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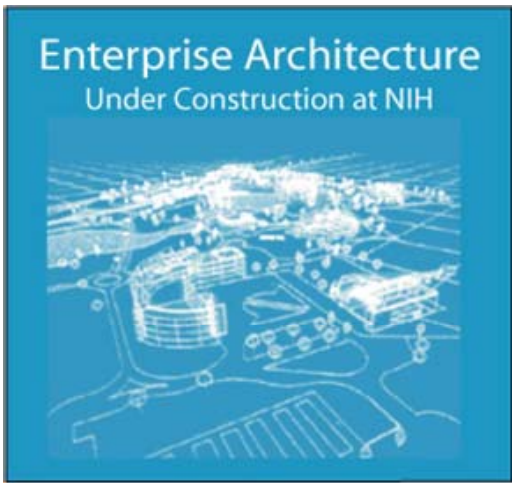

Major Articles

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Table of Contents

Articles

http://www.nih.gov is one of the most frequently visited federal government web sites.

	January	*February*	*March*
Total hits for the month	51,708,373	50,315,653	59,430,530
Hits per day	1,668,012	1,796,987	1,917,113
Different individuals per month	1,557,789	1,554,540	1,725,112

The server has been up 100% of the time* during March.
** Server uptime is independent of network accessibility.*

Articles

NIH Enterprise IT Architecture—Update

Enterprise Architecture (EA) is the design for how information technology (IT) supports the business of all of NIH. The purpose is to guide the implementation of applications and infrastructure, and to ensure they support the NIH mission.

In the July 2004 issue of *Interface* [http://datacenter.cit.nih.gov/interface/interface230/ea.html], the Office of the Chief Information Technology Architect (OCITA) presented an introductory overview of Enterprise Architecture and why it's important to NIH. As we continue to move forward, we'd like to provide you with an understanding of the EA framework and where we are headed.

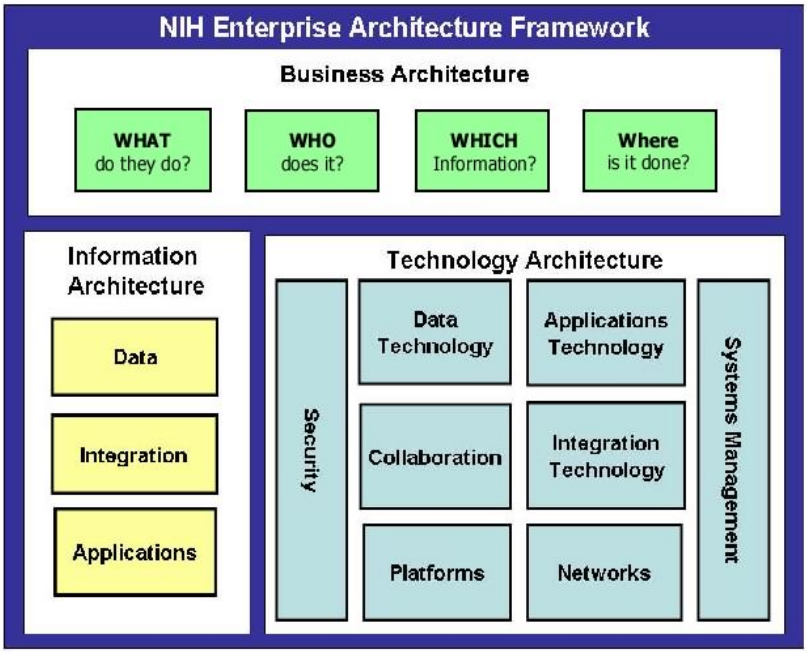
The NIH Enterprise IT Architecture applies to all aspects of information technology (IT) at NIH, including systems, infrastructure, products, and designs, including those developed internally and by outside contractors. For example, if you are installing new equipment, developing applications, or looking for new solutions – enterprise architecture pertains to you! To learn how it applies to your project, visit http://enterprisearchitecture.nih.gov.

