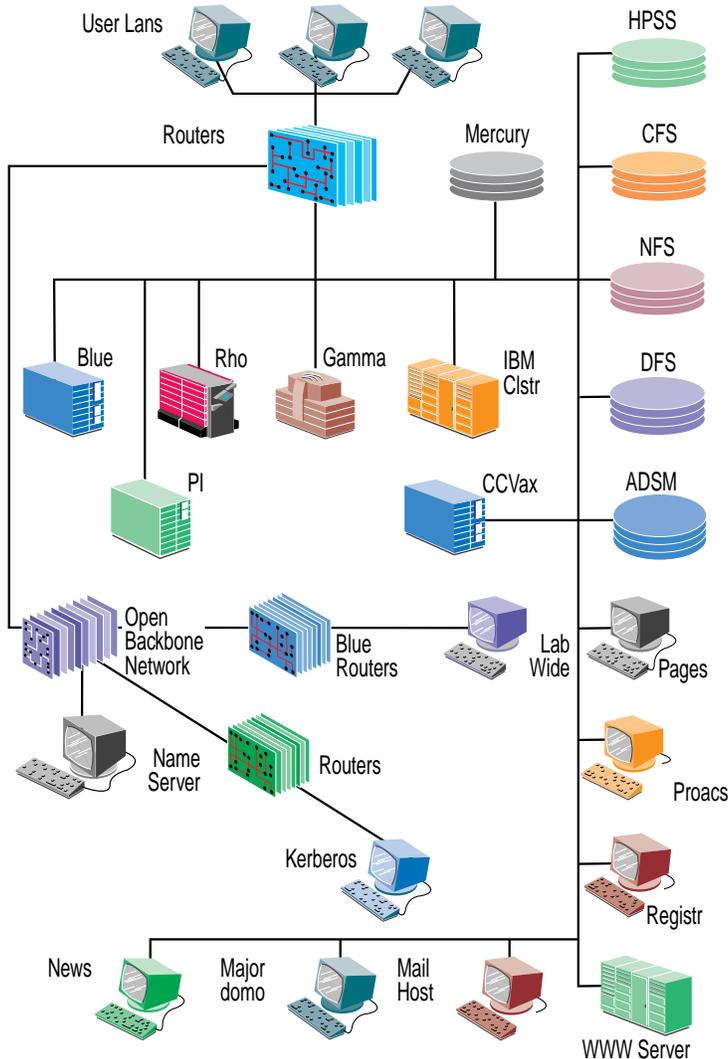


BITS

computing & communications news

MAY 1997

COMPUTING, INFORMATION, AND COMMUNICATIONS (CIC) DIVISION • LOS ALAMOS NATIONAL LABORATORY



The Integrated Computing Network News (ICNN) project was designed to facilitate communication between the customers who use ICN services and the administrators who maintain those services. One facet of this project is the Web page shown here which depicts the configuration and status of the various ICN services. The icons in this simplified schematic automatically change to indicate the status of the particular service they represent. If machine Gamma were down, for example, its icon would be covered with red hatch marks to indicate that status. The goal of ICNN is to use the Web to provide accurate and timely information about ICN services. The Project Leaders are CIC-7 employees Rick Light, Susan Markus, and Tyce McLarty. See the article on page 3 for details.

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Customer Service Center(505) 665-4444 or cichelp@lanl.gov

Because of the wide variety of CIC computing services, numerous facilities are available to address your questions. If you are uncertain whom to call, you can always call the Customer Service Center (CSC). CSC consultants are trained to either answer your question or locate someone who can. To reach the appropriate consultant, dial 665-4444 and make your selection from the following choices:

Option 1: New user topics including e-mail, passwords, registration, and World Wide Web.

Option 2: Labwide Systems such as Travel, Time and Effort, and Purchase Cards.

Option 3: Scientific computing, storage systems, and networking.

Option 4: Classroom instruction and training.

Option 5: Desktop Consulting for PC and Macintosh software and network configurations.

Consulting Via E-Mail

Customer Service Center.....	cichelp@lanl.gov
Scientific and engineering computing.....	consult@lanl.gov
Administrative and business computing.....	labwide@lanl.gov
Passwords and registration.....	validate@lanl.gov
Macintosh computing.....	Mac-help@lanl.gov
PC computing.....	PC-help@lanl.gov
UNIX computing.....	UNIX-help@lanl.gov

Other Useful Numbers

Advanced Computing Laboratory.....	665-4530
Central Computing Facility.....	667-4584
Network Operations Center.....	noc@lanl.gov or 667-7423
Telephone Services Center.....	667-3400

The CIC-6 Training, Development, and Coordination Team

The Training, Development, and Coordination Team of CIC-6 provides computer training tailored to meet the needs of the LANL user community. Our areas of expertise include the following:

- Communication (e.g., Eudora, Meeting Maker),
- Labwide Systems (e.g., Data Warehouse, Travel, Time & Effort),
- World Wide Web (e.g., HTML, Netscape, On-line forms), and
- Advanced Technical Computer Training (e.g., C++, Java, Perl).



Training Team Members: (back) Beverly Faulkner, Vickie Brown, Lisa Gardner, (front) Tim Serna, Nikki Watson, and Leslie Linke.

Other types of computer training are offered through the University of New Mexico-Los Alamos branch (e.g., Microsoft Word, Excel, Windows 95). We also have two Division Training Generalists who are responsible for coordinating ES&H training for CIC employees. Most of our training is provided in a hands-on classroom setting, with appropriate facilities including Mac, PC, and UNIX workstations. We also offer presentations on various computing topics that we can bring to your organization's location. Fees for training vary depending on the size, subject, format, and length of the training.

To register for a class or to receive additional about our training services, call 667-9559 or 665-4444, option 4. For Advanced Technical Computer Training, call Leslie Linke at 667-9399. If you're Web friendly, please visit our home page which offers tons of information including a current training calendar, course descriptions, and on-line registration. Point your browser at

<http://www.lanl.gov/divisions/cic/ComputingAtLANL/training/teampage.html>

Personnel and Facilities

Currently, our staff is made up of four trainers, a coordinator, and a high school co-op student. Team leader Vicki Brown has been with the Lab for 8 years. Her areas of expertise include Time & Effort, Lotus Notes, and RPM (resource planning module). Like the other trainers, Vicki is responsi-

ble for teaching computer classes and developing the training manuals and other learning aids that supplement her classes.

Our Internet/Web guru, Lisa Gardner, has trained dozens of people to use the Internet programming language—HTML. She is also involved in other Web projects including CIC-6 Web pages, JIT (Just-In-Time) catalog, and the Travel and Netscape classes.

Beverly Faulkner, a trainer at the Lab for 6 years, teaches classes on EDS (Employee Development System), Data Warehouse, Infomaker, and WRS (Work Request System). She is also one of the Division Training Generalists for CIC.

The newest team member is Nikki Watson, who offers classes on Meeting Maker. Nikki belongs to the Information Architecture Desktop Standards Team and the REDI (Remote Electronic Desktop Integration) Team.

Leslie Linke can be seen (if you don't blink) running back and forth between classrooms in the LDCC, the CTI, and the Los Alamos Inn. As coordinator of Advanced Technical Computer Training, she sets up, schedules, and advertises specialized classes such as C++, Java, Perl, Solaris System and Network Administration, and UNIX. Tim Serna, our high school co-op student, maintains our registration books, EDS records, and class materials.

We currently maintain and use three classrooms:

Otowi Classroom

Location: TA-3, Bldg. 261, Room P180
Seating Capacity: 18
Security: Open area
Computer workstations: PC & Mac

CTI Classroom

Location: TA-3, Bldg 200, Room 115
Seating Capacity: 20
Security: Open area
Computer workstations: SGI & PC

LDCC Classroom

Location: TA-3, Bldg. 1498, Room 205A
Seating Capacity: 16
Security: Closed area
Computer workstations: Sun

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The End of an Era: No More Micoms

Between 1983 and 1996, much of the Lab's computer information infrastructure was based on the Micom port, which got its name from the first Micom Port Selector 600 switch. At the time, the 9600 baud Micom switches were incredibly fast and provided serial, multi-partition access to scientific and administrative resources on the Lab's Integrated Computing Network (ICN).

At its height, the Lab's Micom network consisted of 17 switches, serving over 6,000 users in Open, Administrative, NS (DoD), Secure Unclassified, and Secure Classified networking partitions.

As time went by, many areas of the Lab gained access to Ethernet switches, whose 10 megabit/second transfer rate made Micom's 9600 bits/second seem positively glacial. The decision was made to phase out the Micom ports in favor of Ethernets. For the many people who were comfortable using the Micom ports, this was not a popular decision. But due to rising costs for supporting the now obsolete equipment, as well as the fact that the equipment was no longer being manufactured, there was no other good choice.

A cross-group team consisting of people from CIC-4, CIC-5, and CIC-6 was formed to plan the removal of the Micom ports. Efforts were made to identify the current users of the Micom ports, to ensure that they had network connectivity before the removal of the ports, and to train them in the use of the new connection method.

