WALK IN WIRELESS AT 50+ PUBLIC LIBRARIES

By Karl Beiser

From Van Buren to Kennebunk and from Rumford to Princeton, more than fifty Maine public libraries will begin offering free wireless Internet access to the public in July! McArthur Public Library in Biddeford will illuminate the adjacent park with wireless Internet connectivity. The Great Cranberry Library will encourage Internet access starved residents to think of the service as Drive In Wireless when the library is closed. Bangor, Portland and Lewiston Public Libraries are treating the service as a test bed for more extensive future services.

This project is part of Maine libraries’ continuing effort to broaden access to online information resources. In doing so, it aims to:

• provide a community Internet access point for use by students with Maine Learning Technology Initiative laptops;
• enable libraries to make more efficient use of their own desktop and laptop public access computers; and
• meet the growing demand of library users for Internet connectivity for their own notebook computer hardware.

In addition, development of a familiarity with wireless technology will prepare library staffs to evaluate and make better use of future generations of this rapidly evolving technology.

All sites were provided with a Linksys WRT54G access point/router supporting both 802.11g and 802.11b wireless communication. In those few cases where a single unit could not deliver a satisfactory signal to major public areas, a second was provided. Three wireless interface cards were offered, with a choice of PC Card devices for notebook computers or PCI cards for desktop computers.

Security Protecting the existing wired network from wireless users is a major focus. The security of network communications by wireless hotspot users is another.

Each library’s access point was connected to the existing wired network in as secure a manner as possible. What this meant in practice was dependent on the site’s existing network infrastructure.

Almost all sites use the Maine School and Library Network (MSLN) as Internet service provider, and thus have either a T-1 connection and a Cisco router, or a 56 Kbps Frame Relay connection terminated in a Frame Relay Access Device (FRAD). Some Cisco units had an unused second Ethernet port. In these cases, the MSLN enabled the port and assigned a small number of IP addresses, thereby constituting an entirely new network segment, to which one or more access points could be connected.

Other libraries had a router or FRAD linked to a firewall appliance or utility router, which was linked to a switch and through it to individual wired computers. A typical hookup involved inserting a utility switch between the Cisco router or FRAD at the building’s entrance point and the firewall/router device, and connecting the wireless access point to a port on the switch.

Some libraries had just the Cisco router or FRAD and a switch — no firewall device of any kind. In a few instances, Maine State Library (MSL) staff set up a switch and a utility router

Driver’s Licenses and Identification Cards On-line at www.Maine.gov

On June 2, Governor John E. Baldacci and Secretary of State Dan A. Gwadosky unveiled the new system that allows citizens to renew and request replacements of state-issued driver’s licenses and identification cards over the Internet.

“The Department of the Secretary of State is pleased to offer on-line driver license and identification card services 24 hours a day and seven days a week,” said Secretary Gwadosky. “Our office now provides more than 20 on-line services to the people of Maine. In doing so, we are working to use technology in ways that improve efficiency and enhance customer service.”

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...to provide enhanced protection for computers on the wired network, both from the Internet and from wireless users. This could only be done in cases where the network was small and simple, and individual workstations did not need to be reconfigured individually.

As to the security of wireless communications, almost all sites elected not to enable WEP (Wired Equivalency Protection) encryption on the access point. Ease of use for the public and for library staff were deciding factors. Instead, the access point is set up to allow essentially immediate connection to any wireless network card. Through signs and other means, libraries alert users that credit card numbers, usernames and passwords, and other confidential information is susceptible to "eavesdropping" unless one is dealing with a server that provides SSL (Secure Sockets Layer) or other encryption.

**Wireless Configuration and Access Point Location**

First the area requiring maximum signal strength was identified. Then a candidate location was selected as close as possible to the center of that area, yet reachable from an existing network jack or cable. The site monitoring software in the project-provided wireless laptop was used to determine relative signal strength in the area of primary coverage, and to estimate the edges of the range given furniture, book stacks, walls and other obstacles. If coverage was not satisfactory — very rarely the case — other candidate locations were tried. Once established, permanent installation of Ethernet and power to the selected location was left to the library. If power was not available at the desired access point location, a power over Ethernet kit was provided with which to run electrical current over the last length of Ethernet cable from a wiring closet to the access point.