Components of Enterprise Architecture

The NIH enterprise architecture (EA) provides the over-arching plan, similar to a "city plan" that specifies zoning and building codes, prescribes land use and road patterns to support a city's business functions (e.g., buildings and infrastructure). Enterprise architecture ensures an effectively planned IT infrastructure to support the business requirements of NIH and all of its employees, contractors, partners, and volunteers.

NIH Enterprise IT Architecture comprises three components: business architecture (BA), information architecture (IA), and technology architecture (TA).

- **Business Architecture (BA)** Similar to zoning and infra-structure to support the needs of a city, BA represents NIH's most important work activities and assets. It shows what processes NIH performs and provides a framework that allows IT to map its activities to business processes.



Specifically, the Business Architecture answers the following questions concerning NIH's organizations and business processes:

What are the activities or processes?
Who does the activities and who are the stakeholders?
Which information or data is used?
Where are the activities done today?

- **Information Architecture (IA)**
  IA creates the logical design specifications and is analogous to the process of drawing a building blueprint. It may include business models, organization models, object models, process models or data models.

- **Technology Architecture (TA)**

  TA, comprised of patterns and bricks, is analogous to providing specifications so that the components can work within the infrastructure—that is, the power and plumbing from a building can connect to public utilities.

Current Enterprise Architecture Content

Over the past several years, NIH has focused on technology architecture, including collaboration, networks, security, application integration and enterprise systems management. Information is described in **patterns** and **bricks**. You can view this part of the architecture on-line [http://enterprisearchitecture.nih.gov].

- **Patterns** are logical models of technology; they are design ideas that can be reused and leveraged across the enterprise. Examples of patterns are: document management service, application program interface (API), high-level enterprise systems monitoring (ESM), and workflow service.

- **Bricks** are physical building blocks that specify the technology or technologies to be used in the architecture. These standards include: enterprise reporting tools, communication middleware, and configuration management software.

All guidelines and standards are developed in a collaborative approach, and they require review and input from the entire NIH community. Subsequently, they are approved by the Architecture Review Board and published by the Office of the Chief Information Technology Architect (OCITA).

Future Directions for NIH Enterprise IT Architecture

OCITA is currently working in the areas of Business Architecture, application integration technologies (part of Technology Architecture), and Information Architecture. The current emphasis is on information regarding NIH grants and people.

If you have questions, contact OCITA at *EnterpriseArchitecture@mail.nih.gov*.

New NIH Password Policy Is in Effect

NIH began a new password policy on January 12, 2005. The policy applies to all employees and contractors who log in to NIH computers or computers that access the NIH Network remotely. This policy helps facilitate the NIH mission by protecting the confidentiality, integrity, and availability of NIH information. With this new policy, NIH is balancing the need to protect information while continuing to ensure the free flow of information so important to conducting research and improving public health.

IT security is becoming a bigger concern for NIH because hacker attacks are increasing in number and severity. As the use of electronic communications increases, risks arise that hackers will exploit vulnerabilities to steal or modify data and invalidate research. Strong passwords are the first line of defense against these potential intruders.

A strong password policy is necessary to prevent hackers from gaining unauthorized access into a system and any resources available to an authenticated user. Exploitation of weak passwords is one of the easiest and most common methods used by hackers to gain access to systems. Furthermore, a network is only as secure as its weakest link, and compromises in one computer can quickly spread to other areas of a network.

Responsibilities of Users

In the new password policy—as in the previous password policy—you have to change your password every six months (180 days). System level passwords must change more often (90 days). There are also new requirements for password length and complexity.

Authorized users are responsible for the security of their passwords and accounts.

- **What to Do**

  - Create a password with at least 7 characters that has a combination of at least 3 of the following— capital letters, lower case letters, numeric characters, or special characters.
  - Choose a password that is different from your 10 previous passwords each time you change it.
  - Contact the NIH Help Desk ***immediately*** at 301-496-4357 or *helpdesk@mail.nih.gov* if you believe your password may have been compromised.
  - Log off or lock your desktop screen when you leave your desk.
  - Use a password-protected screensaver and set it to activate if your system is idle for 15 minutes or longer.

- **What Not to Do**

  - Don't use your login name or your first or last name as your password or part of your password.
  - Don't share login information and passwords with other users.
  - Don't use the same password for NIH accounts as for non-NIH accounts.
  - Don't reveal your password to anyone over the phone, e-mail, or in person.