Several other projects grew out of the Micom project, among them the BITS Special Edition: Introduction to Computing at Los Alamos (the first edition won a state-wide graphic design award from the Society for Technical Communication, and the second edition is currently in prerelease review). Another byproduct was the development of an introductory class to the ICN, which is offered through the CIC-6 training office.

Change is never easy, and removing the Micom ports was no exception. It took a great deal of organizational and individual user support, but slowly, users were removed from the Micom system. On February 6, 1997, the last Micom port selector at the Laboratory was turned off.

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The Integrated Computing Network News (ICNN) Web Site

On May 5, 1997, the Computing Group (CIC-7) will release a new Web site designed to be a focal point for communication between the customers who use ICN services and the CIC support teams who maintain those services. This new site is called Integrated Computing Network News (ICNN), and it was developed by the Scientific Computing Environments (SCE) Team of CIC-7, along with several other teams from CIC-5, 6, 7, 8, 11, and 17. The May 5th implementation of ICNN will be for the Open partition, while a Web site for the Secure partition will be released on May 19th. Our intention and desire is that ICNN will provide an all encompassing view of the ICN and its production services. The location for this new site is <http://www.lanl.gov/icnn>. From the LANL home page, you can reach ICNN via the following path: Computing/CIC Organizations/CIC-7 Computing/SCE. Major features of the ICNN are described below (see Figure 1).

Status of Machines and Services

The Status page provides information regarding the current availability of ICN machines and services. The ICNN Open Web site will display only the Open network; likewise, the Secure Web site will display only the Secure network. The status of compute servers, routers, and services are represented through the use of icons (see Figure 2 on page 4). Each machine or service will be in one of three possible states: Up, Down, or Unreachable. The Up and Down states should be self-evident. The Unreachable state means that the machine or service is technically up and running, however, some intermediate piece (e.g., router or gateway) is preventing access.

The status of each machine or service is retrieved automatically every 60 seconds, and the display is refreshed without requiring participation from the user. However, for those customers who want to personalize their

Web page, various user preferences are also available (click on the "Select Display Options" at the bottom the Status page).

Whenever a machine or service is down or unreachable, the Status page will display a message that provides additional information such as estimated time to fix the problem, reason for the problem, and actions being taken to resolve the problem.

The Status page also provides the current status of production jobs running on Worker Machines. This information is updated every 20 minutes.

Information regarding production queue and resource status for each Worker Machine is available as well.

Problem Tracking

The Problems page allows any ICN customer to submit problems, comments, or requests concerning ICN machines and services (see Figure 3 on page 5). These submissions, or tickets, are referred (automatically in some cases) to the appropriate CIC team that can best provide the required support. Our goal is to have all tickets referred to the responsible party within two hours, so that a name and phone

