all its promise as a graphical user interface and publishing medium, the Web has relied too heavily on bitmap formats like GIF and JPG that tend to be static and difficult to reuse, and they often need to be optimized for the particular screen resolution of the displaying device. As a result, most Web sites are laden with single-use graphic files, and there is little use of graphics to personalize the presentation of material. Moreover, with the growth of non-PC devices such as PDAs and cell phones, the limitations of heavy bitmaps become even more pronounced.

Advantages of SVG

General-purpose and specialized illustration programs have used vector graphics for years. In that sense, there's nothing new about the vector graphics aspect of SVG. Adobe Illustrator, among other programs, is based on vector graphics, as are more specialized programs like AutoCAD. The revolution comes when this technology meets the Web. Suddenly a whole world of improved, nearly three-dimensional documents opens up—live documents and graphics that designers

can change and manipulate without having to regenerate a whole new set of graphics, graphics that morph at the whim of consumer demand, graphics that download in significantly less time than current bitmap graphics.

This combination of speed, versatility, and artistic control gives the graphic designer a dramatically more powerful, perhaps even a revolutionary creative tool. Instead of static Web images, drawn and created one at time, SVG gives the graphic designer the power to create and change multiple Web images simply by entering new data.

Advantages of Quality and Performance

Not only does SVG give the graphic designer a faster, vastly more powerful Web display, it also provides higher-quality graphics that will print more clearly and maintain a consistent resolution no matter the screen quality upon which they're viewed, no matter the size, no matter the dpi. That's the scalable part of scalable vector graphics. The image conforms to the new scale regardless of media, size, or screen quality.

Moreover, in the case of SVG graphics, less typically means more. While the bitmap formats GIF and JPG have excellent compression, the compression varies depending on the kind of illustration. Consider a very simple black and white illustration of a ruled line. This would actually compress very well in a GIF image. In this particular case, the GIF is going to be about 1/7th the size of the SVG image, because in this case the GIF uses compression to say, "make a black pixel, then make 999 more just like it." SVG: 811 bytes, GIF: 51 bytes. Bitmap compression works best when you have a lot of adjacent pixels of the same color, as in this example. The size advantage comes in with more complex documents, particularly ones that use built-in SVG filters and primitives, because then you can say "make a circle with a blur" instead of having to spell out every pixel in a different shade of gray. In the case of the image shown below, which shows a circle with a blur applied to its stroke, the SVG image is 1,280 bytes, and the GIF is 6,489 bytes—a significant size advantage for SVG in this instance.
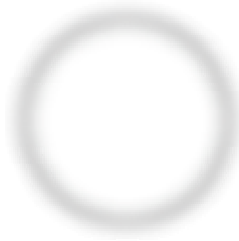
Figure 1. An example of a simple graphic where SVG is dramatically more efficient than GIF

SVG images then are sometimes smaller and sometimes larger than corresponding bitmap images, so SVG won't give an advantage every time. What this means, though, is that designers would have the option of creating a complex image in one format or another, and then actually using the one that offers the best compression. It also means that some images that have traditionally been very large and hard to download can now be dramatically smaller and thus much more useful and easier to deploy.

SVG also provides several other practical benefits to the graphic designer:

> *Use of familiar graphic-design software*, most notably Adobe Illustrator and Corel Draw, to manipulate and create these files. While there are special tools for creating SVG images, many people will want to use the tool that they already use for image preparation. Because SVG is a standard, support for it has already been built into several major products.

> *Better work flow and less labor* for graphic designers. An illustration created for print today needs to be separately saved in another format, often with different characteristics, for deployment on the Web. If the image changes, the entire workflow typically needs to be repeated, leading to tedious, expensive, time-consuming rework.

Also, because SVG images can be managed as assets, and because SVG supports programming models such as the Document Object Model (DOM), designers can work in parallel with Web site developers. While the developers are creating and updating the relevant code and data, the designer can be creating and updating the illustrations and animations. This is an improvement over situations where the work must be done in serial fashion—where first the designer works, then the developer, and so on.

SVG and Data-Driven Graphics

The fact SVG images can be data-driven—that is, the software creates images directly from the data provided—gives SVG graphics one of its biggest practical advantages over bitmap technology. While there are tools for creating bitmaps on the fly, they are typically limited to single-purpose tools, such as a tool we've used for creating math symbols directly from MathML-encoded data.

SVG files are XML-encoded text files, and, as such, human readable and human malleable. Just as it is easy for a savvy production person to change, for example, the size and style of text in an HTML file, it is similarly easy to make that kind of change in an SVG file. As a result, making SVG files "data driven" is really a matter of generating or regenerating the appropriate text string. To give you an idea of how SVG encapsulates text and graphics rendering in a text string, see the following:

```
<line x1="64" y1="189" x2="156" y2="189"
style="fill:none;stroke:rgb(0,0,0);stroke-width:2"/>
```

This line of SVG instructs the software to draw a line, beginning at x,y position 64,189 and ending at x,y position 156,189. It goes on to describe the width of the line, whether it is filled or not, and in what color it should be rendered. If this string existed in a text file, it would be straightforward to edit; if a program were generating it, it would be straightforward to generate a slightly different string; and so on.

With the data encoded in SVG, any software that can interpret the SVG will generate the graphic. And once that the program generates the image, it can then be easily regenerated if the underlying data changes. The SVG-compliant software will automatically alter it to match new information. This feature alone will save graphic designers and the graphics department untold hours of labor. No

more redrawing an entire graphic or set of graphics when a detail changes. Just plug in the new numbers and a new graphic displaying the new information can be generated.

Data-driven graphics will be especially useful for Web sites that track industries with rapidly changing statistics. Financial sites come to mind. Investors demand a wide range of financial information—interest rate changes from the Fed, stock prices, unemployment data, and a myriad of other always-changing statistics. Investors also demand varying snapshots of such data—differing frequencies, levels of detail, and so forth. Providing a graphical view of such data would be a significant advantage for a financial Web site. SVG opens up the possibilities for what kinds of graphics can be employed on a site, and how dynamically and flexibly they can be modified and displayed.

SVG and Interactive Graphics
One step beyond creating a data-driven graphic is to make a graphic interactive for the user. With a little bit of scripting, for example, a data-driven chart can easily be made interactive. For example, the seating chart described above is an excellent example of interactivity. The base SVG file, as we described it, is the stadium seating chart. By adding certain information—the dates for desired games—the base drawing can be regenerated, and then regenerated again when additional information is added (the price the fan is willing to pay, the need for proximity to the aisle, and so forth).

Adobe's site (www.adobe.com/svg) also uses SVG for interactivity; one simple but effective graphic allows you to click on and view the name of a chemical to see its three-dimensional structure, and another allows you to see how an Airbus looks with various exterior lights turned on and off.

SVG and Personalized Graphics
If interactive graphics are one step beyond data-driven graphics, personalized graphics are perhaps one step beyond interactive, or perhaps are a kind of interactive graphic. They imply some amount of interactivity in the same way personalized Web text does. With a personalized Web site such as www.amazon.com or my.yahoo.com, you have at least "opted in" and agreed to be profiled at least to the extent that your browser passes on some information (through a cookie, for example). Or, you may have more explicitly provided some information from past orders, or by filling out a profile, or perhaps even by storing some data there. Either way, the Web site is somehow able to identify you, and customize, or personalize, the experience for you accordingly.

Typically, such personalization is textual. The site www.amazon.com, for example, greets the return customer with "Hello (your name here)," and then proceeds to list "Your recommendations," "Your book store," and so forth. As shown below, some of these personalized lists include graphics—a screen shot of a book cover, for example—but the graphic presentation itself is static from user to user. What if, instead, certain personalized graphics could be generated automatically? For example, as authors, we might like to see a customized bar chart showing all our books sold, by day, with certain colors displayed for sales exceeding certain thresholds. Or a buyer with an outstanding gift certificate might want to see a running balance, displayed as a graphic of a dollar bill with the precise balance showing.