See the complete "NIH User Password Requirements" on-line [http://irm.cit.nih.gov/nihsecurity/pwd_requirements.doc]. The "NIH Password Policy" is also on-line [http://irm.cit.nih.gov/nihsecurity/pwd_policy.doc].

See a previous *Interface* article, "Are you a Computer Hackers Target?" in the July 2003 issue (number 227) [http://datacenter.cit.nih.gov/interface/interface227/security.html].

How to Change Your Password

- **Network Login**

  Your network login is what you use to log on to your computer. To change the network password, just press **Control + Alt + Delete,** as you would to log off. In the lower left corner, click on "Change Password…" Your "User Name" and "Domain" are already visible. Enter your old password, your new password, and confirm your new password.

  This is the same thing as changing your email account password through the NIH Central Email Service webpage [http://password.nih.gov]**.**

- **NIH Login**

  The NIH Login is what you use to log on to the NIH Portal [http://my.nih.gov]— click "Change Password" to bring up the screen for changing your password.

You will be asked to enter your user name and current password—the ones you use to log on to the network—and a new password. If the user name and current password you enter are correct, you get a message, "Your password has been successfully changed."

The NIH Login is a central area that authenticates you with your user name and password. Once logged on to NIH Portal, you can access certain NIH Login-enabled applications (e.g., ITAS, Human Resources, NBS-Travel, nVision) without logging in again.

- **VPN and Parachute Passwords**

  To change your VPN password or your Parachute password, please call the NIH Help Desk at 301-496-4357 or e-mail *helpdesk@mail.nih.gov*.

Remember, IT security is about protecting information assets by effectively managing risks. Creating a password that is hard to guess is a worthwhile and necessary investment in protecting NIH information.

More Information

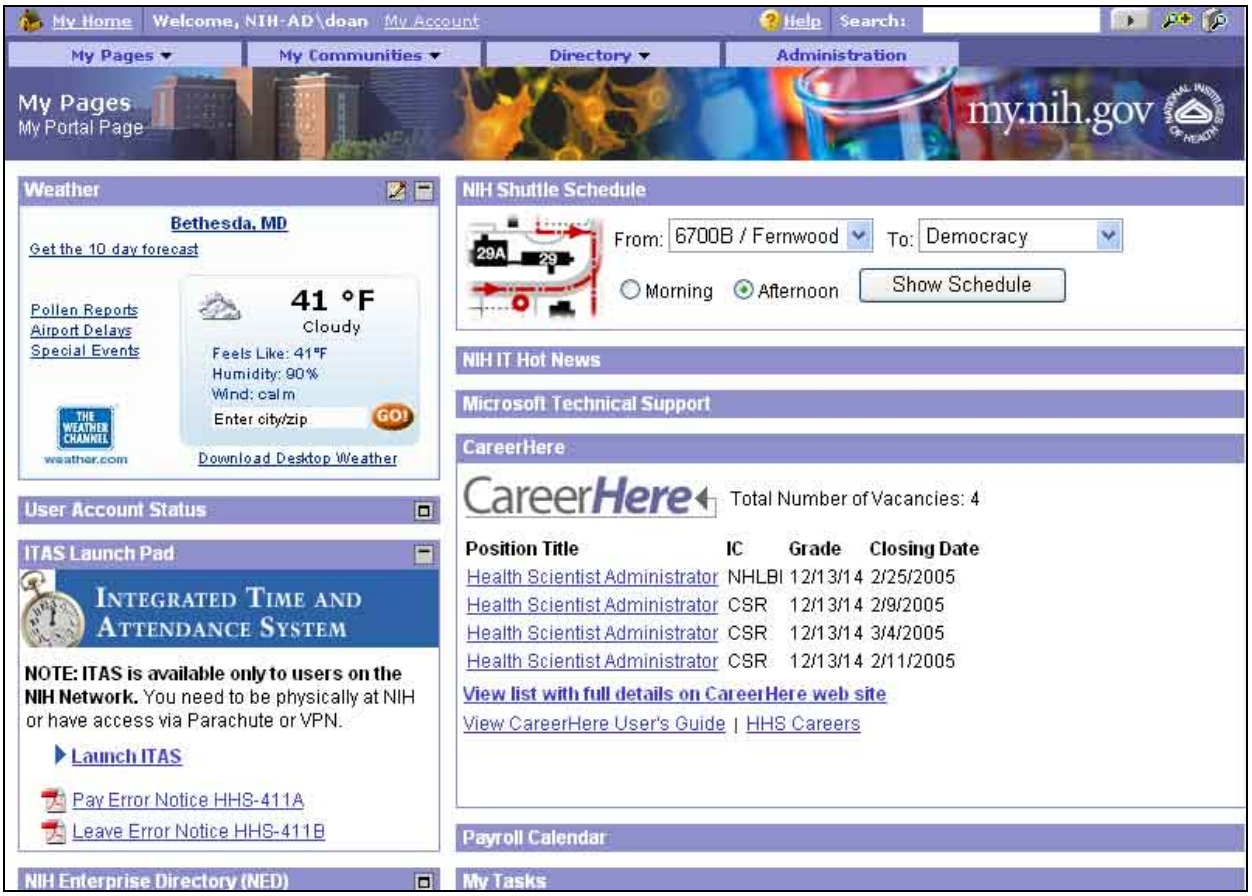
If you need help in resetting your password or if you forget your password, please call the NIH Help Desk at 301-496-4357 or e-mail *helpdesk@mail.nih.gov*.