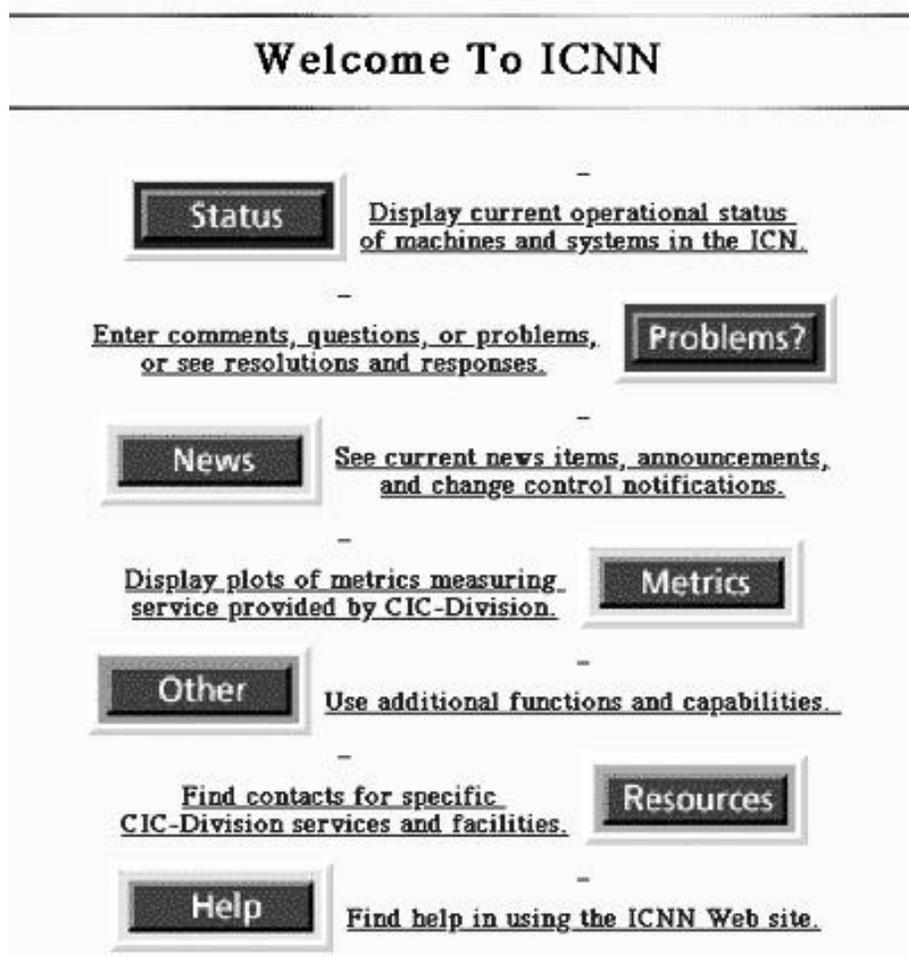


Figure 1. The ICNN Home Page

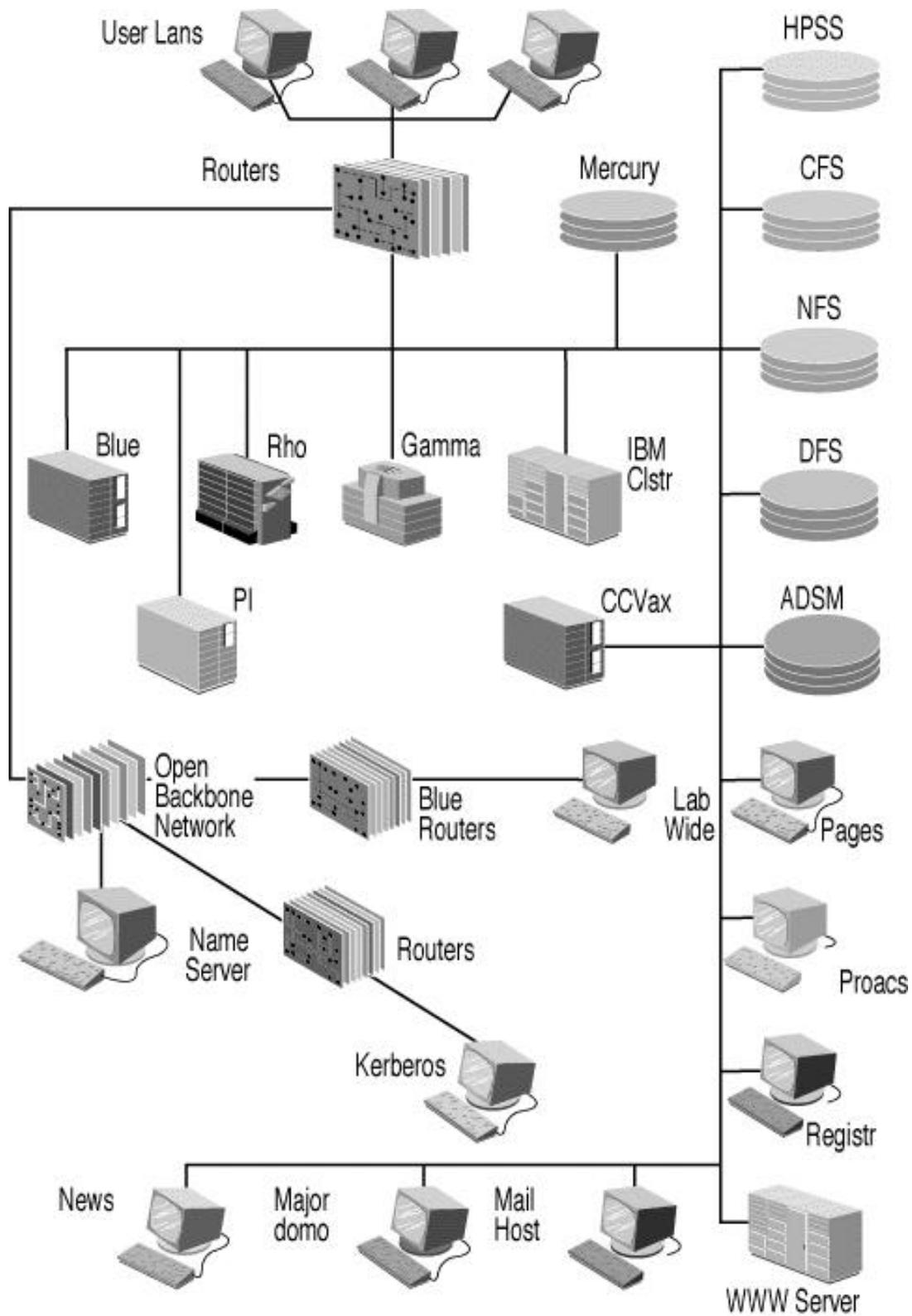


Figure 2. The Status Web Page

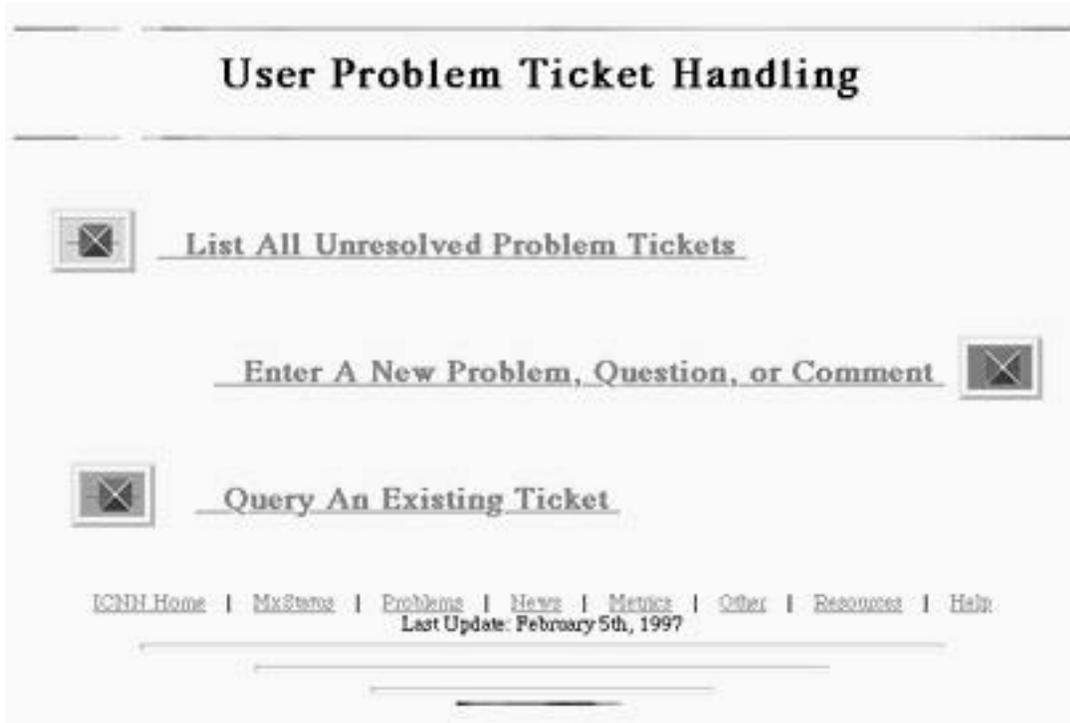


Figure 3. The Problems Web Page

number can be provided as the official contact for that ticket. Customers can then track these tickets to determine their progress and resolution. The repository of tickets can be queried in several ways so that customers will have the ability to view any and all tickets that may be of interest. The repository can also be used to provide contact information for future reference and to help disseminate information about known problems and their solutions. Responding to customer issues quickly and effectively is our highest priority.

News (Under Construction)

The News page will contain various kinds of pertinent information, displayed in logical categories. The first two categories will be (1) General News & Announcements and (2) Change Control Notification. More categories will be added as deemed appropriate. General News & Announcements will contain ICN-related information that is important but not urgent. Change Control Notification will provide information regarding upcoming changes to production machines and services. This information will go through a formal Change Control process before it is published on the Web. Change Control Notification will not be fully operational until June 2, 1997.

Resources (Under Construction)

The Resources page will provide links to additional resources and a listing of "Who's Who" in the ICN. This service will help customers know and understand more about the ICN, how it works, and what services it provides.

Plans for ICNN continue to grow and change. Many new features and ideas are being discussed for inclusion. The ICNN site currently relies heavily on JavaScript 1.1. This means that Netscape 3.0 is necessary to take full advantage of the site's capabilities. If you have questions, comments, ideas, etc., please contact one of the people listed below.

Rick Light, rxl@lanl.gov, (505) 667-0744
Computing Group (CIC-7)

Susan Markus, markus@lanl.gov, (505) 667-8425
Computing Group (CIC-7)

Tyce McLarty, ttm@lanl.gov, (505) 667-6034
Computing Group (CIC-7)

Metrics (Under Construction)
Although the Metrics page will not be operational by the May 5th implementation, big plans for this service are well under way. This service will provide metrics on machine availability, machine response time, Problem Ticket resolution time, and a myriad of other items. The date for metrics availability is set for July 7, 1997. In the meantime, the Metrics page will contain the requirements document, which is driving what will be measured and how the metrics will be represented.

CIC Division Strategies and Tactical Goals

A strategic plan is basically a statement of an end state—where we would like to be in five years and how we plan to get there. The strategic plan leads to shorter term tactical goals and tactics. In turn, these tactical goals and tactics are included in group and division business plans for the current or next fiscal year. The process follows the “Assessment—Strategic Planning—Business Plan—Operations” loop as shown in the illustration on page 7. This cycle is referred to as the CIC Integrated Management Process (IMP).

The CIC Leaders formulated draft strategies for discussion within the Division based on input from white papers, the Baldrige self-assessment, employee feedback from the Checkpoint survey and input on the implied employment contract, information on competitors/collaborators, and results of the 1995 strategic planning session. The Leaders assigned each of the strategies to a Division leadership focus team. These focus teams and their associated strategic and tactical goals are listed below.

Focus Teams

- Workforce
- Customer Relationships
- Enterprise Information Management
- High-Performance Computing
- Information Sciences
- Communication Products
- Division Management and Operations

Workforce: Strategy

Foster a workplace environment that promotes an involved and enthusiastic workforce through collaboration and communication.

Workforce: Tactical Goals

- Improve communication across the Division to ensure a knowledgeable, participating, valued workforce.
- We will create a work environment that will attract and retain a highly qualified workforce to meet the Division’s future needs.
- We will employ a fair and consistent process across the Division for performance appraisals and salary management.

Customer Relationships: Strategy

Establish customer relationships as the foundation of CIC culture. These relationships are characterized by mutual understanding, trust, inclusion, and accountability leading to effective partnerships.

Customer Relationships: Tactical Goals

- Profile current and potential customers (by 5/1/97).
- Identify and document current customer interaction processes (by 10/1/97).
- Develop and implement consistent models for customer interactions across the Division (FY98).
- Promote customer involvement throughout entire P/S life cycle (FY98).

Enterprise Information Management: Strategy 1

Optimize the use and value of information via the electronic workplace.

Enterprise Information Management: Tactical Goals 1

- Provide every Laboratory citizen electronic access to Laboratory information regardless of location.
- Simplify the delivery of applications by implementing a data architecture that makes data manageable and easy to retrieve.
- The customers view enterprise information through an intuitive interface.
- Develop and ensure adherence to standards for production services for the Enterprise Information Systems infrastructure.
- Accelerate the delivery and support of applications by developing an application architecture that encompasses methods and tools.
- Develop and implement an Information Management Program for the preservation, accessibility, and release of the Laboratory’s information.

CIC's Integrated Management Process



Enterprise Information Management: Strategy 2

Maximize the use of commercially available products.

Enterprise Information Management: Tactical Goals 2

- Implement commercial off-the-shelf solutions for major Enterprise systems.
- Implement a process for reusing existing solutions and using commercial solutions for enterprise applications.

High-Performance Computing: Strategy

Increase the Laboratory's role and effectiveness in modeling and simulating complex problems of national importance by providing the computing environment necessary to meet these challenges.

High-Performance Computing: Tactical Goals

- Work with customers to solve problems of national importance utilizing an advanced HPC environment that balances leading-edge technology and production scientific computing systems.
- Be proactive in working with potential customers to obtain funding for new applications.
- Work with SNL and LLNL to leverage tri-lab use of available HPC resources.
- Increase the focus on the Problem Solving Environment to ensure that LANL can meet its time-critical responsibilities as well as ongoing stockpile-stewardship missions.
- Enhance current technology and develop new areas of research in computational science that target the advancement and improvement of LANL's high-performance computing environment.

Information Sciences: Strategy

Elevate Information Science to a recognized Laboratory Core Competency.

Information Sciences: Tactical Goals

- Launch an integrated and aggressive program development effort.

- Design and implement a coordinated capability development effort.

Communications Products: Strategy

Lead communication efforts that strengthen understanding of and support for the Laboratory's contribution to the nation.

Communications Products: Tactical Goals

- Demonstrate that our current portfolio achieves positive results for our customers.
- Expand our portfolio of products/services using contemporary and creative tools, techniques, and strategies that respond to customer needs.
- Expand and deepen staff skills in relevant techniques and capabilities.
- Re-engineer the processes of the Communication Products Focus Team in response to customer needs.