Figure 2. Personalization such as with Amazon.com can be useful, but it is limited to the textual elements only.

"Personalization" does not have to be just textual. It is every way content can target a specific individual or audience by

> *Demographic* (That is, the customer who bought the box seats at the ball game gets the high-end local Mercedes ad included on their SVG ticket, while the customer who bought the cheap seats gets the $1 off coupon for a beer.)

> *Culture* (That is, the color red may be in poor taste in one culture, so it is replaced by something more suitable.)

> *Language* (That is, SVG's "systemLanguage" attribute can be used to detect the user's language and display text content in the correct language.)

> *Accessibility* (That is, properly tagged content is readable by screen readers so that the visually impaired get as much info and interactivity from the graphic as anyone else. Note that not all screen readers can read SVG content—this is a plug-in to browser issue.)

POTENTIAL APPLICATIONS

Beyond the e-commerce potential discussed in the sports event scenario earlier, SVG-based graphics provide great possibilities for scientific and medical illustration, engineering documents, architectural plans—virtually any profession or academic field in which data-driven graphics help people understand information. Professions using heavy technical documentation have been slow to use the

Web as publishing medium, precisely because browsers can't handle large, complex illustrations that are best rendered as vector graphics. SVG-based graphics typically require less disk space and memory, and are thus are more easily Web navigable.

Technical illustration is a good example of the kind of application that can take good advantage of SVG. An automotive manufacturer we have worked with does all of their parts illustrations in a sophisticated CAD-CAM system. When they are ready to publish the parts catalog in print and on the Web, they convert the CAD drawings to TIFF for the print catalog and to GIF for the online catalog. If an illustration changes, they need to go all the way back to the CAD system and regenerate the illustration in both formats. The GIF files are less than satisfactory for the Web, however, as they are often too big and unwieldy. The lower-resolution display available through the browser, and the more limited screen size, make it very difficult to satisfactorily view a large-format, detailed illustration.

FINAL THOUGHTS

Ultimately, SVG will prove itself in how it is used in real-world applications. The compelling thing is that SVG is an entirely open, entirely textual format. It can be easily generated from a database for applications such as dynamic page serving. It can also be modified on the fly for such applications as personalization.

If you visit the Adobe site, (or any other SVG-powered site) you'll confront one of the few things standing in SVG's way—it requires you to download a browser plug-in. We expect this will go away in some future version of Internet Explorer, which should add SVG rendering. In the meantime, this lack of browser support will create some hesitancy in the market. However, Adobe does have a track record of creating a product that people are willing to separately download and use; last we checked, Acrobat had reached more than 110 million downloads.

The other practical challenge is a relative lack of tools for creating SVG, but this is changing quickly. As mentioned above, though, Adobe is building SVG support into their products, as is Corel. Perhaps more significantly, database vendors and content management companies are adding SVG support, as they understand well how central SVG is likely to become to Web development and publishing.

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INDUSTRY NEWS

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

OCTAVE PARTNERS WITH SUREBRIDGE
7/30/2002

Octave Software, Inc. announced a partnership with Surebridge, Inc. to deliver content man-
agement capabilities to high growth companies. Under the partnership, Surebridge will provide
rapid application deployment, secure hosting, application management, and technical support
for WebOctave, Octave Software's product. Surebridge will also become a certified Value-Added
Reseller of WebOctave. www.surebridge.com, www.octavesoftware.com

SOFTWARE AG & ALTOVA ANNOUNCE AVAILABILITY OF XML SPY & TAMINO BUNDLE
7/30/2002

Software AG and Altova, Inc. announced the availability of the XML Spy 4 Suite and Tamino in-
tegrated product bundle. This offering includes Altova's XML Spy 4 Suite and Software AG's
Tamino XML Server (limited version). The suite supports visual design and editing of XML
documents, XML schema, and XSLT stylesheets. The XML Spy 4 Suite is comprised of the XML
Spy 4 Integrated Development Environment (IDE), the XML Spy 4 XSLT Designer and the XML
Spy 4 Document Editor. The XML Spy 4 Suite and Tamino XML Server (limited version) product
bundle runs on Windows. The version of Tamino Server which is included in the bundle, is for
development purposes only (however can be upgraded at any time) and is limited by database
capacity, which can range from 50MB to 1000MB, depending on the number of XML Spy 4
Suite installed user licenses purchased. Bundle pricing begins at $598 US for a single license.
The Software AG Tamino XML Server and XML Spy 4 Suite product bundle is available immedi-
ately from the XML Spy online shop. www.xmlspy.com/order, www.altova.com,
www.softwareagusa.com

ANCEPT & RIGHTSLINE TEAM TO INTEGRATE DIGITAL ASSET & RIGHTS MANAGEMENT WITH IBM CONTENT MANAGER
7/30/2002

Ancept, Inc. and RightsLine, Inc. announced a strategic alliance. By integrating Ancept Media
Server and RightsLine Rights Licensing Server, and presenting this combined technology on top
of IBM Content Manager infrastructure technology, companies can manage, sell and deliver in-
tellectual property in a secure, reliable and scalable manner. The combined solution offers a
single platform for managing content throughout its life cycle of creation, management and
distribution, while ensuring proper rights and licensing procedures. www.Ancept.com,
www.RightsLine.com, www-3.ibm.com/software/data/cm/

THUNDERSTONE ANNOUNCES JAVASCRIPT SEARCH CAPABILITY
7/30/2002

Thunderstone Software announced the ability to index JavaScript hyperlinks and JavaScript dynamic content. The new capability is bundled with Thunderstone's Texis search software and is available immediately. Sites have grown increasingly dependent on JavaScript-enabled browsers. But since most search engines cannot "see" JavaScript links, search-engine users are missing valuable content -- often without knowing it. Texis also provides a broad range of other data discovery and indexing techniques. That includes indexing 'deep' information such as database content and newswire feeds, or even results from other search engines, all of which may be continually changing. Thunderstone is offering a free trial of the JavaScript link crawler through Oct. 30. The feature is included with Thunderstone's Webinator web-site indexing product. Anyone who administers a web site may download a full working copy via the link on Thunderstone's home page, at www.thunderstone.com

DOCUMENTUM ANNOUNCES COLLABORATION EDITION
7/30/2002

Documentum announced the Documentum Collaboration Edition, which includes two new product offerings, Documentum Team Center and Documentum Collaboration Services. The Collaboration Edition also includes Documentum's Content Exchange Services, which include aggregation, distribution and cross-enterprise workflow services, to enable collaboration across businesses. Through Documentum's integration of collaboration and content management technologies, users can initiate collaborative activities at any point during the content management lifecycle or add powerful content management capabilities to their collaborative initiatives. Project teams can work together in a common project area, jointly creating deliverables, addressing issues and managing schedules and resources. The deliverables, team output and related collaborative content are captured and securely stored, and can be later referenced and integrated with other enterprise content and processes. Documentum will embed collaborative features into the Documentum platform to make them available as Collaboration Services. Collaborative Services is expected to ship early next year. www.documentum.com

SOFTWARE AG INTEGRATES BASIS LANGUAGE ANALYZERS
7/30/2002

Basis Technology and Software AG announced that Basis Technology's Rosette Language Analyzers for Japanese, Chinese and Korean have been integrated into Software AG's Tamino XML server to give Tamino customers full-text search capabilities for Asian languages. Basis Technology's Rosette Language Analyzers are portable, high-performance linguistic engines for segmenting and normalizing Japanese, Chinese and Korean text. The products rely on comprehensive dictionaries and linguistic algorithms, and are for applications that require searching and analysis of large volumes of text. www.softwareagusa.com, www.basistech.com