The NIH Portal Is Better Than Ever

In late March, a major upgrade to the NIH Portal appeared with new functionality in the collaboration and community management environments. The NIH Portal enables ICs and offices to access the vast amount of NIH data, documents, processes and services in many systems. Developed by CIT, the web-based Portal provides simple, streamlined access to the many distributed systems, applications and documents that NIH users need. Access to the information and data you use daily has just gotten easier.

In the new portal, ICs can create and administer their own intranet "subportals" with distinct branding. Collaborators and community users can utilize the enhanced search capability and the moderated discussions features. The new version also integrates with MS Exchange 2003 so that users can look forward to even more functionality in the future.

For most casual users, the most obvious impact of the upgrade is a slightly different look and feel.



*Sample **My Portal Page***

For more advanced users, the new portal enables better collaboration within communities. It also provides a new method for creating and granting access to what you need—calendar, tasks, announcements, document directories, and discussions. Everything you need is now available from one screen.

Exchange is integrated with the portal (once Exchange 2003 is installed). Now project calendars can have Exchange data, and community calendars can be imported from Exchange.

Project Explorer provides a single place for all project management and has a full window with all projects accessible in one place

Calendar can be integrated with the portal (once MS Exchange 2003 is deployed) so that you can make meeting requests and see someone's availability

Discussions can be moderated or un-moderated, and can incorporate links, graphics and font formatting

Documents can be added in multiple-file uploads. You can tell other portal users about a document, click  to the right of the document.

In addition to the features already discussed, the new portal improves management capabilities for community leaders— for example, tasks can be assigned to multiple users, and community leaders can easily notify the entire membership. Some of the enhancements are:

Communities
Communities can be related and can have subcommunities.

Subportals
ICs can create and administer their own intranet space with distinct branding and portal experience.

Statistics
Portal statistics will be available soon on community and portlet use (from CIT using PT Tracker), which helps community leaders/managers improve their sites for the benefit of Community subscribers.

From just one web address, you will be able to reach a wealth of information inside NIH and outside—including NIH policy and procedures, collaboration tools, project management tools, scientific and organizational news, document and Internet searches, phone directories, e-mail, Outlook's e-mail and calendar, travel resources, and much more. You can select from over 300 portlets or join any of the existing 20 communities (including 12 related to NBS).

The best way to understand the full power of the new portal is to try it [http://my.nih.gov]. On-line tutorials are available to guide you through the changes. If you are new to the portal, you need to create a **My Page**—the tutorials will help you get started.

More Information

Portal training is available for general users and community managers through the NIH Training Center [http://learningsource.od.nih.gov/]. Recorded videocasts and training specific to ICs and communities are available upon request. For additional information, contact *portaladmin@nih.gov*.