Division Management and Operations: Strategy 1

To manage the Division through an integrated process from strategies to operations.

Division Management and Operations: Tactical Goals 1

Manage CIC Division through a process that correlates assessment and strategic planning, strategic planning and business planning, business planning and operations, and operations and assessment.

Division Management and Operations: Strategy 2

Create a division-wide measurement culture that becomes the foundation of our decision making processes

Division Management and Operations: Tactical Goals 2

By the end of FY2000, the Division Office and every Group, Project, and Center will have measurements in place for all of their key products and services.

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Division Office (CIC-DO)*

Dial-Up TIG for the Administrative Network Now Available

A dial-up Terminal Internet Gateway (TIG) is now available for the Administrative network. The Administrative TIG provides direct access to both Open and Administrative LANL networks, and it has the network-level security required to access "trusted regions" in the Open. The Open non-Administrative TIG is still available as well.

Either TIG provides telnet (TCP/IP) access to terminal users, and desktop computers can be connected to the network with SLIP, CSLIP, or PPP.

The dial-up and log-in processes for the Open and Administrative TIGs are essentially the same. However, the Administrative TIG will only accept smartcard log-ins, and the Open and Administrative TIGs have different phone numbers. Just remember that although the Administrative TIG will prompt you for a "password," you must instead enter a "passcode" via your smartcard.

Phone numbers and rates for the Administrative TIG:

(505) 667-3443	\$0.015 per minute
(800) 973-7598	\$0.105 per minute

The TIG modems can handle speeds from 2400 bits/second to 28,800 bits/second. The rates go up to 115,200 bits/second with data compression. These modems support V.32, V.32bis, V.34, V.42, and V.42bis protocols.

Additional information about the Administrative and Open TIGs is available on the Web at <http://www.noc.lanl.gov/nic/Services/TIG>.

Instructions for accessing and using the TIG is available at <http://www.lanl.gov/Internal/divisions/cic/ComputingAtLANL/net/tig.html>.

The Administrative TIG is part of the implementation for the protected Open network. For more information on the protected Open network see the Tactical Technical Standard IA-6C01: Laboratory Open Network Security Model, which is on the Web at <http://www.lanl.gov/projects/ia/stds/ia6c0110.html>.

Administrative TIG Q&A

1. Who can access the Administrative TIG?

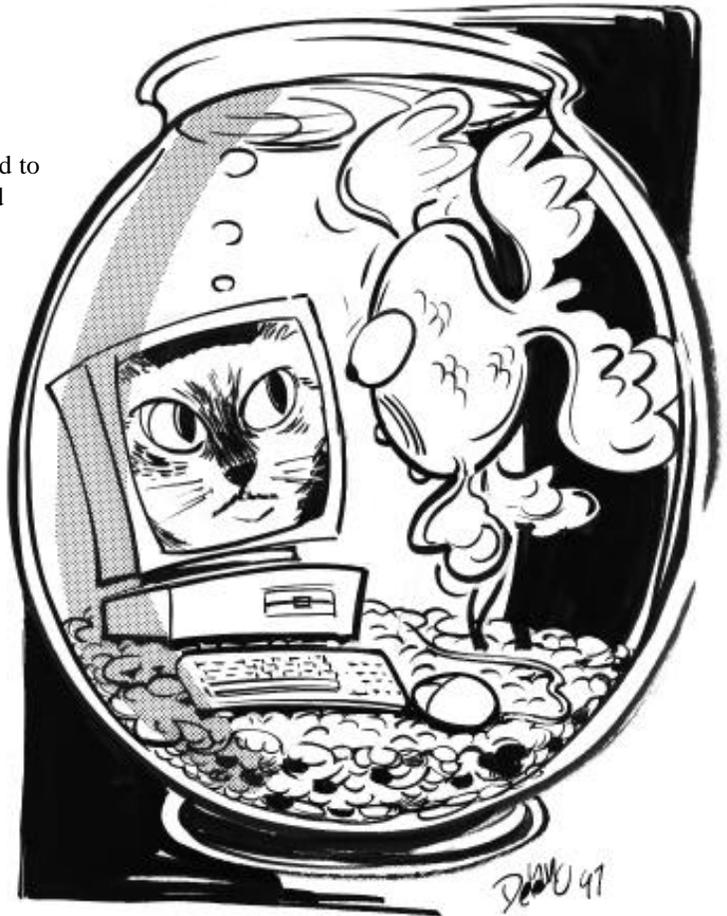
Any LANL user with a smartcard.

2. How can I get a smartcard?

You must be a LANL computer user with an ICN password. Requests for passwords and smartcards are made using the ICN Validation Request form, which is in the back section of BITS. You can also obtain the form by calling the CIC Customer Service Center at (505) 665-4444, option 1 or by downloading the form from the Web at <http://www.lanl.gov/Internal/divisions/cic/ComputingAtLANL/icnvalreg.html>. If you are an uncleared contractor, you will need to get the Access Authorization Packet, which is on the Web at <http://iosun.lanl.gov:7000/devl/htmls/cicforms.html>.

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Customer Service Group (CIC-6)*



Configuring Your Macintosh Keyboard for VersaTerm-PRO

If you are using VersaTerm-Pro to log-on to the IB machine and your function keys don't work, you can reconfigure your keyboard by following the instructions listed below. However, an even better solution is to use TN3270 communication software instead of VersaTerm-PRO. The TN3270 software allows you to log-on directly to IB (if you use VersaTerm-PRO you must first log-on to IA and then IB), and with TN3270 you won't have to reconfigure your function keys. TN3270 is available through the Laboratory's Electronic Software Distribution Web site (<http://www-cic2.lanl.gov/esd/>).

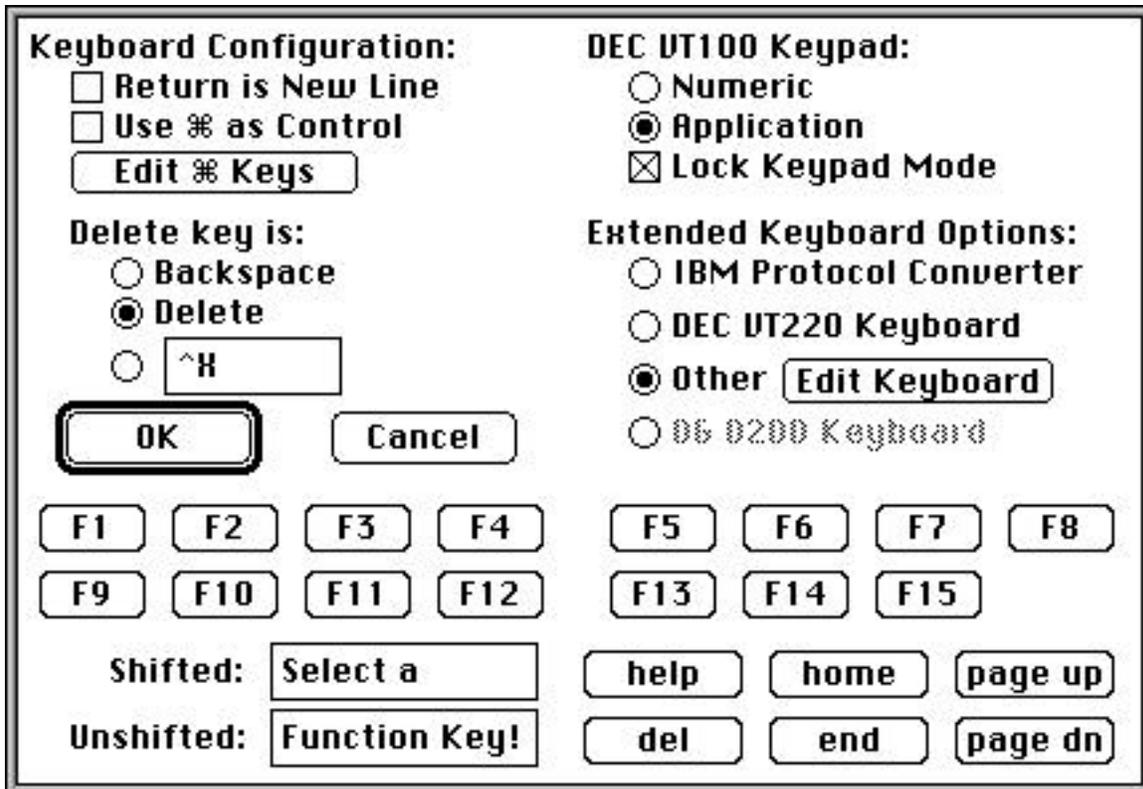
1. Activate VersaTerm-PRO.
2. From the Settings Menu, choose Keyboard.
3. In the Keyboard Configuration dialog box, under Extended Keyboard Options, choose Other.
4. Click on the Edit Keyboard button to bring up the function keys (see illustration below).
5. Click on <F1> and then change $^{[1^M}$ to $^{[1$ in the Unshifted field.