Access point signal strength was surprisingly great even when the unit was positioned far from the center of a large interior space, at a spot determined more by connection convenience than signal optimization. The signal diminishes little in passing through wood-frame walls, ceilings and floors. A foot or two of brick or masonry wall are not enough to stop a signal, though there is a noticeable drop off. Generally, it takes at least four or five double-faced metal book stacks to cause a serious drop off.

Beware of steel and aluminum framing sometimes used in new construction. At the Belgrade Public Library, a small room enclosed in such framing prevented a useable signal from reaching a laptop just outside the room. Conversely, we got acceptable signal strength through at least 6 feet of brick and masonry in the basement of Lewiston Public Library.

The bottom line on siting the access point — do an actual walk-around. Moreover, use both site monitoring software that estimates signal strength, and pull up actual web pages to confirm that actual behavior tracks what the moving graphs report. Expect the unexpected — both surprisingly good reception in remote locations and the occasional blind spot. Determine a final access point location on your observations.

Questions may be directed to Karl Beiser, Library Systems Coordinator, Maine State Library, by writing POB 2145, Bangor, ME 04402, calling: 207-581-1656, or e-mailing Beiser@maine.edu.

Driver's Licenses, cont. from page 1

The new service, as well as information about eligibility requirements and exemptions, is available at www.maine.gov, the state's official Web site. Generally, anyone purchasing a replacement digital license is eligible for this new service. Citizens renewing their licenses between the ages of 23 and 40, 46 and 51, 58 and 61, and those who processed their last digital renewal at a motor vehicle office are eligible to use the service. In addition, citizens who were at least 23 years of age or older when their last state identification card was purchased may use the new service for renewals and replacement requests. With regard to state identification Cards, generally anyone who was at least 23 years of age or older when their last state I D card was purchased may use the new service.

The on-line system is easy to use, and citizens can print out a temporary driver's license that is valid for 60 days. Electronic driver's license and identification card requests are typically mailed 2-3 weeks after the request is received. The system also accepts Visa and MasterCard payments, which are processed through Maine.gov's secure payment server.

Secretary Gwadosky noted that Maine is one of only three states to provide both on-line driver license renewals and replacements. "We are convinced this will become a very popular service and are excited to offer it. The Internet is fundamentally changing the relationship that people can enjoy with government and this new on-line service is one of those applications that can help lead the way."

For more information about this new service, please contact Deputy Secretary of State, Doug Dunbar at (207) 626-8404 or Doug.Dunbar@maine.gov.

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**Funded by an Innovative Technology grant from the Maine Telecommunications Education Access Fund (MTEAF - the entity created by the Public Utilities Commission and the Legislature that supports the Maine School and Library Network), the Maine State Library’s Walk In Wireless in Public Libraries project has equipped participating libraries:**

1. with wireless networking hardware and a preconfigured wireless notebook computer, and
2. provided on-site configuration assistance from Maine State Library staff.

For additional information, including a list of participating libraries, please visit: http://www.maine.gov/msl/infotech/wireless/walinwireless.htm.

**Big Blue Meets Inspector Gadget**

"Here in what IBM calls its Gadget Lab are devices that sit at the intersection of the marketplace and IBM's vast patent portfolio. … IBM hopes these demo devices will turn into real products, albeit in most cases manufactured by another company. In addition to generating license fees, IBM hopes they will spawn demand for its big-iron infrastructure products. Wherever there are networked bathroom scales and pillboxes, there must be a server and some database software in the background. IBM figures." [http://www.computerworld.com/hardware/topics/hardware/story/0,10801,94287,00.html?has=ST#94287](http://www.computerworld.com/hardware/topics/hardware/story/0,10801,94287,00.html?has=ST#94287)

Anthes, Gary H. "IBM works on gadgets and gizmos, too." COMPUTERWORLD 5 July 2004. p 25
LETTER TO THE EDITOR

I learned about this site, http://www.smartcalorie.com, in a diabetic health magazine, and I thought it was worth passing on to your readers. This free program provides nutritional tools which track calories, fats and carbohydrates. The spreadsheet also tracks exercise and has a section for modifying recipes. The workbooks were developed by Doctor Thomas M. Manger, M.D., Ph.D.

I downloaded this program, which requires Excel version 2000 or greater, to my home PC and really liked all the features. The price is right also!