Much information is available on the NIH Portal web page [http://my.nih.gov]. Click first on the **My Communities** menu, and then on "Portal Information Center." Tutorials are located under the heading "How to Use the NIH Portal." You will also find links to helpful documents: *NIH Portal Upgrade: What's New*, and *NIH Portal User Guide for Project Leaders and Members*. One document, *NIH Portal Guide - Portal Version*, is a quick guide to using the portal.

If you have questions or need more information, contact the NIH Help Desk at 301-496-4357, or send e-mail to *helpdesk@nih.gov*.

Top 10 Reasons to Use CIT Hosting Facilities

You may not be aware of the many different types of hosting and housing services provided by CIT at the NIH Data Center. The main reasons to let CIT do the work of hosting your application are:

10 — Physical environment
The NIH Data Center provides a computing environment with controlled humidity and temperature, sufficient power for all installed equipment, an uninterruptible power supply to prevent short power glitches from affecting the equipment, and a standby generator to maintain normal operations during a long-term utility outage.

9 —Security
The NIH Data Center is located on the NIH campus in the building 12 complex, with a 24 x 7 security guard. Once inside the building, access to the computer area is by card-key. Facilities in the Data Center are monitored and recorded 24 hours a day, seven days a week. Applications hosted in the NIH Data Center are protected with general network firewalls as well as application-specific firewalls if you elect this service. Hosted applications can participate in Disaster Recovery tests that are run twice a year. Off-site data storage is available. An annual SAS 70 audit reviews physical security, and operating practices and procedures. Certification and Accreditation of hosting systems is done in full accordance with NIH policies and procedures.

8 —System monitoring
In addition to the 24 x 7 facilities monitoring, there are various levels of monitoring based on the hosting services provided. Monitoring tools watch for hardware problems and operating system performance—including CPU, memory, and disk space utilization.

7 —Connectivity
CIT provides redundant OC-3 network connections for high-speed connectivity to the Internet. Connectivity and the reliability of the network are monitored 24 x 7.

6 —Support
Highly trained, experienced staff install, configure and maintain the hardware and operating system, monitor the systems, and manage disk allocation and backups. CIT database experts handle the

system DBA work. Services are coordinated by an "application coordinator" who will be available to answer questions, help tailor services, etc.

5 —Economy of scale
CIT offers shared server hosting for various services so that users can share the cost of the hardware and the software licenses. Shared hosting is set up to ensure the integrity and security of each application. Small applications can take advantage of savings that would otherwise only be possible for large users. Shared server services available include Oracle RDBMS, Oracle Application Server, MS SQL Database, ColdFusion, IIS web hosting, and Google search indexing.

4 —No hardware worries
CIT provides all hardware with a wide range of processing capabilities that will be tailored to your needs. All hardware has silver-level or higher maintenance contracts. Spare parts and even spare computers are maintained onsite. Hardware is periodically refreshed so that customers' applications are running on correctly-sized, up-to-date systems. Disk storage can be provided incrementally as needed using SAN technology.

3 —Flexibility
CIT will work with you to ensure a configuration of hardware and services that meet your needs. If your requirements change, additional services can be added or subtracted. You only pay for what you actually use and need. You do not have large startup expenses for purchase of hardware and software licenses. You do not have to worry about disposing of hardware you no longer need.

2 —Rates are realistic and payment is easy
The customer has no large initial outlay for hardware and licensing costs. CIT purchases the necessary hardware and software licenses, but will amortize the costs over a period of years. The data center functions on a cost-recovery basis; thus, it does not generate a "profit" by charging more than the actual cost of the services provided. The customer establishes a CIT account by identifying an account sponsor and CAN to be used for charges, and then each month the charges are billed to that account.

1 —Many hosting choices
CIT provides many types of application hosting services at the NIH Data Center. In addition to these hosting services, a recently-added co-location service can provide housing for ***your own equipment*** either within the data center or off-site. (See co-location services below.)

Summary of Hosting Services

If the summary below does not cover your special hosting needs, please contact CIT to discuss a possible solution we ***can*** provide.