6. Click on <F2> and then change $^{[2^M}$ to $^{[2$ in the Unshifted field.
7. Click on <F3> and then change $^{[3^M}$ to $^{[3$ in the Unshifted field.
8. Repeat this process for function keys 4 through 9.
9. Click on <F10> and then change $^{[10^M}$ to $^{[0$ in the Unshifted field.
10. Click on <F11> and then change $^{[11^M}$ to $^{[-$ in the Unshifted field.
11. Click on <F12> and then change $^{[12^M}$ to $^{[=$ in the Unshifted field.

Note: Function keys 13 through 15 are not applicable.

12. Click on OK to complete the reconfiguration process.

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Customer Service Group (CIC-6)



Keyboard Configuration Dialog Box with Function Keys

JavaScript Observations and Tips: Part II

In the March 1997 BITS article, “JavaScript Observations and Tips: Part I,” I offered some general observations and tips about how to use JavaScript within the context of the Information Architecture (IA) standards and the state of the Web at large. This month, I’d like to offer an update on scripting from the World Wide Web Consortium (W3C) and some practical tips on how to use JavaScript effectively.

As always, in these articles, the emphasis is on how to make things work. And as always (also), the attempt is to find an effective, implementable way of making use of rapidly evolving technologies. (In other words, as usual, whatever I write today is likely to be significantly changed within the next few months—which is a big part of the Web’s magic.)

Update on <SCRIPT> Status

Since the previous BITS article, Dave Raggett’s “Client-side Scripting and HTML” has been issued by the W3C as a W3C Working Draft. This specification proposes extending HTML 3.2 to include the <SCRIPT> element, which brings <SCRIPT> more firmly within the parameters of IA-5815: Laboratory Standard HTML. (It is also a good document for practical hints on how to write scripts to accommodate older browsers.)

The Working Draft specifies three attributes for the <SCRIPT> tag:

- **TYPE**—the media type for the scripting language (e.g., “type=text/javascript”).
- **LANGUAGE**—the name of the scripting language (e.g., “language=JavaScript” or “language=JavaScript1.1”).
- **SRC**—a URL for an external script (e.g., “src=/path/scriptfile.js”).

Currently, of these attributes only LANGUAGE is widely supported (and recommended, since browsers rely on it to avoid attempting to interpret scripts that they are not capable of interpreting). In the long term, however, the Working Draft proposes deprecating LANGUAGE in favor of TYPE, which would enable the <SCRIPT> tag to potentially accommodate binary files in addition to text scripts.

The Working Draft also proposes the following set of intrinsic event handlers (instructions about when to perform an action).

- **onLoad**—occurs when the browser has finished loading the <BODY> of a document.

- **onUnload**—occurs when the browser exits the <BODY> of a document.
- **onClick**—occurs when the user clicks an <A> anchor or a <FORM> <INPUT> field.
- **onMouseOver**—occurs when the user passes the mouse over an <A> anchor.
- **onMouseOut**—occurs when the user passes the mouse off of an <A> anchor.
- **onFocus**—occurs when the user clicks within a <FORM> <SELECT>, <INPUT>, or <TEXTAREA> field.
- **onBlur**—occurs when the user leaves a <FORM> <SELECT>, <INPUT>, or <TEXTAREA> field.
- **onSelect**—occurs when the user selects text within a <FORM> <INPUT> or <TEXTAREA> field.
- **onChange**—occurs when the user leaves a <FORM> <SELECT>, <INPUT>, or <TEXTAREA> field after having changed its value.

Note that the above list seems likely to grow, in terms of both the number of event handlers and the elements they can be used with (the elements listed above are restricted to those that are currently included in IA-5815: Laboratory Standard HTML).

Also note that not all of the intrinsic event handlers are supported in all versions of JavaScript and that both current versions of JavaScript include event handlers beyond those in the list. JavaScript 1.0, for example, does not include onMouseOut but does include onSubmit. JavaScript 1.1 does include all of the intrinsic event handlers but also adds onAbort, onError, and onReset. The widest portability is available from JavaScript 1.0; if JavaScript 1.1 is used, then <SCRIPT LANGUAGE=“JavaScript1.1”> should be specified so that browsers that do not support it will not generate script errors.

Flip, Don’t Ticker

“Tickertapes” (messages that scroll right-to-left through a field and/or the status bar) are a widely implemented, widely abused capability of JavaScript. What’s good about them is that they give us the ability to make an active message to call people’s attention to whatever we’re trying to say. What’s bad is that

- They don’t scroll at consistent speeds. With some browsers (including some versions of Netscape I’ve tested), the speed

varies depending on whether or not you're moving the mouse (faster when the mouse is moving, slower when it's not).

- They have the potential of eating up memory. I've seen tickertapes that don't release the memory they no longer need—the longer they scroll, the more RAM they consume. I have yet to isolate the cause of this side-effect (partly because it hardly seems worth the effort given the other drawbacks), but I have seen machines with 24 MB RAM brought to their knees by nothing more than a simple tickertape.

- They make some users nauseous. As much as we, as developers, might like the way that tickertapes call attention to whatever we want to say, I've found a number of users who don't like the tickertapes because their display is irregular, unclear, or worse.

None of that means we shouldn't have scrolling messages; after all, unless we scroll, we have no way of putting multiple lines of explanation into a single-line field. There are, however, ways to "scroll" that don't incur the unwanted side effects of tickertapes.

What I personally do on the IA home page is a "flip," in which one line of text is displayed at a time, shifting to the next complete line, etc. The code I use was adapted from Timothy Wallace (<http://www.essex1.com/people/timothy/js-index.htm>) and is based on the following JavaScript function:

```
function updateContent()
{
  var contentText="";
  contentNum++;
  if (contentNum==1)
    contentText="Controlled Access includes proposals, working drafts, etc.";
  if (contentNum==2)
    contentText="Access is restricted to Laboratory machine addresses.";
  if (contentNum==3)
    contentText="To view a controlled access page, select from drop-down list,";
  if (contentNum==4)
    contentText="then press 'Jump To Area' button.";
  if (contentNum==5)*
    contentText="*****Explanation*****";
  document.forms[2].elements[2].value=contentText
  if (contentNum==5)
  {
    contentNum=0;
    goContent();
  }
  else
    goContent();
}
```

This function is initiated by an event handler in the <BODY> tag that says onLoad="goContent();". As mentioned in the March article, a further trick is to define the <FORM> field where the message is displayed as

```
<INPUT TYPE="text" VALUE="Select from drop-down list,
then press 'Jump To Area'." SIZE=61>
```

The VALUE attribute causes a simplified message to appear for non-JavaScript browsers, making the script backward compatible.

"SNARK" Search-Engine Interface

One of the most annoying things I've ever tried to do is maintain a local search engine/database for the Web areas I manage. Aside from the basic problems associated with keeping the database maintained, there are the seemingly endless problems of trying to get a robot to report the type of results that I've wanted. Others have certainly had better success than I (see, for example, the InterNIC IETF documentation at <http://ds.internic.net/ds/dspg1intdoc.html>, which implements both Harvest and WAIS searches). From my perspective, however, making local search tools work has proven time consuming, frustrating, and generally a waste of time (especially given that others have already indexed the area as well as I could ever hope to).

Instead of trying to recreate work that others have already done, my personal solution to providing search capabilities for our Web area has been to build an interface to search engines that already exist. For this, I adapted a "SNARK" JavaScript by Justin Boynan (<http://www.cs.cmu.edu/~jab/snark/>) that provides an interface to the search engine of your choice.

In our particular case, I add restrictions onto a query to the InfoSeek (<http://www.infoseek.com/>) search engine, so that the result set is limited to the IA standards, the IA public Web space, or the Laboratory Web space as a whole.

Although the code is a bit too complex to replicate in this article, what it creates is a three-part form. In the

first part, a drop-down selection list, the user selects which area he/she wishes to search through. In the second part, a `<FORM> <INPUT>` field, the user enters the text he/she wishes to search for. The third part is an `<INPUT TYPE=SUBMIT VALUE="Start Search">` button that lets the user initiate the search. What the script then does is to add in restrictions to the search request to the outside engine.

For example, if the user were looking for “search string” within our public Web space, then instead of a simple “`qt=search+string`” (the format that the browser converts to when it issues the request), the SNARK substitutes the following:

```
qt=%2Bsearch+string+%2Burl%3Alanl.gov%2Fprojects%2Fia
```

Because “%2B” translates into “+”, “%3A” translates into “.”, and “%2F” translates into “/”, the above string has the same result as entering “+search string +url:lanl.gov/projects/ia”, which causes the InfoSeek search engine to only return results that (a) match the search string input by the user, and (b) reside within the IA web space (<http://www.lanl.gov/projects/ia/>, the only URL address that matches the “lanl.gov/projects/ia” pattern).