Just click on this site to learn more or download to your own home PC. Instructions are included, and, as a friendly reminder, I suggest you do a virus scan prior to opening downloaded files.

Leda Cunningham
Computer Programmer
Department of Labor

Editor’s Note: This software should be considered for use on home machines only, and not to be installed on State of Maine owned computers.

What Is All The Talk of Security?

BY GINNIE RICKER

From reading the last issue’s article, I understand what security is, but as an employee how am I supposed to help?

You can ensure that you are protecting the State’s information from unauthorized disclosure of confidential or sensitive information (Confidentiality), from unauthorized modifications to systems or information (Integrity) and from disruption of services or procedures (Availability).

How do you do this?

• Be familiar with people sitting at employees’ desks, or in your facility. If visitors are to have a badge, ask to see it. Be concerned with unfamiliar people in secured areas.

• Do not disclose information in writing, over the phone or in person if you are not sure of the classification of information.

• Be careful when opening e-mail that is not familiar. If you question the authenticity, follow your agency’s procedures.

• Make sure your agency’s critical systems are not available to unauthorized users, or that “generic” log-on passwords and usernames are not used.

• Document, Document, Document. One of the highest risks in an organization is the fact that people don’t document processes or procedures. The availability of information for anyone to perform a task is critical. When people keep the information in their head, they put the organization at risk when they are out or retire.

• Ensure that your critical systems have the necessary continuity equipment, i.e. Uninterruptible Power Source, battery packs, or fail-over procedures.

Please look for more Customer Service notes regarding Information Security over the next few months. Ginnie Ricker (Ginnie.Ricker@Maine.gov) has been tasked as Project Manager for the Department of Administrative and Financial Services’ Information Technology Security Policy Project.

1 http://www.maine.gov/newsletter/june2004/what_is_all_the_talk_of_security.htm

Challenge

BY LESTER DICKEY

I have in my hand a number of current US coins. I cannot make change for $1.00, but I have more than $1.00 worth of change. In fact, I have the largest amount of money for which this is possible. For a chance at the pizza, how many coins do I have?

For an extra challenge, how much money do I have?

Please e-mail Lester Dickey with your answer and your name, phone number, and the organization for which you work. Or call Barbara Buck at 624-9501. The winner will be drawn from all the correct entries and will receive a FREE donated pizza, either from CJ’s Pizza or from the EDOC Cafeteria. All answers must be in no later than the July 30th.

Last month’s challenge brought 52 submissions, with 34 having correct answers. The winner, chosen by random drawing, is Helene Whitehouse of the Maine Emergency Management Agency.

The answers to last month’s Challenge: a) Marie is 29 years old. b) A few of you came up with some on your own; others looked on the internet. See the list of 543 of them at www.marlodge.supanet.com/wordlist/hgrlist.html. There are six (address, compress, overage, primer, recess, windy) that you found that are not on this list.

Opportunity

The Accessibility Committee is recruiting a new member who is familiar with assistive technologies – particularly speech recognition software - which make computer use possible for those with physical impairments.

Applicants need to be a state employee who is interested in promoting access to information technologies for those with disabilities. The Committee meets the last Monday of each month from 2:00-4:00 pm. Members also agree to participate in one of the standing sub-committees.

Please refer to the Maine State web page on Accessibility and Disability Resources http://www.maine.gov/portal/accessibility.html for more information. If you have questions, or would like to apply, e-mail a letter of interest and resume to: Valton.Wood@Maine.gov or Carolyn.O.Bebbe@Maine.gov.

Interviews will be scheduled during September. We look forward to hearing from you.
Maine Telemedicine Services

BY RON EMERSON

Maine Telemedicine Services, a not-for-profit agency of the Regional Medical Center of Lubec, currently works with more than two hundred sites throughout the state of Maine. Videoconferencing and telemedicine are being utilized by many governmental and non-governmental organizations to provide a cost-effective way of dealing with the large geographical barriers we face in our large, rural state. Currently, state organizations in the network include offices within the Departments of Health and Human Services, and Corrections.

Video conferencing is being used for multiple purposes to include administrative, educational, social service and clinical telemedicine. Due to the geographic spread of Maine state government sites, video conferencing has been crucial to providing an effective means of communicating. Education over video is performed regularly. All video units within the network have the capability of running PowerPoint, VHS and DVD presentations to other sites.