MOMENTUM ANNOUNCES MOMENTUM ENTERPRISE & MOMENTUM REALTIME
7/29/2002

Momentum Solutions announced the availability of Momentum Enterprise and Momentum RealTime. Momentum Enterprise extracts answers and insights from enterprise content, no matter what format or location, and delivers them to users in the form they prefer within fractions of a second. Momentum Enterprise allows companies to manage content across disparate

systems and from separate sources and repositories without templates, tagging tools and work-flows, or data replication, synchronization or transformation. The solution utilizes indexing and retrieval engines that work in real time on to distribute unlimited amounts of information across multiple organizations and locations. Momentum RealTime, a component of Momentum Enterprise, uses personalized filtering technology to enable real time access to data categories specified by the user. Once a user specifies search criteria, the solution continuously monitors information feeds and provides that user with instant alerts, regardless of the total number of users and the amount of information filtered. www.momentum-solutions.com

ATOMZ ANNOUNCES WEBDAV SUPPORT FOR ATOMZ PUBLISH
7/24/2002

Atomz announced that Atomz Publish supports WebDAV. WebDAV brings visual editing to Web developers and designers by allowing seamless integration between many of the popular HTML editors and Atomz Publish. Support for WebDAV enhances Atomz Publish's functionality by making the Web content management system a shared network file system, as well as providing a protocol for manipulating and staging content within the user's favorite HTML editor. Major features include content and template editing, WYSIWYG editing and previewing of changes, file locking and unlocking, unlimited versioning, and a single content repository that is shared between Atomz Publish and the client application. The Atomz Publish file repository can be mounted as a remote file folder, which enables users to access, copy, and delete files using common desktop user interfaces. Then, these files can be managed by workflow processes within Atomz Publish. www.atomz.com

VENETICA & BEA IN AGREEMENT
7/23/2002

Venetica announced an agreement with BEA Systems, Inc. making Venetica's Content Provider for BEA WebLogic Portal generally available to all BEA WebLogic Portal customers. The Content Provider for BEA WebLogic Portal includes a set of portlets that are designed to provide document sharing and collaboration as well as content integration functionality for accessing content stored on a Windows NTFS File Server. Companies can have the ability to upgrade to the Extended Edition, which includes the full VeniceBridge product, enabling integration of existing content management systems, additional network file systems, and content stored in databases. Venetica's Content Provider for BEA WebLogic Portal will be available for download from the BEA Portal Solution Center on www.bea.com, www.venetica.com/bea

INTERWOVEN ANNOUNCES TEAMPORTAL FOR MYSAP ENTERPRISE PORTALS
7/23/2002

Interwoven, Inc. announced the general availability of Interwoven TeamPortal for mySAP Enterprise Portals, offering a rapid integration of content management features into a single portal interface. The integrated solution is the result of joint development efforts between SAP and Interwoven and is available immediately from Interwoven. Interwoven is also integrated with mySAP Enterprise Portals using Interwoven Content Services, a Web services layer. Developed on top of Interwoven Content Services, TeamPortal software for mySAP Enterprise Portals provides reuse of content and content contribution across all initiatives while enforcing corporate approval, audit processes and best practices throughout the enterprise. www.interwoven.com

MICROSOFT ANNOUNCES INTEGRATION OF GROOVE WORKSPACE & SHAREPOINT TEAM SERVICES
7/22/2002

Microsoft Corp. announced that Groove Networks Inc. is working with Microsoft to integrate Groove Workspace, with SharePoint Team Services from Microsoft, to provide customers with a team Web site solution that supports online and offline use and automatic synchronization, and works securely across company firewalls. Groove Networks will deliver a kit that integrates SharePoint Team Services with Groove Workspace, by fall 2002. The combined SharePoint Team Services and Groove Workspace solution will offer customers collaboration tools that enable offline access to team content; automatic synchronization; and secure, real-time collaboration across network boundaries. The SharePoint Team Services/Groove Workspace integration kit will be available to customers via Groove Networks distribution channels. www.groove.net, www.microsoft.com

DIVINE ANNOUNCES AVAILABILITY OF SINGLEPOINT SEARCH
7/22/2002

divine, inc. announced the availability of divine SinglePoint Search, an engine for accessing enterprise content and Web search. The browser-based application features automatic classification and multi-factor relevance ranking. divine SinglePoint Search is a search tool for enterprise users that enables fast and accurate information retrieval of content from both internal and external sources. SinglePoint applies a robust taxonomy and multi-factor relevance ranking to integrated searches of internal and external databases. It also addresses a broad range of information and options to automatically adapt to the data type and user's query style, and to provide Custom Search Folders that allow easy navigation of search results. divine SinglePoint Search is based on the NorthernLight technology. www.divine.com

FAST ANNOUNCES ALLTHEWEB ALCHEMIST
7/17/2002

Fast Search & Transfer (FAST) announced that the presentation of search results from AlltheWeb.com can be completely customized with the AlltheWeb Alchemist tool. AlltheWeb now allows technically-minded users to create a customized look and feel for web, multimedia, news, and categorized search results from AlltheWeb via user-defined cascading style sheets (CSS). AlltheWeb Alchemist displays web search results in basic HTML code. Searchers can view these results in this basic format, or customize the results view via their own pre-defined CSS file, allowing the user to control virtually all aspects of result presentation for the various search catalogs and other elements on the page. Users can share their design by sending a link to the style-sheets so that their friends may have the same search experience. As this is a beta technology, no formal support from FAST is provided and FAST is not responsible for any style sheets created by third parties. www.alltheweb.com/alchemist

INKTOMI TO ACQUIRE QUIVER
7/17/2002

Inktomi Corp. announced that it has signed a definitive agreement to acquire Quiver, Inc. The addition of Quiver's portfolio of categorization and taxonomy software will further strengthen Inktomi's enterprise information retrieval solutions. The total purchase price of this transaction will be approximately $12 million in a combination of common stock and cash. With the addition of Quiver, Inktomi can deliver information management solutions that provide both search

capabilities and the ability to accurately arrange information into taxonomies.
www.quiver.com, www.inktomi.com

INGENIUX RELEASES CMS 3.0
7/17/2002

Ingeniux Corporation announced the release of Ingeniux Content Management System (CMS) 3.0. The Ingeniux CMS empowers front line staff to create, manage and publish business-critical Web sites. Ingeniux CMS 3.0 offers a simplified user interface specifically designed to enable non-technical content contributors to quickly and easily create and deploy content. Content publishing is now a one-button operation. An adaptable user interface based on a user's profile allows site administrators to completely define the working environment for content contributors. Ingeniux CMS 3.0 is available now. www.ingeniux.com

STRATIFY ANNOUNCES INTEGRATION WITH BEA & PLUMTREE PORTALS
7/16/2002

Stratify, Inc. announced the availability of the first in a suite of integration adapters that brings taxonomy and categorization capabilities to portal environments. The Stratify Portal Adapter for BEA and the Stratify Portal Adapter for Plumtree utilize the Stratify Discovery System's Web services APIs to provide direct access to enterprisewide taxonomies that are automatically generated and managed by the Discovery System. The Stratify Portal Adapter suite is based on a set of Web services (SOAP, WSDL) and Java APIs. The Stratify Portal Adapter suite can communicate with other BEA Portlets and Plumtree Gadgets, classify designated documents or selected information in real-time, and provide users related topics and associated documents. Similarly, the Stratify Portal Adapters can provide real-time document classification, content management or publishing workflow applications within the portal. www.stratify.com

VIGNETTE UPDATES V6 INTEGRATION ADAPTERS
7/15/2002

Vignette Corp. announced new versions of its enterprise content adapters to integrate enterprise content from PeopleSoft 8 and Siebel 7 applications into Vignette content management solutions. Integrations with Vignette content adapters are created in a graphical design environment. The intelligent adapters automatically discover and expose object models and processes to developers in real time and enable the two-way exchange of content contained in application repositories. The new enterprise adapters include support for Solaris, Windows, AIX and HP-UX. In addition, the new adapters expand integration with EAI tools and frameworks such as MQSeries, J2EE, XML schemas and Web services. More than 50 content adapters are available for a wide variety of content sources, including desktop authoring tools, XML, enterprise applications such SAP R/3 and J.D. Edwards, content repositories, HTTP, FTP, EDI and RosettaNet. www.vignette.com