Date Last Modified

The `document.lastModified` property in JavaScript 1.0 returns a text string that reflects the date the document was last modified (i.e., saved). In and of itself, this can be used to provide a time-date stamp on a document to let the user know how “fresh” the document is. In combination with a “cookie” that stores the time of the user’s most recent visit, though, the `lastModified` property can be used to let the user directly know whether or not a page has been changed since the user’s most recent recorded visit.

As usual, the basic concept is straightforward, but the implementation requires some tricks. The particular implementation I use is based on a script by Paul Monday (<http://www.isl.net/~pmonday/>).

Basically, the first thing we need to do is set up three messages: one for new users (to let them know that a cookie has been sent so that next time they’ll know whether the page has been updated), one to tell previous users that the page has been updated since their last visit, and one to tell previous users that the page has not been updated.

This is done by setting variables within a function in a manner such as the following:

```
var newCookie = "I have left a cookie for you so you can
  know when this page is updated";
var nothingNew = "The page has not been updated since your
  last visit";
var newStuff = "This page has been updated since your last
  visit";
```

When the user loads the page, the function checks for the cookie. If it doesn’t exist, then the “newCookie” message is displayed. If the cookie does exist, then the date of the last visit is checked against the date the document was last modified, and either “nothingNew” or “newStuff” is displayed. The test whether the cookie exists is done by checking whether the cookie’s value is a null string (“”). The date test is done with an “if” such as the following:

```
if(Date.parse(modDate) < Date.parse(cookieLastVisit)
```

where `modDate` is the date value of `document.lastModified` and `cookieLastVisit` is the date the cookie returns for the most recent visit.

After this is done, the final step is to send the browser a new cookie that includes the current date-time stamp so that it can be retrieved during the user’s next visit. This is done with a function call such as the following:

```
SetCookie("cookie-name", accessDate.toGMTString(), expdate);
```

where `SetCookie` is a function that issues a `document.cookie`, “cookie-name” is whatever you choose to label the cookie, `accessDate` is the current date-time (converted to Greenwich Mean Time, GMT, for cross time-zone portability), and “exp-date” is whatever expiration date you choose. Set `accessDate` by creating a new date-time equal to the result of a current `getTime`:

```
var accessDate = new Date();
accessDate.setTime(accessDate.getTime());
```

Set `expdate` in a similar way with additional time (in milliseconds) added on:

```
var expdate = new Date ();
expdate.setTime (expdate.getTime() + (100 * 24 * 60 * 60 *
  1000));
```

The above sets the expiration date to 100 days from now, with 100 being the number of days, 24 the hours in a day, 60 the minutes in an hour, 60 the seconds in a minute, and 1000 the milliseconds in a second.

Beyond this, if you choose, you can display the date and time of the user's last visit and the date and time of the last document modification, through a script such as the following:

```
document.writeln("Last visited:"  
+cookieLastMod.toLocaleString() +"<br>");  
document.writeln("Last Modified:"  
+lastModifiedDate.toLocaleString());
```

Note that the above example puts the two date-times on separate lines (via the
 tag). They can just as easily be placed within a table (or however you please) for improved formatting.

Also note that the example converts the dates to "toLocaleString", the user's local time. This is done because of some inconsistencies in the way that various browsers interpret and display Greenwich Mean Time.

The most common problem with any of the document.lastModified scripts seems to be a server "misconfiguration." (I've encountered this myself and have found numerous questions regarding it on the USENET news-groups.) Basically, what happens is this: If the server is parsing the file, then the concept of "last modified" becomes meaningless (because the server is recreating the file each time it is served). This causes the document.lastModified to become null (apparently), which in turn causes the browser to display a "zero" date (either 12/31/69 or 01/01/70, depending on time zone adjustments). The result is document.lastModified values that are meaningless.

If you encounter this, check (or have your system administrator check) the .htaccess (or other configuration) file. There's typically a combination of two lines in the file:

```
Options Includes  
AddType text/x-server-parsed-html .html
```

The first line can also be IncludesNoExec and can also include other options, but what it does is to enable server-side "includes" (which enable you to include other files in a document via an <!--#include file="filename" --> or similar line in the HTML code). The second line specifies that files with an extension of ".html" should be parsed by the server, which sets off the chain of events that makes document.lastModified fail.

The best solution is to set the parsed html type to an extension other than ".html" (most commonly ".shtml") and then rename your file to use that extension. This method has the added benefit of preventing the server from parsing every .html file it serves, thereby improving overall performance. An alternate solution is to disable includes (e.g., "Options None"). This approach, however, has the drawback of disabling all server-side includes, preventing you from using them in other places within the directory tree.

For More Information

For more information about the IA Project in general, including the current status of our guidelines and standards, please see our home page at <http://www.lanl.gov/projects/ia/> (or look under "What's New" from the Laboratory home page).

For more information about JavaScript, including links to the complete scripts discussed in this article, tests that are currently under way, and links to additional resources, please see the IA Internet/WWW subject area page at <http://www.lanl.gov/projects/ia-lanl/areas/int-web/> (Laboratory IP addresses only).

If you would like e-mail or printed copies of any of the IA materials, please contact me at the address given below.

*Tad Lane, tad@lanl.gov, (505) 667-0886
Information Architecture Standards Editor
Communications Arts and Services (CIC-1)*



Research Library Training

The LANL Research Library provides training for using its specialized databases. Training sessions begin and end at times indicated below. Classes are free but you must preregister by calling the Research Desk at 7-5809 or sending e-mail to library@lanl.gov. Special classes and orientations can also be arranged.

Date	Time	Subject Matter
5/1/97	1:00 - 1:30 p.m.	Grant and Funding Information
5/6/97	1:00 - 1:30 p.m.	SciSearch at LANL—At your desktop!
5/8/97	1:00 - 1:30 p.m.	Finding Secret Information (Q-Clearance Required)
5/13/97	1:00 - 1:30 p.m.	Energy Database via the WWW
5/14/97	1:00 - 1:30 p.m.	Finding Addresses and Phone Numbers on the WWW
5/15/97	1:00 - 1:30 p.m.	Research Library Catalog via the WWW
5/20/97	1:00 - 1:30 p.m.	SciSearch Alerting Service
5/22/97	1:00 - 1:30 p.m.	Finding Chemistry Information on the WWW
5/22/97	1:00 - 1:45 p.m.	New Employee Orientation/Research Library Overview
5/28/97	1:00 - 1:30 p.m.	Finding Addresses and Phone Numbers on the WWW
5/29/97	1:00 - 1:30 p.m.	Search Engines, Advanced Web Searching
6/3/97	1:00 - 1:30 p.m.	Finding Environmental Information on the WWW
6/3/97	1:00 - 1:45 p.m.	New Employee Orientation/Research Library Overview
6/4/97	11:00 - 11:30 p.m.	MELVYL (U of CA specialized databases)
6/5/97	1:00 - 1:30 p.m.	Federal Regulations on the Internet
6/10/97	1:00 - 1:30 p.m.	Grant and Funding Information
6/11/97	1:00 - 1:30 p.m.	Finding Addresses and Phone Numbers on the WWW
6/12/97	1:00 - 1:30 p.m.	Finding Business Information on the WWW

Labwide Systems Training

The Customer Service Group (CIC-6) offers training for users of Laboratory information systems. The CIC-6 courses offer training for a variety of personnel including property administrators, group secretaries, training coordinators, budget analysts, group leaders, or anyone needing to access training records, property records, costs, employee information, travel, chemical inventories, etc. Refer to the table below and on the following pages for specific information about courses currently offered.

Course Registration

You must have a valid ICN password before taking any of the courses shown in the table. To register for a course, call the CIC-6 Training, Development, and Coordination section at 667-9559 or access our Web page. From the LANL home page, look under "Services/Computing at LANL/Training" or enter the URL:

<http://www.lanl.gov:8010/computer-information/cic6/teampage.html>

Course Title	Date	Time	Cost	Course Number
Employee Development System - Basic Training (EDS I)	5/7/97 & 6/11/97	8:30-12:00	\$350	Course #5289
	The course provides hands-on instruction to request course enrollment, use the on-line course catalog, retrieve training transcripts, and assign EDS authorities. The student will learn to create courses, add students to the courses, and generate several training reports.			
Employee Development System - Training Plans (EDS II)	5/21/97 & 6/25/97	1:30-5:00	\$350	Course #7155
	Participants receive hands-on instruction to create and maintain training plans, assign assignment codes, and generate training plan reports. Attendees must have prior training in the Employee Development System (course #5289).			
Eudora Electronic Mail	TBA	1:30-3:30	\$175	Course #9762
	This class is a hands-on class that teaches the participant how to use Eudora software to create, send, receive, and edit electronic mail messages. In addition to these procedures, the participant will learn what related settings mean and how to configure the system to meet his or her individual needs.			
Data Warehouse Basics	5/20/97 & 6/20/97	8:30-10:30	\$175	Course #11961
	Students will receive hands-on training to generate standard reports and make quick queries from information in the data warehouse, a real-time collection of data tables from Laboratory financial, time-reporting, and personnel systems.			
Data Warehouse/ Financial Reporting	5/20/97 & 6/20/97	8:30-12:00	\$350	Course #11960
	Students will receive hands-on training to generate standard financial reports and make on-line queries from information in the "data warehouse," a collection of data from Laboratory budgeting, accounting, and time-keeping systems.			
HTML Basics	5/13/97 & 6/10/97	8:30-12:00	\$350	Course #11605
	Students will gain a basic understanding of HTML (Hypertext Markup Language), the language for the World Wide Web. Topics covered will be commands and standards, creating and editing documents, and authoring programs.			