Clinical Telemedicine continues to develop within the state of Maine. Medical specialists are generally located in the larger urban areas. Telemedicine provides a means of increasing access to rural areas that previously didn’t have the option of receiving specialty care in their local community. Maine Department of Corrections is developing telemedicine applications to better serve prisoners throughout the state. Many private organizations utilize telemedicine to offer services that include psychiatry, primary care, pediatric neurology, genetics, wound care, endocrinology, mental health counseling and adolescent psychiatry.

If your organization is interested in video conferencing, please feel free to contact Ron Emerson, Director of Field Operations for Maine Telemedicine Services by calling 287-4060.

1 Non-governmental agencies include hospitals, rural health clinics, private mental health organizations, physicians’ offices, social service agencies and other private entities.

On 3/17/04 Governor Baldacci signed an executive order, which requires, in part, that information describing the availability and use of video-conferencing equipment for state offices be disseminated, and that agency and department heads encourage the use of technologies that reduce state employee vehicle miles traveled.

See http://inet.state.me.us/vtc/ for a map which highlights televideo sites throughout Maine.

Intranet Overhaul at the Retirement System

BY BOB DRURY

For about two years, employees at the Maine State Retirement System (MSRS) have had access to an Intranet containing a hodgepodge of information about the System, from staff directories and floor plans to information about our history, mission, and values. The resource, dubbed StaffNet, served as a repository of information from the very useful to the purely historical, and was not always as organized as one would like.

Thanks to a collaborative effort between Information Technology and Communications staffs over several months, MSRS employees now have access to a reorganized, revitalized StaffNet. This new site is designed to put key resources within a click or two of the homepage through new pop-out menus and a streamlined design.

Before taking on the task of overhauling the Intranet site, the first step in formulating our strategy was to re-examine what we wanted the new StaffNet to do. Not only did we want the site to be a distribution point for organizational information to employees, but we also wanted to re-create a tool that would serve as a convenient, adaptive, and growing resource for all of us who work at MSRS. We set out to overhaul the site to ultimately help improve employee productivity, reduce costs, and create a sense of pride within the agency.

Some of the new features include searchable on-line versions of the MSRS statutes and rules; an expanded human resources section with interactive forms; agency/departmental - continued on page 7 -
WIC Web Ed – Nutrition Education

BY DR. SUSAN N. DONAR

Maine’s Women Infants and Children’s (WIC) Program web-based, interactive “Nutrition Education” modules were developed in collaboration with the University of Southern Maine’s (USM) Muskie School, Institute for Public Sector Innovation (IPSI) Distance Delivery Office. These modules were developed to utilize the Web in delivering nutrition education to Maine WIC clients.

The modules are interactive and focused on engaging parents with a 12-36-month old child enrolled in the WIC Program. A wide range of “Eating and Feeding” and “Developing and Growing” information is presented in the modules and addresses WIC participant barriers to nutrition education on two levels:

a) Reduce the geographical (rural isolation), time (limited hours of operation), and financial (e.g., lack of reliable transportation, child care) barriers to obtaining nutrition information at clinic sites, and

b) Provide relevant nutrition education on the Web.

The sub-title of Maine’s WIC Web Ed Project is “Give People What They Want, When They Want It.” Thus, WIC Program staff and Muskie researchers tested the hypothesis that WIC clients would find value in obtaining nutrition and child development information from the convenience of their homes or at public libraries, thereby increasing levels of participation in WIC when children turn one year old. (After a child turns one, the financial value of the WIC food package decreases significantly.) This project also serves to collect and analyze data about WIC clients’ use of the modules that will inform the federal and other state WIC Programs as they design Web-based education options for clients.

Data Collection and Analysis

This statewide project includes WIC’s ten local agencies as either an experimental or comparison group. The research design will:

1. Evaluate the effectiveness of the Web-based education in affecting positive change in nutrition-related knowledge, beliefs, and intended behaviors;

2. Assess its impact on access to nutrition education for WIC clients;

3. Determine the relationship between accessing Web-based nutrition education and maintaining WIC Program participation.

Data obtained via clients’ use of Web modules is being analyzed to ascertain if their nutrition knowledge has changed from the demographic information initially provided. This analysis will help determine effectiveness of on-line learning for WIC clients that might ultimately be replicated nationally. As clients accessed the module, additional data was collected regarding how often the person visited the Web site and how long s/he remained there.