- **Mainframe "Titan" (z/OS)** [datacenter.cit.nih.gov/mvs]
  Batch and interactive processing
  DB2
  IMS

- **Scientific Computing** [helix.nih.gov] – Available for NIH scientists
  ALW
  Helix

- **Unix (EOS)** [datacenter.cit.nih.gov/eos]
  Servers
    - platforms include Sun and Hewlett Packard
    - dedicated and shared severs
  Oracle
    - Database and Application server
    - dedicated and shared servers
  Managed storage (includes backup and recovery)

- **Windows**
  Dedicated servers
  Shared server services
    - Web server
    - file server
    - print server
  MS SQL
    - on dedicated or shared servers
  ColdFusion hosting
    - on shared and dedicated servers
  Content management service

- **Other services**
  Application-specific firewalls and rulesets
  Connect:Direct
  Disaster Recovery
  Google search indexing
  NIH Backup and Recovery Service (NBARS)

Co-Location Services

If you already own your own servers for hosting applications but find that you are simply running out of floor space or you lack the resources to house your servers properly, you will find CIT co-location

services useful. Customers' own servers are housed in a secure, climate-controlled environment, where they can be accessed by your authorized administrators on a 24 x 7 basis.

There are two CIT co-location sites—one is on the NIH Campus, in the Customer Server Area (CSA) of the NIH Data Center; the other is in Northern Virginia. Information is available on-line about our co-location sites, the policies/procedures and rates.

More Information

You can learn more about these CIT hosting services on the NIH Data Center web site [datacenter.cit.nih.gov/colocation]. Our rates are published on-line [datacenter.cit.nih.gov/rates].

To learn more about the various hosting options, please send e-mail to *datacenter@list.nih.gov*, and someone on the hosting/co-location staff will contact you.

Coming—A New, Larger NIH Co-Location Site

CIT provides co-location services both on-campus at the NIH Data Center and off-campus in Northern Virginia. The on-campus co-location has been available since October, 2001.

A second, larger co-location site will open soon on the NIH campus. The second area is double the original co-location size and will accommodate much more equipment.

Customers' own servers are housed in a secure, climate-controlled environment, where they can control and access their own equipment. Co-location is an attractive option for customers who have already invested in servers but do not have a suitable server environment.

Co-Location Services

All co-location sites—on and off-campus—provide an environment for customer applications that includes:

- **physical security**, including card key access and video monitoring
- redundant, high-bandwidth **connectivity**
- **reliable infrastructure** (uninterruptible power supply, climate control)
- **24 x 7 access** to your server

- **charges based on** the amount of **rack space** needed—either full or partial racks (CIT provides the racks)
- **operations staff on site 24 x 7**

The on-campus co-location sites are in building 12—in a secure, separate part of the NIH Data Center.

The off-campus co-location site is in a secure commercial location connected by extremely high bandwidth—away from the NIH campus (in Northern Virginia) yet under the auspices of CIT. The off-campus co-location still ensures the full confidentiality, availability, and integrity of NIH information.

What Else Is Available and How Can I Learn More?

In addition to co-location services, CIT offers traditional full-service hosting for customer applications in the NIH Data Center on CIT-owned servers (z/OS, Unix, or Windows).

To learn more about these various options—co-location on campus (at NIH), co-location off campus, and full service hosting—please send e-mail to *datacenter@list.nih.gov*.

Our staff looks forward to working with you to assess your hosting requirements and to help you determine the option that best meets the needs of your organization.

ACSI Arrives at NIH—CIT to Evaluate Web Sites

CIT, NIH, and HHS will soon begin evaluating the NIH Portal and selected NIH web sites using the American Customer Satisfaction Index (ACSI) survey. Some of the 60 sites from across NIH to be studied are major public access points, while others offer information for smaller, specialized audiences. Agency officials approved the use of set-aside evaluation funds for this project to measure customer satisfaction and to improve service.

CIT will measure customer satisfaction for the NIH Portal [http://my.nih.gov] and the following CIT six web sites:

cit.nih.gov
security.nih.gov
isdp.cit.nih.gov
antivirus.cit.nih.gov
datacenter.cit.nih.gov
cit.nih.gov/nw-tc.html#

What Is ACSI ?