INNODATA PARTNERS WITH ONTOPIA
7/15/2002

Innodata Corporation announced a new partnership alliance with Ontopia, providers of Ontopia Knowledge Suite, a software solution based on Topic Maps. Under the terms of this alliance, Innodata's Systems and Training Division, ISOGEN International, will become a certified integrator of the Ontopia Knowledge Suite for customers based in North America and Europe.
www.ontopia.net, www.innodata.com, www.isogen.com

EQUILIBRIUM INTEGRATED WITH SHAREPOINT
7/12/2002

Equilibrium announced that MediaRich Image Server integrates with Microsoft SharePoint Portal Server to create a digital asset management (DAM) solution. Equilibrium MediaRich is server-based imaging software that automates the production and deployment of visual content to the Web, print and smart devices. By integrating the open architecture of MediaRich Image Server with Microsoft SharePoint, companies are able to maintain revision control for a single high-quality image, create derivatives on-demand, and deliver consistent brand assets across multiple channels. MediaRich extends SharePoint's search capabilities with previews and zooms, establishes approval workflows to streamline production and delivery, and allows access and modification to images in a self-service portal. www.equilibrium.com

ORACLE ANNOUNCES COLLABORATION SUITE
7/10/2002

Oracle debuted the Oracle Collaboration Suite, which is built upon Oracle's software infrastructure. The Suite will include calendar, conference capabilities, email, files, voicemail and work-flow - centralized and protected in a database with universal access through Microsoft Outlook, any web browser, voice, wireless devices and fax. Oracle is also introducing additional capabilities including integrated voice access and voicemail as well as Ultra Search capabilities, which gives users the ability to search in one place for any document, email, voicemail or other communication using dates, words or phrases. The Oracle Collaboration Suite will include the clustering and high availability technology from the Oracle9i Database with Real Application Clusters and Oracle9i Application Server. Oracle Collaboration Suite will offer embedded Oracle database technology to store files, messages and user information, and embedded technology from Oracle's application server to provide a Web server, directory services, and single sign-on capabilities. The introductory price for a perpetual license of Oracle Collaboration Suite is $60 per named user, including voice support and regardless of the number of devices an individual uses to access information. Oracle will also offer Oracle Collaboration Suite as an annual subscription service at $15 per named user and as an outsourced service for an additional $10 per month per named user. www.oracle.com

DIVINE ANNOUNCES NEW PORTAL CONTENT MANAGEMENT OFFERING
7/10/2002

divine, inc. announced divine Content Server for Portals, an offering for deploying content management capabilities in enterprise portal initiatives. Customers can expand their use of divine Content Server by adding additional CPUs, with no migration or software upgrade required to start using the capabilities of Content Server across new initiatives. The divine Content Server for Portals special offering provides a complete portal content management solution for a bundled price of $25,000 per CPU. The bundle includes the divine Content Server platform for dynamic delivery of content, the Content Server Direct application for content contribution, workflow and revision tracking, and sample portlets for portal platforms such as IBM, BEA, Sun, Plumtree, Epicentric and SAP. www.divine.com

STELLENT RELEASES STELLENT CONNECTION SERVER 6.1
7/9/2002

Stellent, Inc. announced the release of Stellent Connection Server 6.1. Stellent Connection Server provides content integration and distribution capabilities that enable Stellent's customers to aggregate content from multiple repositories, manage it in the Stellent environment and dis-

tribute it to internal and external individuals, Web sites and applications. New features in Connection Server 6.1 include: J2EE compliance, BEA WebLogic certification, support for LDAP, and connectors providing tight integration with the Stellent Content Server. Stellent Connection Server is available in two versions -- a stand-alone Java application and a J2EE version for operation within an application server. Version 6.1 is currently shipping and has a starting price of $60,000 USD (for two CPUs). www.stellent.com/connectionserver

XYENTERPRISE & COREL PARTNER
7/9/2002

XyEnterprise and Corel Corporation announced an ongoing partnership to deliver an integrated XML content creation and high-volume publishing solution for enterprise customers. This integrated solution enables customers to use Corel XMetaL for XML content creation and leverage the high-volume "assemble and publish" capabilities of XyEnterprise XML Professional Publisher (XPP). The Corel XMetaL interface simplifies the XML creation process by providing an environment similar to a standard word processor. Through the integration, XML content is sent directly to the XPP high-speed composition engine to produce high-quality postscript and PDF output. www.corel.com, www.XyEnterprise.com

COREL INTRODUCES VENTURA 10
7/9/2002

Corel Corporation announced the upcoming availability of Corel Ventura 10. Corel Ventura 10 provides tools designed specifically for the creation and publishing of highly-formatted and visually-rich business documents. With the addition of a number of new features including XML import, Corel Ventura 10 enables enterprise customers to re-use all forms of content. When used in conjunction with an XML editor such as Corel XMetaL, Corel Ventura 10 can be used for combining and transforming an organization's information, data and graphics into manageable, structured business documents. Other new features include Table Tags, Publish to PDF, Integrated Preflight Engine, and Enhanced Graphics Capabilities. Corel Ventura 10 will be available in September 2002 at the suggested retail price of US$699. Registered customers of Corel Ventura 7 or 8 may purchase Corel Ventura 10 at the special upgrade price of US$249. www.corel.com

MOHOMINE ANNOUNCES AVAILABILITY OF MOHOCLASSIFIER V2.3
7/9/2002

Mohomine Inc. announced the availability of mohoClassifier v2.3 (mC). The software is targeted for use in intelligence community applications. mC reviews text information in emails, file systems, intranets and extranets, including the Internet, and provides automated document classification and routing based on recognized patterns in the document as a whole. It reports on user-definable properties such as topic, country source, subject, and tone/urgency of the author, among others. The classifier can make fine-grained distinctions between categories, and can ascertain both text and numbers. Designed from its inception to be embedded in large-scale enterprise and intelligence community applications, mohoClassifier v2.3, is a server-based modular solution that is integrated into other applications. The software can be embedded in applications for portals, content management systems, business process management and security as well as Web-enabled applications and Web services environments. An evaluation version for enterprises of the mohoClassifier v2.3 may be requested. www.mohomine.com

MICROSOFT ANNOUNCES AVAILABILITY OF CONTENT MANAGEMENT SERVER 2002 BETA
7/9/2002

Microsoft Corp. announced the availability of the beta version of Microsoft Content Management Server 2002. Part of the Microsoft .NET Enterprise Server family, including BizTalk Server, SharePoint Portal Server and Commerce Server, Content Management Server 2002 will offer support for XML Web services, enhanced content authoring and site deployment capabilities, and provide developer support through its integration with Visual Studio .NET and support for ASP.NET. Content Management Server 2002 adds direct publishing from Word, .NET and XML Web services support, an application development environment, faster time to deploy, and standards-based interoperability. Developers and customers can find the beta version of Content Management Server 2002 immediately available for download. Content Management Server 2002 is scheduled to be released by the end of this year. www.microsoft.com/cmserver/

FILEMAKER ENHANCES XML CENTRAL WITH FREE STYLE SHEETS
7/9/2002

FileMaker announced its enhanced FileMaker XML Central to jump-start developers' and power-users' ability to create data exchange and application integration solutions. Featured on FileMaker XML Central is the new FileMaker XSLT Library, consisting of freely downloadable XSLT stylesheets. Each stylesheet translates XML grammars, so FileMaker can exchange data with a large and growing number of other applications. Eight XSLT stylesheets are included with the new FileMaker Pro 6 software, and more than 40 are available in the Library. That number is expected to grow as developers contribute stylesheets they create. In addition, some of the Library's stylesheets enable FileMaker to import data from Microsoft SQL Server, import Web data, export to Microsoft Excel, and export data in scalable vector graphics (SVG) format. www.filemaker.com