Once the pilot period ends, additional data will be gathered regarding knowledge attainment and retention, ease of use, likes/dislikes with Web learning, accessibility and availability, and if the client would like the opportunity to learn additional information via the Web. Additionally, a “Management Procedures and Daily Log” has been provided to WIC Office staff to record the status of WIC client enrollment, questionnaire completion, and pre-test completion.

Use

Enrollment is ongoing throughout the pilot period, and client use of modules is continually monitored and reported monthly to WIC Offices. Additionally, as each module was added, enrolled clients were encouraged to visit the age-appropriate information by WIC program staff and via e-mails sent to clients enrolled in the study every three to four weeks. The e-mail messages encourage non-enrolled clients to find answers to nutritional or developing and growing questions.

A demonstration WIC Web Ed Site (http://www.ipsitech.org/wic) was designed to allow project staff and others access, while not affecting the data accumulation. This demonstration site provided an opportunity to “market” this learning approach to other potential clients as well as providing project staff with “quality check” opportunities.

Design Considerations

A graphic artist researched layout, color schemes and maneuverability to accommodate WIC clients and any visually impaired Web site users. Additionally, each module met the following effective online design criteria:

• Colorful
• Interactive
• Personalized (as much as possible)
• Easy to Follow
• Readability Level of 6th Grade
• Focused Information on Each Page
• Links for Additional Information
• Clear Instructions
• Easy to Navigate
• Maximum of 15 Minutes to Complete Module Topic
• Interactive “Review” of Key Points (on-line test)

The WIC Web Ed Project has the following potential outcomes:

- To revitalize nutrition education offerings nationwide.
- Allow for self-directed learning.
- Offer education relevant to individual’s needs.
- Use interactive activities as central to learning.
- Allow for continuous collection of data that will inform continuous quality improvements in information and technique.

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WIC Web Ed, cont.

Final Product  
Initial project feedback has been very positive. Clients report enjoying Web site accessibility, and fewer trips to the WIC Office. Follow-up data indicates clients who obtained nutrition, and developing and growing information via the Web learned and retained more than those who made regular office visits.

However, the overall usage of the WIC Web Ed was below anticipated levels. Throughout the project, incentives were offered to encourage local WIC Offices to enroll clients; and client incentives encouraged Web site access, and on-line completion of training modules.

Lessons Learned  When initially considering the idea of WIC information being available via the Web, counselors and clients anticipated convenience, and a valuable resource. However, as the modules became on-line, WIC clients gave the following reasons for not accessing them: “I went to another Web site for information.” “I asked someone.” “Haven’t had time.” “No Internet access at home.”

Based on the initial follow-up data, suggestions to encourage future Web learning projects include:
• Provide participants guided success opportunities.
• Address issues of personal interaction.
• Provide follow-up for non-participating individuals.

For more information about this project and other distance delivery projects, call Sue Donar, Distance Delivery Coordinator, USM Muskie School, Institute for Public Sector Innovation by calling 207-626-5203 or visiting the Office’s Website at www.ipsitech.org/dd.

To Your Health and the Environment  
BY ANDREA LANI

It’s no coincidence the ozone and swimsuit seasons occur simultaneously. The same hot sunny weather that causes us to strip down, also causes air pollutants from our vehicles to combine to form ground-level ozone-polluted air - which can make breathing difficult, and aggravate lung problems.

It is a coincidence that activities which help reduce waistlines (and enhance the look of those swimsuits) are the same ones which help reduce ozone and other forms of pollution. Try the following to improve both the swimsuit and ozone seasons.

Take a hike. Getting out and enjoying nature is the best way to gain an appreciation for our environment and get inspired to help protect it. Walking a mile to the general store and back will burn at least 150 calories1, even at a slow pace. Increase the distance, add a load of groceries, or walk faster and you burn even more.

Ride your bike.
For trips a little too long for walking, bike riding provides many of the same health and environmental benefits. Say the general store is five miles away... a leisurely 10 mile bike ride will burn up over 470 calories.

