

Communication Specialist Sharon Light (left) has said goodbye to paper documents and HTML conversion. The system she uses now automatically converts and posts documents to Chevron's intranet.

Web Content Management	▼
Document Management	▲
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Order From Chaos

▲ North America Upstream, a company within Chevron, treats the Internet as both a powerful and perilous communications tool. Find out how the company makes content king without being checkmated.

by Ed Hess

With the Internet only beginning to hit its stride by the mid-1990s, it wasn't that long ago that this domain was considered a wide-open landscape. While this frontier provided infinite opportunities for large enterprises and start-up companies alike, it was also fraught with some serious pitfalls.

Having been with Chevron in various capacities for almost 14 years, Sharon Light remembers those early days of the Internet which were ruled with a laissez-faire attitude. At the time, the company was running on a UNIX platform, and Light painstakingly converted content to HTML, which was then posted on the fledgling Web site. Enhancing the site with pictures and graphics was not a problem – simply copy and paste those optical elements from other sites. “When we started out on the Web, there was no Microsoft FrontPage or WYSIWYG Web tools. Although there were always rules and federal copyright

laws in place, we didn't necessarily understand them or know how to enforce them. There were no boundaries,” recalls Light. “Today, things are much different.”

Today, things are much different – now, that's an understatement. Along with Chevron, every online entity closely regulates the content that is viewed by users and how graphics and images may or may not be used. Companies no longer look at the Internet as a novelty, but as a strategic tool. The power of this tool has necessitated that businesses become much more formal about how information makes it onto their sites. The posting of an erroneous earnings report, for instance, is no longer seen by just a handful of cyber-geeks. Instead, it will likely end up on CNN. My, how the wide-open frontier has changed.

Now working as a communications specialist in Chevron's North America Upstream Headquarters group, Light is largely in charge of facilitating top-down communication over

Installation Profile

Technology User: North America Upstream, a company within Chevron, has about 5,000 employees and is charged with managing the ever-expanding resource base of the overall corporation.

Problem: Communication between the company and employees was originally handled by e-mail. Once that system became overwhelmed, the company opted to use an intranet for communications. Converting paper documents to online content then became a time-consuming and costly issue.

Solution: Upstream implemented Net-It Central (from Informative Graphics) at one of its eight business units. The software automatically converted documents to online-ready content without human intervention. In addition to saving time, the software offers security features to limit the posting of content. Currently, Net-It Central is deployed at three business units and at Upstream headquarters.

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the company's intranet. Located in Houston, North America Upstream is an operating company within Chevron that is composed of six business units. With approximately 2,500 employees, Upstream is charged with finding ways to efficiently manage Chevron's resource base and sustain long-term competitiveness. For Light, the challenge



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Sharon Light, North America Upstream

remains constant – easily provide access to critical information without putting the company at risk or making the sharing process difficult. Of course, this takes coordination and technology.

E-Mail Chaos Leads To Orderly Solution

The amount of e-mail coming into and flowing out of

Upstream continues to climb. While the volume of e-mail may be greater today, managing e-mail at the company has always been a challenge. E-mail may have been less pervasive a few years back, but there weren't as many tools to manage it. It's in this chaotic e-mail environment that Light first became involved with trying to manage content on the company's intranet.

At the time, Light was working for a business unit within Upstream when the manager of that unit approached her about the pending e-mail dilemma. Wanting to reduce the corporate-to-employee e-mail, the business unit manager assigned Light the task of leveraging the company's intranet to meet this goal. "She (business unit manager) wanted to push information out to employees in hopes of eliminating some of the e-mail distributions that were taking place. She believed we could use the Web to effectively communicate with employees and also cut back on the flow of e-mail," explains Light. "As it turned out, she was right."