PERCUSSION UPDATES RHYTHMYX ACCELERATOR FOR WORD
7/8/2002

Percussion Software announced the immediate availability of Version 2.0 of the Rhythmyx Accelerator for Microsoft Word 2000. The Rhythmyx Accelerator for Microsoft Word V2.0 enables the Rhythmyx Content Manager to inherently support in-line links to other content being managed throughout the system directly from within Word. Contributors using Word as their authoring tool are able to take full advantage of all system content. Drop-down menus in Word for "CMS in-line link" or "CMS in-line image" allow contributors to search for, select and utilize content from anywhere in the Rhythmyx system. And with the newly added feature of "Open from Rhythmyx", users can edit content entered by other users without leaving Word. With Rhythmyx, contributors always work on the original document rather than a filtered document so edits are not lost and publishers work from an original document while continuing to utilize notes, edits and annotations created by a previous editor or author. Further, "Save to Rhythmyx" directly from Word uploads the original document and the filtered document to the repository, as well as uploading the defined metadata and extracted fields, allowing for management, re-use aggregation, assembly and publishing. Rhythmyx Accelerator For Microsoft Word 2000 Version 2.0 is available immediately. www.percussion.com

VERTIS RELEASES ENKLAVVISION 1.5
7/8/2002

Vertis announced its latest release of the EnklavTDW content management and publishing system. EnklavVision 1.5 features configurable digital asset management and search and browsing, along with components for project management and ordering of premedia services. EnklavVision was designed to streamline creative production workflows for in-house agencies and other creative units involved in desktop publishing. The Web-based EnklavTDW application family streamlines and manages the process of creating, publishing and distributing marketing communications through interoperable modules. EnklavVision 1.5 serves as an application module for digital asset management, which works with Vertis' Content Management, Dynamic Publishing and Channel Content Distribution tools. 15 EnklavTDW modules are scheduled for release through 2003. http://vertisinc.com/enklav

XML GLOBAL TO ACQUIRE VERTAPORT
7/8/2002

XML Global Technologies, Inc. announced that it has signed a letter of intent to acquire all of the intellectual property of VertaPort Inc. The letter of intent also provides for up to a $5 million equity investment into XML Global by The Paradigm Group II, L.L.C., the controlling shareholder of VertaPort, subject to certain conditions. Under the proposed agreement, Paradigm would provide an immediate $2 million equity investment upon closing of the transaction, scheduled for no later than August 15th, 2002. The terms of the acquisition and funding agreement provide for XML Global to issue 7 million common shares in exchange for 100% of the intellectual property rights of VertaPort. Additionally, XML Global will issue 7 million common share warrants exercisable at $0.50 and a further 2.5 million common share warrants exercisable at $1.00 per share to complete the acquisition transaction. www.xmlglobal.com

STELLENT INTEGRATES SOFTWARE AG'S XML SERVER
7/1/2002

Stellent, Inc. Software AG, Inc. announced that Software AG's Tamino XML Server has been integrated with the Stellent Content Management system. This integration offers a content management system integrated with an XML database and provides users with a content repository optimized for managing and storing large amounts of pure XML content. The Tamino integration is available as part of the core Stellent Content Server product. www.stellent.com, www.softwareagusa.com

ENFISH ANNOUNCES INTEGRATION WITH SHAREPOINT
7/1/2002

Enfish Corporation announced that Enfish now provides complete integration with SharePoint, Microsoft's Web-based portal solution. Businesses using SharePoint can now access SharePoint data through Enfish products. Integrating SharePoint Portal Server and SharePoint Team Services data with Enfish products enables users to see, relate and access SharePoint data in context to their personal data from e-mail, appointments, tasks, and files. Enfish automatically connects them to related information without users having to search data stores or even know that related data exists. Enfish products integrate data from many disparate information sources, including e-mail and e-mail attachments, document/content management software programs, portals, intranets/extranets, CRM/ERP systems and databases. www.enfish.com

LexisNexis Launches Content Organizer
7/1/2002

LexisNexis launched a content organizer capability, jointly developed with Verity Inc., that enables a business organization to leverage its information assets for better decision-making by classifying and integrating a business's enterprise information in a single, easy-to-navigate tool. The LexisNexis Content Organizer couples the LexisNexis taxonomies and concept definitions with Verity's K2 Enterprise's classification capability. www.LexisNexis.com, www.verity.com

Verity Updates K2E
7/1/2002

Verity, Inc. announced a new version of its Verity K2 Enterprise (K2E) software. Verity K2E integrates search, taxonomy and personalization. Verity K2 Enterprise provides a classification solution that combines machine learning with domain expertise. Verity K2E gives users a multitude of ways to quickly find the information they need. The search tools include federated search, which brings back results from many sources to a single query, parametric search, which finds single or groups of documents with specific attributes, category drill-down to let users browse through categories and subcategories, and relational taxonomies, which enables simultaneous search of two or more taxonomies. www.verity.com

SDL Introduces Enterprise Translation Management System
6/28/2002

SDL International announced the introduction of a scalable system for enterprise management of translation memories. Offering the choice of working seamlessly with SDLX, STAR and Trados, as well as the new XML market standards, such as TMX and XLIFF, "SDLX for UNIX" is intended to be part of the workflow of global organizations. The Translation Editor utilizes the familiar interface of SDL's 'SDLX', but the back-end engine uses a UNIX server, allowing translators to continue to use the familiar SDLX desktop, but plug into corporate UNIX servers. www.sdlintl.com/enterprise-systems.htm

Quiver Announces QKS Classifier 2.0
6/26/2002

Quiver, Inc. announced Version 2.0 of QKS Classifier, an upgrade to its taxonomy platform. QKS Classifier is a categorization application for organizing, managing and distributing unstructured data through end user directories. QKS Classifier leverages automated categorization technologies to reduce the effort associated with accurately organizing unstructured data while. The expanded functionality of QKS Classifier Version 2.0 includes the following automated and interactive features: Support Vector Machine [SVM] Algorithm; Business Rules Engine; Publishing Rules; Enhanced Filtering Rules; Expiration Rules; Information Manager Wizards; End User Document Submission; Additional Taxonomy Import Capabilities; Enhanced Caching System; Expanded Inktomi/Search Support; and QKS Topic Advisor Integration. Quiver's QKS Classifier release 2.0 is available immediately. www.quiver.com/products/classifier/index.html

Artesia & Electronic Solutions Partner
6/26/2002

Artesia Technologies announced that London-based digital production facility Electronic Solutions has integrated Artesia's TEAMS DAM solution into its offering. This will allow Electronic So-

lutions' customers to control a centralised digital asset repository, which includes digital files, rights and permissions, and related information for company's advertising, branding and marketing efforts across its global operations. Electronic Solutions is using TEAMS as a platform to create an enterprise-wide, web-accessible digital archive for the storage and re-use of all digital assets, which can then be marketed to its enterprise clients as a turnkey solution. www.artesia.com

OPENPAGES TO INCORPORATE FUJITSU'S INTERSTAGE I-FLOW
6/26/2002

Fujitsu Software Corporation announced that Openpages, Inc. has selected Fujitsu's Interstage i-Flow Business Process Management engine to embed in its upcoming Openpages 4.0 adaptive content software platform to enhance its collaborative workflow capabilities. i-Flow is a Java-based and browser-based business process management solution allowing for integration with Web-based systems, and is customizable. Its graphical user interface enables customers to build workflow applications according to their specific needs. www.fsw.fujitsu.com, www.openpages.com

ENGAGE ANNOUNCES CONTENTSERVER 7.0 & RETAIL SOLUTION
6/25/2002

Engage, Inc. announced the unveiling of Engage for Retailers and the general availability of the solution's platform technology, ContentServer, version 7.0. Built on Engage's ContentServer digital asset management and workflow automation platform, Engage for Retailers is designed for retailers and catalogers to streamline the creation, approval, production and repurposing of advertising and other marketing promotions. New features and functionality of ContentServer 7.0 include out-of-the-box capabilities such as enterprise search and retrieval, and integration with third-party applications using technology including XML, designed to speed the creation, production and delivery of advertising and promotional content. Engage advertising production solutions are now available with integrated ContentServer 7.0. www.engage.com