Go jump in a lake.
In Maine, 99.5% of lakes are clean enough to meet the swimmable classification, so we don’t have to think twice about swimming almost anywhere. A leisurely swim can burn at least 350 calories in an hour. Paddling around in a canoe for an hour burns over 175 calories, while more moderate canoeing burns over 400 calories.

Every time we choose to walk, bike, paddle or swim instead of driving or power-boating, we reduce the amount of ozone-forming pollution that goes into our air, in addition to burning calories. That’s good news, because ozone air pollution from sources like cars and boats can irritate the eyes and the respiratory system, reduce lung function, inflame and damage the lining of the lungs, and aggravate lung disease and asthma.

Besides reducing pollution, physical activities can provide a wealth of health benefits. Studies show that regular exercise can reduce the risk of heart disease, stroke, high blood pressure, noninsulin-dependent diabetes, obesity, back pain, osteoporosis, and can improve your mood and help you better manage stress.

But remember, when air quality reaches unhealthy levels, avoid strenuous outdoor activities to protect your lungs. Check the air quality forecast at www.mainedep.com (click on Ozone) or call the hotline (1-800-223-1196) and plan outdoor activities to coincide with good air quality.

So when that summer sun beckons, get out and do something, but leave your car behind for your health and the environment.

Author Andrea Lani, is an Environmental Specialist with the Maine Department of Environmental Protection’s Bureau of Air Quality.

1 Calories burned are based on a 135-pound adult. Calorie and health information from www.nutristrategy.com.
Change is Coming to the COLD System

BY PAUL SANDLIN

The Computer Output to Laser Disk (COLD) system has been in production since June of 1999. The major goal of the system was to decrease the volume of printing and microfiche. In this it has been quite successful. The system currently serves as an electronic report archive for Maine Revenue Services, MF ASIS, and for BIS’ own Telco Billing system on the IBM z/OS system. The archive currently holds about 20 million pages of stored reports and is growing by 420,000 pages per month.

Unfortunately the version of software that drives the system, IBM’s OnDemand for OS/390 v2.1, will not be supported beyond April of next year. Upgrading to the latest version of the software requires a major conversion effort and comes with a steep price tag which gives BIS the opportunity to cast a wide net in exploring upgrade/replacement options.

The current archive is physically located on the IBM mainframe, which explains why its customer base is limited to IBM initiates. The administration of stored reports initially required a user with good mainframe CICS skills. Although a thick Graphical User Interface (GUI) client was available to users when COLD was initially implemented, the use of the GUI client was rejected because of desktop support concerns. As a result, the only access method was through CICS and the TN3270 green screen terminal emulators – not the most elegant interface as we enter the 21st century. In 2001 a Web-based client was installed, which made the application much easier to access, but which also caused difficulty with the presentation of some reports.

This spring a group of current users met to develop a list of requirements for a replacement system. The meetings were very productive, and the participants provided much positive and negative feedback about the features of the current software. In looking for a replacement for COLD, users were particularly concerned about how well the application integrates into their desktop environments, and they identified many potential improvements in this area. Users want an archive that functions as a seamless extension of their workspace and does not require individualized training, tweaking, and installation of client software at the desktop.

Migrating to a new application does pose an inconvenience. However it is unavoidable since we must migrate away from the soon-to-beunsupported release of COLD. The State now has an opportunity to move to a better report archive and distribution system. Technology and the marketplace have come a long way since 1998 when the current system was acquired. There are so many new products that are “bigger, faster, better, and cheaper” that it would be difficult not to realize improvements in functionality, access to data, ease of maintenance, and overall cost.

Input on the prospective changes to the COLD system is very welcome and should be directed to the author by e-mailing Paul.Sandlin@maine.gov.

Retirement System Intranet Overhaul, cont.

from page 4

newsletters and procedures manuals; and updates on the agency’s major projects. Use of the site will reduce or eliminate production and distribution costs of company materials such as employee handbooks, work guides, calendars/schedules, and training manuals. In addition, employees are saving time by getting the answers to frequently asked questions right on the spot. Already, we’ve had positive feedback from staff commenting on how quickly and easily they can access information.

In the months to come, we hope to expand the resources available to MSRS employees through this medium. StaffNet will evolve and grow with users’ needs. The more participation we have on the site, the more employees will rely on it—and the more they’ll benefit from it. One of the biggest benefits of an Intranet site is its ability to give users access to timely information. We are making certain to not only keep the site pertinent and interesting, but also to keep the content up-to-date. This will help all employees do their jobs more effectively and economically.