Course Title	Date	Time	Cost	Course Number
HTML Tables	6/17/97	1:30–5:00	\$350	Course #11959
	Students gain basic understanding of how to create various tables in HTML and new tags in HTML 3.0. Netscape-specific tags are also identified for clarity. Prerequisite: HTML Basics (Course #11605) or permission of the instructor.			
Introduction to the Internet: Beginning Netscape	6/3/97	8:30–10:30	\$175	Course #10961
	Students gain basic understanding of the Internet and the World Wide Web and the use of Netscape as a browser to surf the Net. Topics covered are both Laboratory sites and open sites, along with practical uses of the Internet.			
Lotus Notes 4.0	5/8/97 & 6/4/97	8:30–12:00	\$350	Course #9917
	This class provides hands-on instruction for Mac and PC users to use Lotus Notes software to create and send E-mail memos; fax documents; search databases; create filters, nicknames, banners, and doclinks; set defaults; and use multiple address books. In addition, participants learn how to use the memo, meetings, and discussion databases.			
Meeting Maker	5/6/97 & 6/10/97	1:30–4:00	\$175	Course #12395
	Students learn how to create an address book, create personal groups, utilize the Auto-Pick feature, utilize e-mail integration with non-Meeting Maker users, and customize various Meeting Maker features.			
On-Line Forms	TBA	3:30–5:00	\$175	Course #9756
	Participants will learn to use Netscape software to access Lab-wide information and forms. Using Jetform Filler software, participants will access, complete, and print forms such as the "ICN Validation Request," "Visitor Request for Unclassified Visits to Security Areas," and "Request for Quotation."			
Purchase Card System	TBA	1:30–2:30	\$175	Course #11924
	Students will learn to reconcile monthly statement of account, submit reconciled statement of account for approval, print statement of account for audit records, and delegate reconciliation authority. Prerequisite: PCS Overview. Call Ruby O' Rear at 665-4523.			
Reporting with Infomaker	6/12–13/97	8:30–5:00	\$650	Course #11054
	Hands-on training to query data and develop ad hoc, or non-standard, reports from the LANL data warehouse using Infomaker software.			
Time and Effort System (GUI)	TBA	8:30–10:00	\$175	Course #11018
	The student will learn how to enter attendance, amend attendance, approve attendance, and submit exception and approval reports. Time codes and associated policies will be discussed. The student will also learn how to use the Information Manager utility to view and print reports.			
Travel	TBA	8:30–12:00	\$350	Course #12091
	Hands-on training to submit and approve travel requests and expenses in the new Travel System which replaces the TRIPS on-line system and the post-travel expense worksheets.			

Advanced Technical Computer Training

The Customer Service Group (CIC-6) supports advanced technical training in computing areas such as programming languages, system administration, networking, and World Wide Web development tools. The support provided by CIC-6 can be as limited as providing the appropriate facilities for a specific group or as extensive as coordinating training functions such as system administration, vendor acquisition, EDS administration, and class facilitation. The table below lists classes that are either currently being offered or are available on request. An expanded list of classes that are potentially available can be viewed on the Internet at <http://www.lanl.gov:8010/computer-information/ComputerTraining/Vendor.html>.

To request registration in any course or for general assistance, please contact the CIC-Division Advanced Technical Computer Training Coordinator at (505) 667-9399 or send e-mail to cic6-train@lanl.gov.

*Cost per student will vary depending on the total number of students enrolled in the class.

Course Title	Date	Time	Cost	Course Number
C++ and the Unified Modeling Language (UML)	5/28-29/97		\$800-\$1000*	12894
Prerequisite(s): This course is designed to analysts, software engineers, application experts, and technical project managers using Rational Rose with the Unified Modeling Language (UML). Topics Include: Introduction to Rational Rose; Course Registration Case Study; Use Cases; Packages and Classes; Relationships; Operations and Attributes; Inheritance; Object Behavior; Architecture; Design Details; C++ Code Generation; The C+ Analyzer; Team Development; and RoseScript. Participants will create, update, and save UML models containing use-case diagrams, class diagrams, interaction diagrams, state-transition diagrams, component diagrams, and deployment diagrams.				
C++ for Experienced Programmers	6/23-27/97		\$1600 - \$1900*	9050
Prerequisite(s): Excellent C Language programming skills. Topics Include: Major Differences and Additions to ANSI C; Building C++ Classes; Introduction to Text I/O with C++; Function Overloading; Single Inheritance; Virtual Functions; Multiple Inheritance; Operator Overloading; Creating, Initializing and Assigning Objects; Passing and Returning Objects; Templates, Parameterized Functions and Classes; C++Stream I/O with the File System; and C++ Course Summary.				
Java Programming (Basic)	Available on Request (3 days)		\$800 - \$1,000*	11686
Prerequisite(s): Students must have the ability to create compiled programs using an advanced language (such as C or C++) and the knowledge to use basic Solaris commands and a World Wide Web browser (such as Mosaic or Netscape). Topics Include: Overview of the Java Programming Language, the HotJava WWW Browser, Applets, Audio and Animation, Importing Java Classes, Attaching Applets to HTML, Object-Oriented Programming Methodology, and Identification of Main Features of Java (including classes, servers, and security).				
Java Applications Programming	Available on Request (2 days)		\$600-\$800*	11687
Prerequisite(s): Completion of Beginning Java Programming course or equivalent knowledge. Topics Include: Developing Java Applications; Point-of-Sale Interfaces; Writing Java Code (demonstrating Java security, interactivity, graphics, audio, and animation); Java Class Packages and Subclasses; Memory Allocation and Garbage Collection Work; Interfaces, Exceptions, and Access Modifiers; Multithreading; and Extending Java.				

Course Title	Date	Time	Cost	Course Number
Java Programming Workshop	Available on Request	(5 days)	\$1800-\$2100	12872
<p>Prerequisite(s): Completion of Basic Java Programming and Java Applications Programming courses or equivalent knowledge. Topics Include: Designing and Developing Java GUI and Live Java Applications; Using a Subset of ANSI SQL to Communicate with a Relational Database; Programming a Java Network Connection and Interface; Understanding the Basic Structure of the JDBC-API; Constructing a Query-By-Example Interface, Including Data Parsing and Formatting; Listing Porting Issues Between Solaris 2.X and Windows NT; and Explaining the Steps for Including Native Methods in Java Code.</p>				
SGI Java Programming with Cosmo Code	Available on Request	(3 days)	\$1000-\$1300*	12896
<p>Prerequisite(s): C and/or C++ Programming experience Topics Include: Java Survival Skills for C/C++ Programmers; Java Runtime Interpreter and Compiler; Setting (Breakpoints) and Examining Data with the Graphical Source Debugger; Visual Source and Class Browser; and Creating User Interfaces with the Visual Builder. Students will master the Cosmo Code 2.0 visual development environment.</p>				
SGI ProDev C++	Available on Request	(2 days)	\$800-\$1000*	12895
<p>Prerequisite(s): C Programming experience Topics Include: Quick Overview of C++ Programming; SGI C++ Compiler Environment (Compiler Use and Flow, Template Instantiation Details, and Delta/C++ Tmand Smart Build™ Specifics); Customizing the ProDev Environment (Changing Color Schemes, Using the Source View, File Browser, and SGI Help and Graphical View); Using the Build Manager Tools to Compile Programs; Using the Static Analyzer to Create Filesets and Databases and to Make Queries; Querying Class Information with the C++ Class Browser; Setting Traps (Breakpoints) and Looking at Data Using the Debugger; Setting Fast Watchpoints; Using the Fix+Continue Feature to Debug and Prototype Changes; Profiling Your Code and Determining Resource Usage Using the Performance Analyzer; Doing Heap and Memory Fragmentation Analysis Using Heap View; Determining the Coverage of Your Software Tests with Tester; and Tuning Your C++ Code for SGI.</p>				
SGI System Administration (Beginning)	Available on Request	(5 days)	\$1800-\$2300*	11688
<p>Prerequisite(s): Familiarity with using Silicon Graphics IRIS workstations and system administration procedures on other open system platforms. Topics Include: The Role of the System Administrator; Set Up and Configuration of an IRIS Workstation or Server; Supporting a Group of Silicon Graphics Users; System Security Maintenance; Backups and Recoveries; Configuration of Disk Drives; System Installation and Application Software; Attaching Terminals and Printers; Modifying the system Start Up and Shut Down Sequences; Automating Administrative Procedures; and Performing Basic System Troubleshooting.</p>				
SGI Network Administration	7/7-11/97		\$1800-\$2300*	11690
<p>Prerequisite(s): Completion of Silicon Graphics System Administration (Beginning) course or equivalent knowledge and experience. Topics Include: Networking Fundamentals; Network Configuration; Network Troubleshooting; Resource Management with Network; Information Services; Domain Management with Domain Name System; Electronic Mail with Sendmail; Remote File Sharing with Network File System & Automounter; Network Performance Monitoring; and Network Security.</p>				
SGI System Administration (Advanced)	7/28/97-8/1/97		\$1800-\$2300*	11689
<p>Prerequisite(s): Completion of Silicon Graphics System Administration (Beginning) course or equivalent knowledge and experience. Topics Include: System Error Monitoring; Kernel Reconfiguration and Debugging; System Monitoring Tools; Process Management; MultiProcessor CPU Management; Memory Management and Tuning; Swap Management and Tuning; Disk Management and Tuning; XPS Filesystem Management; and System Security Concepts.</p>				