VIGNETTE ANNOUNCES RELEASE OF V6 CONTENT COLLABORATION SERVER
6/25/2002

Vignette Corp. announced the release of Vignette V6 Content Collaboration Server (VCCS). The updated VCCS version combines the functionality of Vignette V6 Content Collaboration Server and Vignette V6 Content Syndication Server into a single, integrated extension for the Vignette V6 Content Suite. Under the umbrella of one browser-based application, companies can collaborate with external partners, customers, suppliers and employees through services such as targeted subscriptions; real-time content syndication to applications and portals, both within and outside the firewall; and collaborative exchange of documents and other content within and between enterprises. VCCS also includes: The collection of content from multiple internal and external systems and sources; The ability to exchange content and partner requests via multiple protocols (including ICE, BizTalk, cXML, FTP, HTTP, EDI, and RosettaNet); The personalized real-time assembly and packaging of content in the format desired by each partner; and the delivery of content via the Internet to partner systems, Internet-enabled portable devices, external trading networks and other channels. www.vignette.com

REDDOT LAUNCHES NEW CONTENT INTEGRATION SERVER
6/25/2002

RedDot Solutions announced the launch of its new Content Integration Server (CIS). RedDot CIS enables users to develop personalized content and track user behavior. CIS supplements RedDot Content Management Server (CMS) with a platform for delivering dynamic content. Compatible with other software, CIS also enables user and process data to be exchanged with external applications. CIS makes it possible to distribute user-specific content that has been generated and managed by CMS. User data and processed data can also be handed off to external applications. Therefore, data can be pulled from Customer Relationship Management, Supply Chain Management and other applications into content environments that interact with customers. Responses to database queries, transactions, and to other business processes are dynamically integrated into published Web pages. RedDot CIS is available immediately. www.reddot.com

ATOMZ LAUNCHES ATOMZ PROMOTE
6/24/2002

Atomz launched Atomz Promote, an online application that integrates Atomz Search with the company's Web content management system, Atomz Publish. Atomz Promote offers a way for companies to integrate content into search results through a single online application. Atomz Promote allows companies to instantly review and analyze site search requests and add relevant content to search results. For example, retailers can advertise timely promotions and link visitors to areas where they can purchase products or request more information. Media companies can highlight related editorial content to terms repeatedly searched for on their Web site. Atomz software is updated every week, not every six months, so customer feedback can be incorporated frequently. Atomz customer support diagnose issues and are able to fix them online, allowing rapid resolution of technical issues. Atomz Promote starts at $35,000 per year and comes bundled with Atomz' site search application, Atomz Search. www.atomz.com

EDS, SUN, AND VIGNETTE LAUNCH SECURE PORTAL SOLUTION
6/24/2002

EDS, Sun Microsystems, and Vignette Corp. launched a new joint portal solution, based on the Sun Open Net Environment (Sun ONE) platform, which offers end users a single point of entry for information and solid levels of security. Designed to help companies and government agencies improve communication and productivity, the new Secure Enterprise Information Portal solution is designed to protect critical information assets, while delivering personalized content from multiple sources to the right audience via any device. Available today, can be integrated into existing business systems, scales to address future needs and can withstand strict regulatory requirements. This integrated solution also includes scalable content management applications, privacy, risk management and compliance assessments, as well as single sign-on, encryption and authentication capabilities. The Secure Enterprise Information Portal joins Sun's portfolio of iForce solutions. www.eds.com, http://sun.com/sunone, www.vignette.com

INTERWOVEN LAUNCHES CONTENT MANAGEMENT SOLUTION FOR GOVERNMENT
6/24/2002

Interwoven, Inc. launched the Interwoven Solution for Government, a platform for content management that helps federal, state, and local governments build initiatives such as public-

facing citizen portals and internal facing agency portals and meet key government mandates to make electronic information and technology accessible to all people. The Interwoven government offering is built on top of the Interwoven 5 platform and includes ECM capabilities tailored to the specialized needs of E-Government. Interwoven said they are committed to enabling its customers' compliance with Section 508 of the Rehabilitation Act Amendments, Department of Defense legislation 5015.2, and Government Paperwork Elimination Act of 1988. www.interwoven.com

SOFTWIN LAUNCHES DRM SOLUTION
6/20/2002

SOFTWIN launched its proprietary DRM solution, tailored to the inherent needs of the publishing industry. It focuses on the management of digital rights concerning specific content, by interdicting its involuntary as well as the voluntary non-authorized distribution. The electronic format provides the ability to redefine the content, by including their own comments, highlights, and to re-arrange different sections of interest. The solution is customizable, targeting the entire process of electronic content distribution. It provides a client-side application which controls printing, copy-pasting, saving and classical Print Screen key, and the server-side automatic content preparation tools and even a customizable virtual bookstore. A unique license which identifies a class of content, the rights associated, and the user allowed to access it. SOFTWIN's solution targets the entire range of publishing agents, especially those with periodic content delivery (journals, updates, newsletters) following complex rules in a controlled manner. www.softwin.ro, www.intuitext.com

STELLENT LICENSES CONVERA TECHNOLOGY
6/19/2002

Convera announced that Stellent, Inc., has integrated Convera's Screening Room Capture rich media indexing technology into the newly available Stellent Audio Video Indexer. Convera's Screening Room Capture technology extracts visual and textual metadata from analog or digital video by controlling multiple subsystems for closed-captioned text extraction, voice-to-text servers, video analysis, manual annotation, device control, and timecode management. By encapsulating all metadata into XML, Screening Room Capture allows the integration of video logging into many other systems, such as an existing content management solution. Stellent Audio Video Indexer enables users to perform sophisticated searches on numerous video file types such as .mpg, .avi, .asf, or .wmv. Voice recognition results and file property information are encoded in XML for full-text indexing and online viewing. Stellent Audio Video Indexer also takes an snapshot of video files and automatically creates thumbnail images for audio video files managed within the Stellent Content Server. www.stellent.com, www.convera.com

INSTRANET INTRODUCES SECURE REPORT DISTRIBUTION MANAGER
6/19/2002

InStranet, Inc., announced the release of Secure Report Distribution Manager (SRDM), designed to securely facilitate the delivery of Business Objects WebIntelligence reports to large, yet targeted audiences. SRDM is offered as new module in InStranet's Content-Based Application product suite. SRDM manages all the security-related metadata for navigation, access to reports, and row-level data access. SRDM enables users to retrieve the correct InfoView report using any number of descriptive dimensions, including global regions, business unit, and/or business objects. With SRDM information can be off-loaded from the data warehouse, eliminating the need to create additional tables or joins because SRDM manages all of the security-related metadata. SQL statements needed to query the data warehouse are simpler. SRDM en-

ables users to distribute reports alongside unstructured data such as proposals, contracts, written analyses, etc. www.InStranet.com

XyEnterprise Announces New Release of Content@ Web
6/18/2002

XyEnterprise announced the availability of its new Content@ Web interface to its Content@ XML content management software. Content@ Web offers browser interfaces to Content@'s XML re-use, versioning, metadata and workflow functions as well as a development environment for integrators, resellers, and OEMs. Content@ Web offers out-of-the-box functionality for Web user access to Content@ projects and workflows, XML data, and search and document management functionality. The Content@ Web browser interface offers metadata and full-text search, unique views based on users and roles, and detailed versioning and history tracking. Content@ Web can be used as a development interface for OEM and integration partners with its access to core Content@ content management functionality. Content@ Web, built using the Content@ API, offers a JSP access layer that can be customized with XML, XSL, Java, and other customization languages and tools. Content@ Web is an option to the standard Content@ software that runs through Web Servers on Windows and Unix platforms.
www.XyEnterprise.com

Merant Launches Collage
6/17/2002

Merant announced the availability of Merant Collage, an enterprise content management solution for application-driven Web sites. Merant Collage's integration with software configuration management (SCM) tools, including the MERANT PVCS product family, provides a collaborative environment for the application developers and the Web design team to build Web applications and dynamic Web sites. New features and functionality include: task management with workflow control, auditing and reporting, content contribution editor and templating, automatic notification, and integration with PVCS Dimensions and Version Manager. Merant Collage is available now. www.merant.com