Bob Drury is the Communications Associate at the Maine State Retirement System where he participates as part of the Web-collaborative and manages the content for the agency’s internal and external web sites.

Maine State Museum, cont. from page 8

ferent periods, putting in details that made each piece recognizable and giving dimensions from the object list. When it came time to actually build the exhibit, the shop crew knew each piece would fit in the cases perfectly, because it fit on the screen. He also used Lotus Approach to organize the database for the curator so that information remained after the exhibit was dismantled. Any of these designs can be exported as attachments if other museum colleagues want to see the “virtual exhibit” even though the real one no longer exists.

Scott does the space design and Don fills in the details and graphics, but their work is integrated throughout any project. The layout on the computer saves time, crews’ backs, and objects because they don’t have to be moved repeatedly. One can set up views precisely and know that they are accurate. Scott balances the length of the exhibit exposure, versus the time it takes to make it, to determine which design program to use. Scott also uses his e-mail to keep a project on track, inform outside architects, contractors or other State agencies of any needs we have. And the Internet is an incredible resource for building codes, materials searches and price comparisons.

Questions? Contact Author Kris Weeks Oliveri, who is the Coordinator of Volunteers at the Maine State Museum (since 1985) by calling 287-2302 or e-mailing kris.weeks-oliveri@maine.gov.
Various Technologies Used at the MAINE STATE MUSEUM

Although the Maine State Museum houses artifacts collections that date back thousands of years, day-to-day operations require very modern computer applications. Collections data and organization are obvious candidates for computer use. The less obvious uses include many aspects of graphic design and exhibit planning and preparation.

Donald Bassett, Art Director for the museum, has used a computer for art and graphics publications for the last 12 years. He says he was “dragged kicking and screaming from his drawing board” but soon realized what a marvelous tool computers were. When a job such as a brochure, or new set of labels had to be sent out to be typeset, it might take three to five weeks for the material to come back. Errors caused the whole process to be repeated. Now most of the work is done in-house the same day, or within a week, with nearly complete control over the end product because adjustments can be made quickly. When jobs were sent out there might be six or more people involved outside of the agency. Now the work can be printed with “dummies”, tested, corrected or adjusted to fit new criteria. One’s “mind’s eye” tells us something might look good but with a real sample in place we can see what the finished look approaches with 85-90% accuracy.

Before choosing the machine and programs he uses, Don surveyed the printers asking what he would need to make his job more efficient and compatible with them. Don now uses a G4 Macintosh with a medium format color printer. He uses Adobe Photoshop for manipulating photos, Adobe Illustrator for artwork and QuarkXpress for word publishing and printing. These programs produce documents that can go directly to the printers.

- Reducing the turn-around time,
- Giving us the control and accuracy we require, and
- Minimizing costs because the printing company does not do the layout.

Don also uses a Photolook3 scanner for high resolution scans of photos, documents or objects. He uses these for small publication scans which saves time and money again because there is no need to send these jobs out. Sometimes he still “cuts and pastes” then scans the whole to get the effect he wants. Don believes the computer he uses saves the State a minimum of five times its purchase price per year because sending the work out to be typeset and laid out is so costly and time consuming. He exclaims “To integrate art and graphics with the computer from start to finish and have near full control-ah boy!”

Another staff person, Operations Manager Scott Mosher, uses his Dell WorkStation for floor plans, designs for exhibit construction and space modification. He also started using computer-aided design about 12 years ago because he needed basic floor plans of the building. He took two courses in AutoCAD from the Kennebec Valley Community College in Fairfield, one in 2D design and the other in 3D. In his first course, he redesigned the Museum store showing the existing space, and suggested changes in his design as overlays.

The store was expanded using Scott’s design in 1997 from 282 sq. ft. to 649 sq. ft. with 110 sq. ft. of storage space. His second course gave him the opportunity to use 3D design in Auto Walkthrough to visualize a virtual walk through of a furniture exhibit. He drew the furniture from the digital store plans of the building. He took two courses in AutoCAD from the Kennebec Valley Community College in Fairfield, one in 2D design and the other in 3D. In his first course, he redesigned the Museum store showing the existing space, and suggested changes in his design as overlays.

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