Course Title	Date	Time	Cost	Course Number
Solaris 2.X System Administration (Beginning)	Available on Request	(5 days)	\$1600-\$2000*	7477
Prerequisite(s): Knowledge of Unix commands and an editor. Topics include: Custom installation of Solaris2.X server; Add peripheral devices; Use format utility to display partition information; Compress and send binary files; Change system run levels; Add startup files for additional services; Add and remove software packages; Configure terminals and modems; Administer disks and file systems; Discuss basic networking concepts; Configure NFS to support the client-server environment; Use the automounter; Add and remove diskless clients; Back up and restore file systems; Perform basic recovery and troubleshooting procedures; Configure and administer the NIS+ environment.				
Solaris 2.X Network Administration	Available on Request	(5 days)	\$1600-\$2000*	8107
Prerequisite(s): Completion of Solaris 2.X System Administration (Beginning) class or equivalent knowledge and experience. Topics Include: Network Configuration; Remote Installation Procedures; Advanced Security Techniques; Troubleshooting Techniques; Customizing Sendmail; Network Application Tools; and Name Service Configuration.				
Sybase SQL Server Administration	Available on Request	(5 days)	\$1800-\$2100*	12913
Prerequisite(s): Prior experience with SQL and familiarity with SQL servers and databases. Topics Include: SQL Server Environments and Installation; Resource Allocation and Management; Creating Databases; Modifying Default SQL Server Configuration; Backing Up Databases and Transaction Logs; User Permissions; Monitoring and Troubleshooting; Connectivity Issues; and Auditing.				
Sybase Performance Design and Tuning	Available on Request	(5 days)	\$1800-\$2100*	12914
Prerequisite(s): Sybase SQL Server Administration or equivalent knowledge and experience. Topics Include: Tuning Transact SQL Queries; Optimizing Locking at the Application Level; Tuning Transaction Processing; Working with Cursors; Benchmarking Techniques; and Optimizing Hardware Device Usage.				
UNIX (Basic)	Available on Request	(4 days)	8:15-12:00 \$400	5267
Prerequisites: Basic computer literacy (knowledge of the keyboard and mouse) are helpful. Topics: Getting Started; UNIX File System; Editing with VI; Manipulating Files; Using C-Shell Features; Customizing Your Environment; Navigating the Network; Job Control; Generic UNIX E-mail; and Electronic Mail Registration (EMR).				
UNIX (Advanced)	Available on Request	(4 days)	8:15-12:00 \$400	12972
Prerequisites: The Basic Unix class or equivalent knowledge. Topics: File Manipulation; File Reorganization; Network File System Concepts; Introduction to C-Shell Scripts; Conditional Execution; Shell Programming; The Korn Shell; Korn Shell Script Features; and SED Filtering Tool.				
Windows NT Optimization and Troubleshooting	Available on Request	(4 days)	\$1800-\$2100	12893
Prerequisite(s): Windows NT 4.0 Workstation and Server class (EDS # 12729 or equivalent knowledge and experience. Topics Include: Overview and Benefits of Windows NT Architecture; Collecting Data; Identifying the Baseline Using the Performance Monitor; Creating and Interpreting a Performance Database; Tools and Techniques; Improving Operating System Efficiency; Boosting Network Performance; Implementing Redundant Systems; Clustering Technologies; Identifying Operating System Components; Maintaining Services and Device Drivers; Tuning the Registry; Demystifying the "Blue Screen"; Identifying Major Resources; Forecasting Utilization Trends; and Predicting Future Requirements.				

INTEGRATED COMPUTING NETWORK (ICN) VALIDATION REQUEST

Instructions:

- (1) Complete all parts of this form that apply to you. Please take note of the "Special Requirements" section and complete any applicable parts.
- (2) Manager (Group Leader or above) authorization and signature are required for all validation requests.
- (3) Before submitting this request, ensure that your Employee Information System (EIS) information is current.
- (4) Once completed, either mail this request to the Password Office at MS-B251, fax it to (505) 667-9617, or, if you are cleared, handcarry it to TA-3, SM-200, Room 257.

If you have **questions** call (505) 665-1805 or send e-mail to validate@lanl.gov

Owner Information

Z-Number (if you have one)		Name (last, first, middle initial)	
LANL Group	Phone Number	LANL Mail Stop	Citizenship (Foreign National see "Special Requirements-Foreign National")

<p>Check LANL affiliation:</p> <p><input type="checkbox"/> LANL employee</p> <p><input type="checkbox"/> Contractor _____ (specify contract company)</p> <p><input type="checkbox"/> External user _____ (specify employer)</p> <p><input type="checkbox"/> Other (specify) _____</p>	<p>Send password / smartcard to:</p> <p><input type="checkbox"/> Mail Stop or <input type="checkbox"/> Mail to address indicated below</p> <p>Name / Organization _____</p> <p>Address _____</p> <p>City, State, Zip Code _____</p>
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Access Check access method and needed partitions:

Access method:	<input type="checkbox"/> ICN Password	<input type="checkbox"/> Smartcard	<input type="checkbox"/> Both
<input type="checkbox"/> Open partition (e.g., open machines, or for dial up access)			
<input type="checkbox"/> Administrative partition (e.g., Travel, Data Warehouse, IA [BUCS, Stores], IB [EIS, FMIS, PAIRS]) If you are not a cleared LANL employee, see required steps in section "Special Requirements-Administrative Partition".			
<input type="checkbox"/> Secure partition (i.e., secure machines) A Q-clearance is required for secure access. After obtaining Manager signature for Secure access, handcarry this form to the Password Office to obtain your Secure account.		<p>I certify this person does require secure access:</p> <p>_____</p> <p>Manager Signature (Group Leader or above) Date</p>	

Password Office Use Only

New <input type="checkbox"/>	Change <input type="checkbox"/>	Clearance Status	Processed	Lv	Smartcard Serial #
Comments:					

cut along dashed line

Special Requirements

Administrative Partition Lab-Wide Systems (e.g., Travel, Data Warehouse, IA [BUCS, Stores], IB [EIS, FMIS, PAIRS])	
<input type="checkbox"/> Under 18 years of age	If you need to access Administrative systems, your Group Leader must provide a memo accepting responsibility for your actions and justifying your need for access. This memo is to accompany all forms taken to the security briefing (see "Contractor or Non-Cleared") section below. You may not access the Secure Partition.
<input type="checkbox"/> Contractor or Non-Cleared	Phone (505) 665-4444 (option #2) to obtain Access Authorization packet. Phone (505) 667-9153 to schedule a security briefing. Bring all forms including this ICN Validation Request to the security briefing for approval.
CIC-6 Security Briefing Approval Signature	Date

<input type="checkbox"/> Foreign National	Attach a copy of Form 982 (REQUEST FOR UNCLASSIFIED VISIT OR ASSIGNMENT BY A FOREIGN NATIONAL) with all approval signatures. Be sure Box #11 of Form 982 is completed. If you are not a visitor/assignee under a LANL/DOE approved Visit / Assignment Request, attach written justification from your host Group Leader or Division Director describing your need to access the ICN.
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Authorization (required)			
Print Manager Name (Group Leader or above)	Manager Z-Number	Group	
Manager Signature (Group Leader or above)	Mail Stop	Date	
If you are NOT a LANL employee you must have a LANL contact and obtain the contact's signature in addition to the contact's manager's signature.			
LANL contact: Read the following and sign below.			
By signing this form I affirm that I understand and accept the following:			
a. I am a regular Laboratory employee.			
b. I am responsible for forwarding password reauthorizations and verifying annual account reauthorizations for this user.			
c. I am responsible for notifying the Password Office within 10 days of changes in my status.			
d. I am responsible for notifying the Password Office immediately of changes in this user's status (termination, end of contract, etc.).			
Print LANL Contact Name	Contact Z-Number	Phone Number	Group
LANL Contact Signature	Mail Stop	Date	

NOTE: All Laboratory computers, computing systems, and their associated communication systems are for official business only. By completing this validation request and signing for a password and/or smartcard, you agree not to misuse the ICN. The Laboratory has the responsibility and authority to periodically audit user files.

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