Documentum Releases Content Distribution Services
6/17/2002

Documentum announced the availability of Content Distribution Services (CDS). Based on the technology from Boxcar Software that Documentum acquired in the first quarter of this year, CDS extends the Documentum platform by automating and controlling the distribution of enterprise content to any number of subscribers, including customers, distributors, affiliates, marketplaces and business partners. CDS, which is completely integrated with the Documentum ECM platform, enables companies to create any type of content offering and automatically distribute it, to any destination, using any transport protocol. Using CDS, the content distributor can allow recipients to subscribe to content through an offers-based model and set the method of content delivery, including scheduled, events-based or on demand. CDS is fully integrated with the Documentum platform. www.documentum.com

Authentica Introduces Content Security Server
6/17/2002

Authentica, Inc. has expanded its product line with the introduction of the Authentica Content Security Server, an enterprise application for securely delivering or persistently protecting e-mail and documents whether they are shared internally or between companies. The Authentica Con-

tent Security Server enables enterprises to apply the appropriate level of content security using two protection levels on a case-by-case basis: Secure Delivery for point-to-point information security, and Secure Content for continuous protection and lifecycle control of content after delivery. Secure Content incorporates Authentica's Active Rights Management technology for after delivery security and lifecycle control of messages and documents. The sender always retains control over the recipient's ability to forward, print and copy, and can recall or expire that information at anytime after delivery. Authentica Content Security Server is available immediately. Pricing is based on concurrent users and server configuration and starts at $32,500. www.authentica.com

PERCUSSION ANNOUNCES RHYTHMYX CONTENT MANAGER V4.5
6/17/2002

Percussion Software announced Rhythmyx Content Manager V4.5. Rhythmyx V4.5 is based on a SOAP architecture that allows for enterprise application integration and enables authors to use their existing content creation tools (like Microsoft Word) that can now dynamically interact with the Rhythmyx server. It also enables integration with external repositories such as portals, application servers and other asset management systems. Other new features include: Content Services, Publishing Services, Site Explorer, Support for Content Contributor Groups, and a new Graphical Interface for Content Editor Engine. Rhythmyx V4.5 will also offer administration enhancements to the Publishing Engine, Sybase and UDB Support for Rhythmyx Repositories and LDAP Group Support. Percussion's Rhythmyx Content Manager V4.5 supports Windows NT 4.0, Windows 2000 and Solaris platforms. www.percussion.com

GE GLOBAL EXCHANGE SERVICES & POET TO PROVIDE HOSTED CATALOG MANAGEMENT
6/17/2002

GE Global eXchange Services and Poet Software announced that they will team to provide hosted catalog management services to Global 1000 companies. The services are designed to allow buying organizations to lower procurement cycle times and reduce overhead costs associated with managing supplier catalogs. Poet will provide content management software, called eSupplierWeb, that allows a buying organization to import supplier catalog content, cleanse the data, apply classification and custom pricing, and then load the data into its procurement systems in the appropriate data format. GE Global eXchange Services (GXS) will provide software hosting services, as well as project planning and management, testing, training and ongoing technical support. The hosted services are compatible with all major electronic catalog data exchange formats, as well as major e-procurement, supply chain network and marketplace platforms. www.poet.com www.gxs.com

X-HIVE UPDATES XML DATABASE
6/13/2002

X-Hive Corporation announced the release of version 3.0 of X-Hive/DB, the native XML database designed for software developers who need to process and store XML data in their applications. X-Hive/DB supports all major XML standards including XML 1.0, XQuery, XPath, XPointer, XLink, XSL, XUpdate and DOM. It also offers a transaction mechanism, versioning with branching, BLOB storage and various indexing methods, as well as support for J2EE and WebDAV. Next to overall performance improvements the following features have been added or enhanced in X-Hive/DB 3.0: support for XQuery; support for DOM Level 3 Abstract Schema and Load & Save; a new indexing method; improved XPath/XPointer and administrator client with new functions and updated GUI; and simplified database setup with default configuration

based on best practices. X-Hive/DB 3.0 is available as of today on Linux, Solaris and Windows. A free 30-day evaluation license can be obtained. www.x-hive.com

PAPERTHIN ANNOUNCES COMMONSPOT CONTENT SERVER 3.0
6/11/2002

PaperThin, Inc. announced the release of CommonSpot Content Server 3.0, a browser-based Web publishing and dynamic content management solution. CommonSpot 3.0 introduces an improved administrator interface, integrated link management tools and expanded scheduling and reporting options. With new tools like cascading style sheet support, enhanced WYSIWYG editing and pop-up menus, Web designers can empower contributors to easily create content, while flexibly controlling the look and feel of a site. With CommonSpot's new content object architecture, designers can build custom elements that allow contributors to create content once and reuse it. New replication features, enhanced search performance and support for the Sun Solaris platform provide additional options for enterprises. PaperThin also announced a reduction in the base price for a standard CommonSpot license to $19,500. Standard license pricing starts at $19,500, with the enterprise version priced at $85,000. CommonSpot is available immediately directly from PaperThin, Inc., and through PaperThin's partners.
www.paperthin.com

DOCUMENTUM & PLATEAU INTEGRATE LEARNING & CONTENT MANAGEMENT
6/11/2002

Plateau Systems and Documentum announced an alliance to offer Documentum's ECM platform as an integrated component of the Plateau 4 Learning Management System. This integration allows organizations to link learning initiatives with enterprise content. The software developed by both companies is built on J2EE/EJB architecture. The combined solution enables organizations with any training documents in the Documentum repository to use Plateau to automatically alert all affected workers if their training profile is revised.
www.documentum.com, www.plateau.com

INFORMATIVE GRAPHICS PARTNERS WITH DOCUMENTUM
6/11/2002

Informative Graphics Corporation (IGC) announced that its viewing and collaboration software, Brava! For Documentum, will be offered as a complementary product to the Documentum Enterprise Content Management (ECM) platform. Brava! for Documentum brings document view and markup to Web-based applications and is scalable and easy to administer, using an transaction-based approach in serving documents to large user-groups. www.documentum.com, www.infograph.com

WEBWARE TO INCORPORATE CONVERA'S RETRIEVALWARE INTO MAMBO
6/11/2002

WebWare Corporation announced it has reached agreement with Convera to integrate Convera's RetrievalWare technology into WebWare MAMBO brand and media asset management software. The optional RetrievalWare plug-in provides additional search capabilities for distributed client/server environments. It will enable teams working on technology and/or branding projects to do multimedia, cross and multi-lingual searches of document content. A wide range of text and text-related formats will now be available in WebWare MAMBO through Retrieval-

Ware: over 200 proprietary document formats including Microsoft Office applications, Adobe PDF, Lotus Notes, FileNet, Documentum, and MS Exchange documents and other relational database tables, document management systems and groupware repositories. The RetrievalWare technology will be part of a future release later this year. www.convera.com, www.webwarecorp.com

FANTASTIC INTEGRATES ECDN WITH IBM CONTENT MANAGER 8
6/11/2002

The Fantastic Corporation announced the integration of its CoreCast eCDN (enterprise content delivery network) into IBM's Content Manager Version 8. Together with the IBM Content Manager, CoreCast helps companies manage and deliver massive quantities of information such as text documents, Web content, and audio or video files to the desktop. Fantastic's CoreCast eCDN is a network-aware distribution platform for delivery of data-intensive multimedia applications within an enterprise. An application-layer content networking engine, CoreCast eCDN automatically recognises its data network environment, performs real-time analysis, proactively adapts distribution processes, routes and answers end-user requests, and allocates network resources according to business policies set at the CoreCast control centre. www.fantastic.com, www.ibm.com/software/data/cm