The idea of using an intranet to keep employees

Web Collaboration Shrinks Distances Between Employees

In broad terms, controlling enterprise-wide data may very well be the number one challenge facing any large business today. In addition to the ever-growing structured databases that must be managed, users continue to create a seemingly endless stream of unstructured data such as documents, drawings, and graphics. Combined with the fact that most companies have distributed workforces, efficiently managing data across an enterprise typically requires a Web-based solution. The Internet shrinks the distances that separate company departments, and the browser interface is available to all users.

With this concept in mind, Informative Graphics Corp. (Phoenix) developed a line of software products that allow for Web collaboration in a portal environment. The company was founded in 1990, and its products are used globally by end users, OEM partners, and ASPs (application service providers). The company's product line includes Brava! Central, Net-It Central, Brava! WebKit, and MYRIAD.

Brava! Central is a lightweight portal solution for customers that are seeking an out-of-the-box solution for sharing and collaborating information. It enables reviewers and design contributors to access drawings and documents through their browsers without installing plug-ins or soft-

ware on every desktop.

Net-It Central is an intranet solution that enables users to post documents, presentations, spreadsheets, and other information online, without converting the files to HTML, having to create specialized Web pages or installing client software or plug-ins.

Brava! WebKit is a component that enables viewing and redlining over a standard browser without plug-ins, client-side downloads, or installations. It also does not require that users reconfigure their computers to the latest Java Virtual Machine. Drawings reside on customers' servers and are delivered to user desktops inside or outside the firewall via a thin Java applet.

MYRIAD is Informative Graphic's flagship product, and the viewing and redlining solution is used by more than 250,000 design and manufacturing engineers around the world. MYRIAD includes both 2D and 3D functionality, as well as a full-function toolset for enhanced design collaboration.

For More Info. On Informative Graphics Corp.
Go To www.infograph.com

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Sharon Light, North America Upstream

informed is not a revolutionary concept in today's business world, but it was a new idea a few years back when the Internet was just taking off as a communications tool. Knowing that the idea was sound, Light still had to find a way to convert paper documents to Web content. This is when she fell into the trap that is set for most IT folks – becoming responsible for posting Web content.

Before you know it, you are inundated with requests from every department. Managers have messages they want sent out to employees. Another department wants to let employees know about an upcoming company-sponsored community event. "Once we decided to leverage the Web, people started coming to me from all over the business unit with documents they wanted posted online. People had already created these documents; now I had to reformat them into HTML. It was a real chore and redundant," remembers Light.

Automatically Post Content To Web

Being the middleman is usually a profitable venture. But, acting as the go-between in the middle of the paper-to-Web equation is only frustrating. While some IT staffs continue to be mired in this process, Light and her business unit were determined to remedy the situation. Ideally, any solution would automate the process of posting content to the company's site. And, departments within the company should be able to post such information.

Eventually, Light's quest led her to purchase and implement Net-It Central (from Informative Graphics)

at the business unit. The software required Light to build a separate site that would be available to different departments throughout the business unit. By accessing the site, users from these departments would simply place documents in assigned folders – human resource documents in the human resource folder, for instance. At scheduled intervals, the software scans the folders looking for new documents, which it identifies and posts to the appropriate location on the intranet. "As long as the documents are created in an application that is loaded on the Net-It server (e.g. Word, Excel, PowerPoint), they will appear on the site identical to what the author intended. None of the author's formatting is lost," states Light. "If the document was generated in an application not loaded on the server, Net-It Central will use a best-guess approach in reformatting the document for the Web. Most of the time, the document that's posted on the Web is very close to what the author intended. That's one of the unique aspects of the software."

STORAGE SOUND BYTE

SSP May Be The Best Option

At Chevron's North America Upstream (Houston), not all of the company's data is stored on-site or at its six business units. Instead, much of the company's enterprise storage is handled off-site at strategically located data centers that are administered by Chevron's IT staff. For a Fortune 100 company like Chevron, finding the IT expertise to run such centers is probably a challenge, but not impossible. If you're a mid-size enterprise, however, attracting such talent is a different story altogether.