INXIGHT RELEASES METATEXT SERVER 2.0
6/11/2002

Inxight Software, Inc. announced Inxight MetaText Server 2.0. Inxight MetaText Server provides a solution for integrating vast resources of unstructured data -- email, text files, Web pages, news feeds -- into mission-critical business processes. The new version includes a repository for storing metadata -- key descriptors collected from a document to quickly and easily identify its meaning; a collection manager for easy scheduling of Web and file system crawls to continually update information stored in repositories; simple concept search integration with third-party search engines; and the addition of full-text search, including Boolean query support for Italian, Portuguese and Dutch. The product also supports English, French, German and Spanish. Inxight MetaText Server provides interfaces for integration with enterprise portals and customer relationship management, text mining, business intelligence, content, document and knowledge management applications. Inxight MetaText Server 2.0 is available immediately. www.inxight.com

PINDAR SYSTEMS RELEASES AGILITY
6/11/2002

Pindar Systems announced the commercial release of Agility v. 1.0, its new enterprise catalog commerce server. Agility, a comprehensive product information management system built with a Java-based, J2EE-compliant Web application server architecture, is now available for sale and installation, following field testing and quality assurance work with customers. Already supporting the latest BEA WebLogic application server, Agility is being extended to support IBM's WebSphere server by this Fall. In addition to integration with QuarkXPress, Pindar Systems is working on a product information solution that integrates Adobe InDesign 2.0. Agility can be deployed across traditional Microsoft Windows, Web or the new Apple Macintosh OS/X platforms. It runs on Sun SPARC Solaris 7.0 and Intel NT 4.0 (and greater) servers. Supported enterprise databases are Oracle 8i and 9i and Microsoft SQL 2000. www.pindarsystems.com

VIGNETTE STRENGTHENS SUPPORT FOR IBM CONTENT MANAGER
6/10/2002

Vignette Corp. announced its intentions to support IBM's Content Manager Version 8. Vignette and IBM enable joint customers to store diverse information assets and then use the Vignette solution to manage the content through its entire lifecycle. www.ibm.com/software/data/cm/, www.vignette.com

INTELLISEEK ANNOUNCES ENTERPRISE SEARCH SERVER 3.6
6/10/2002

Intelliseek announced the release of Enterprise Search Server (ESS), version 3.6 and an enhanced ESS Bridge for Lotus. The latest version of ESS is more flexible for users, supporting either Oracle or SQL Server as database managers and enabling the rapid integration of other informational, subscription-based Web sites, such as Lexis-Nexis. ESS is an information discovery platform that enables companies and to find, organize, distribute and make use of relevant information from multiple, disparate information sources. It provides single-point access to all the vital data that can affect decision making -- information found on intranets, extranets, subscription sources, document management systems, specialty databases and the Internet. New features include Oracle database support for Windows, Agent Development Kit (ADK) enhancements, and Direct Lotus Domino Name & Address Book synchronization. The new version of ESS and the ESS Bridge for Lotus are available immediately. Pricing is based on a server, seats and services model. www.intelliseek.com

EKTRON CMS200 NOW AVAILABLE IN GERMAN AND FRENCH
6/6/2002

Ektron, Inc. announced immediate availability of Ektron CMS200 Version 1.6. which is now available in languages beyond English, including German and French. The application's default language can easily be set to German, French or English, which can be assigned on a per-user basis (i.e., two French users, three German users, and one English user). A language software developer kit is available for translating end-user menus and dialogs into other languages. MS200 now also delivers full branding capabilities to allow companies to add logos and match the application with their own graphical style or the style of a client organization. Ektron provides documentation to assist developers with modifying Ektron CMS200 graphics, colors, and styles. Other new features in Version 1.6 include: an improved user interface; support for MySQL database; improved history tracking; e-mail customization; and support for larger content blocks and summary data. Pricing ranges from US$2,999 to US$12,999. Ektron has numerous VAR partners worldwide. www.ektron.com/partners/find_a_partner.cfm

FILENET DELIVERS INTEGRATION TO MYSAP ENTERPRISE PORTAL
6/5/2002

FileNET Corp. announced availability of FileNET ECM for mySAP Enterprise Portal, a solution provided to any existing FileNET customer who wants to gain access to their FileNET Enterprise Content Management applications through their mySAP Enterprise Portal environment. FileNET ECM for mySAP Enterprise Portal solution enables enterprises to leverage the relationship between content and the business processes it drives. By supporting SAP's Unification technology, users can work seamlessly between different enterprise information sources. www.FileNET.com

J.D. EDWARDS & INFORMATION MAPPING PARTNER
6/5/2002

J.D. Edwards & Company and Information Mapping, Inc. (IMI) have partnered to provide customers with a solution to their content management challenges. The solution couples information design with a content creation and change management application. The agreement allows IMI to resell J.D. Edwards Content Manager application to their customers and makes IMI's content design and development products and services available to J.D. Edwards customers. Content Manager is a content creation and change management application that allows organizations to build business critical documents, like proposals, procedure manuals and training materials, from smaller reusable components using Microsoft Word. IMI's research-based methodology helps organizations design and develop information standards, structures, and models optimized to support key business goals. www.infomap.com, www.jdedwards.com

IBM & INKTOMI PARTNER ON ENTERPRISE CONTENT DELIVERY
6/3/2002

IBM Corporation and Inktomi Corp. announced an agreement to provide enterprise content delivery network (eCDN) technology. The solution is designed to enable enterprises to manage and distribute mission-critical business applications, such as ERP, CRM, content management, enterprise portal, and streaming media, including webcasting, e-learning, and corporate communications. Enterprises and service providers can use Inktomi technology running on IBM's eServer xSeries systems to help overcome network congestion without adding bandwidth and router upgrades. IBM Global Services is now reselling Inktomi software products including Inktomi Enterprise Search and Inktomi content networking software.
www.ibm.com/industries/digitalmedia, www.inktomi.com

FILENET RELEASES INTEGRATED EGRAIL & PANAGON SOLUTION
6/3/2002

FileNET Corp. announced the general availability of FileNET Web Content Management (WCM - the acquired eGrail technology) with integration to the company's Panagon platform. The solution is aimed at streamlining the Web-based development and management of digital content for Web sites, including content that resides in FileNET Panagon repositories. FileNET WCM allows for collaborative authoring so that one or more persons can update Web content, while significantly reducing the workload for the Webmaster. New FileNET customers can deploy FileNET WCM as a standalone solution to meet their immediate Web content needs, while also having the ability to add subsequent Enterprise Content Management solutions easily. FileNET WCM is available immediately and is priced at USD $125K for a two CPU system and USD $195K for a four CPU system. www.FileNET.com

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CALENDAR

The Gilbane Conference on Content Management @Seybold. September 11-12, 2002, Moscone Center, San Francisco, CA. Our newest conference will be co-located with Seybold San Francisco 2002 so that IT and project managers from all industries now have a one-stop event where they can learn how to build content management strategies, and create implementation plans that integrate with other enterprise applications in order to meet a wide variety of business needs. www.gilbane.com/seyboldsf02.html (www.seyboldseminars.com/sf2002/)

XML for Financial Services. September 17-19, 2002, The New York Helmsley, New York City, NY. This event will feature the executives in the securities and banking industries and how they are using XML to reduce costs, maximize efficiency and increase interoperability for the long-term. This event is specifically tailored to address the needs of financial services companies looking to implement XML initiatives. **Gilbane Report subscribers receive a $300 discount** off the regular registration rate. Login to the Gilbane Report subscriber website at www.gibane.com to get the special registration keycode. www.worldrg.com/fw251

Enterprise Web & Corporate Portal Conference & Expo. November 7-8, 2002, Georgetown University Conference Center, Washington, DC. An executive level event, which features a two-day educational conference program. The conference showcases a number of user study sessions from institutions and top Web and portal experts, offering attendees the latest information for deploying, optimizing and extending portal-based, Enterprise-class Web systems. **Special Offer to Gilbane Report subscribers: Save $200 off the cost of a Full Conference Package.** Login to the Gilbane subscriber website at www.gilbane.com to get the discount priority code. www.enterprisewebportal.com