Even with the economy staggering along and daily news of high-tech layoffs, that does not mean that IT talent is no longer at a premium. In fact, a META Group (www.metagroup.com) survey of 500 U.S. corporations found that these businesses are struggling to fill some 600,000 IT positions and they will likely remain vacant. It's in this environment that businesses have to consider outsourcing options. And, one critical business area that can be managed by an off-site entity is enterprise mass storage. This is where SSPs (storage service providers) enter the picture. These companies provide off-site storage and management services from one location for many businesses. Listed below are several reasons that using an SSP is so attractive to companies.

- Annual savings from outsourcing storage management ranges from 25% to 40%.
- SSPs offer state-of-the-art storage systems that most end users could not afford to purchase.
- End users pay only for the storage they use.
- The burden on internal IT staffs is greatly reduced.
- In case of a disaster at an end user company, critical data is stored off-site.

Gartner (www.gartner.com) estimates that the U.S.-based SSP market will reach \$9 billion by 2003. The research firm also reports that end users are more likely to purchase managed data backup and recovery services from an SSP than any other offering.



NAS (network attached storage) solutions, like this one from GRAU Data Storage, are commonly used as primary storage components by SSPs.

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The automated online posting system worked well at the business unit where Light was employed. In time, however, Light moved to Upstream headquarters and rolled out the Net-It Central solution to a much bigger audience. The technology would remain the same, but the increased number of users would complicate matters. "When we started using the software at the business unit, the users managed the creation and posting of information. Now that we're using the software on a bigger scale, we have policies and procedures in place that govern what documents even make it into the Net-It Central site to be posted online," comments Light. "If restricted information should somehow be posted, that can mean big trouble. We have to really guard against that."

The Less Glamorous Wireless App

Wireless technology vendors often pitch potential customers on the benefits of anytime/anywhere access to critical business data. Armed with a PDA (personal digital assistant) wirelessly connected to headquarters, a salesperson can access customer data on the spot and further solidify a relationship with a major account. Or, wirelessly connected IT administrators can avert possible disasters back at their offices while they're sitting in airports. While these scenarios are certainly possible, end users are clamoring for wireless solutions for a more mundane reason – to check e-mail.

"E-mail is easily the number one application that our users want extended to wireless devices," comments Sharon Light, communications specialist at Chevron North America Upstream (Houston). "As a result, we have users who are accessing e-mail on RIM and

Palm handhelds. In my opinion, the number of users will grow once all the wrinkles have been ironed out." The end user demand for wireless access to e-mail at Upstream is hardly atypical of most organizations. In fact, Gartner (www.gartner.com) reports that most employees have an "always-on" mentality when it comes to e-mail (*Feeding Your Addiction*, page 26).

Any company that is planning to extend e-mail to mobile users will be faced with an immediate decision – choosing the best wireless device. In general, users can access data and applications through PDAs and mobile phones. Both form factors offer different, yet obvious, benefits in addition to accessing e-mail. If you can't decide, the Smartphone from Kyocera (www.kyocera-wireless.com) may be the best choice – it combines Palm and mobile phone technology in one device.



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The Constant Battle To Control Content

Currently, Net-It Central is up and running at Upstream headquarters and three of its business units. In addition to posting documents at these locations, the software also serves to manage and enforce the posting policies that are now in place at Upstream. For instance, once a document is created, it is still placed in the specific folder at the Net-It Central site. Where the software would once automatically post that document, the new process now routes the document through an approval process before posting it. When the document has been given the green light, the software then posts it online at that time.

As an additional safeguard, Upstream's Web management team meets monthly with the company's technical local coordinators (TLCs). Together, the TLCs and the Web team works to implement and improve the policies that govern content distribution at Upstream. "The whole idea is to reduce the risk to Chevron, while still making it easy for employees to post information. If there are problems with current guidelines, then we work to resolve them. If people are not following the guidelines, then we take immediate action," says Light. "The rules have really changed. What may have worked five years ago is not close to being acceptable today."

My, how things have changed. □



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