The ACSI survey—a respected indicator of customer satisfaction in the United States—is based on research from the University of Michigan Business School. ACSI has been used at over 100 federal sites (e.g., FirstGov.gov, NASA, and the US Department of State). NIH organizations that have used ACSI to measure and improve customer service include the National Cancer Institute and the National Library of Medicine's MedlinePlus.

To ensure unbiased sampling and analysis, NIH is working with ForeSee Results, a private company focused on web-based customer satisfaction management. ForeSee Results uses the ACSI methodology. The goals of the CIT surveys are to:

- measure user satisfaction with the specific site
- determine who is coming to the site and why
- learn whether they find the information they need

CIT will use the results of the survey, along with future usability testing, to:

- determine what changes should be made to improve the sites
- ensure that content and organization meet user needs
- measure the effects on customer satisfaction of any changes made

How the Survey Is Done

The ACSI survey is delivered randomly to visitors of selected CIT sites and will remain on selected CIT web sites through the evaluation period. The survey is a pop-up questionnaire that takes only about 2-3 minutes to complete.

The selected users will receive an unobtrusive invitation in their web browser, which they may accept or decline with a single click. If declined, the invitation simply disappears. If the user accepts, a new window pops up with questions including the user's level of satisfaction with the site. Users cannot be individually identified by the testing system, so all responses are confidential. Participation in the survey is completely voluntary, and those who do not wish to respond will see no effect on their ability to access information.

Cookies Approved for ACSI

In January 2005, NIH received permission from the Office of the Secretary, HHS, to employ "persistent cookies" for the ACSI survey. A "persistent cookie" is code stored on a user's personal computer that the web site will recognize when that user returns for another visit.

Specifically, the cookie will:

- block the repeated delivery of the survey either in the current visit or in any subsequent visit within a certain number of days
- record only that the visitor had the opportunity to answer the survey questions

The cookie will not:

- collect any information about visitors
- track the web-surfing activities of visitors
- indicate whether a visitor answered any questions, or record any answers given

Users may take the survey without accepting cookies. However, users who won't allow the cookie to be placed on their computers may get the survey again when returning to the site.

Thanks for Helping Us Help You

CIT looks forward to full participation in this important trans-NIH initiative. We are committed to using the ACSI evaluation results to improve our web sites.

nVision New Business Area—Technology Transfer

The latest business area reporting tool in nVision is Technology Transfer, which replaces and modernizes the Data Warehouse (DW) Technology Transfer business area. Released in the late fall of 2004, this new tool provides long awaited, in-depth data to the management staff working with NIH invention portfolios. Technology Transfer includes an extensive library of information designed to report key, previously unavailable, detailed data—invention life-cycle, inventors, patents, licenses, cooperative research and development agreements (CRADAs), royalty income, invention costs, disbursements activities and much more.

The Technology Transfer business area is accessible via the nVision launch pad—click on "nVision Reports."

Technology Transfer Reports Available

A description of the 12 standard reports appears in *Guide to nVision Technology Transfer Report*, available on-line as an Excel file [http://nvision.nih.gov/jobaids/Guide to nVision Technology Transfer Reports.xls] (346k). The reports include:

- **Royalty Reports**
  - Royalties by License
  - Royalties/Invention Cost Comparison Report
  - Royalty Disbursement Activities
  - Royalty Income/Invention Costs Snapshot

- **CRADA Reports**
  - CRADA Information

- **Technology Reports (Invention/Patent/License)**
  - Invention Lifecycle/Inventor's Portfolio Report
  - Invention/Patent Search Report
  - License Lifecycle Report
  - Patent Cost Report
  - Patent Lifecycle Report
  - Research Portfolio
  - Unlicensed Invention/Patent Report

New Access Views Have Been Added

The nVision Technology Transfer business area has new access views, added in response to requests from the NIH user community. They are:

- IC with Royalty Data
- TDC (Technology Development Coordinator)
- TDC with Royalty Data

The new access views allow authorized users to view and print very detailed reports on the development cycle of inventions from the very early stages through issued patents, licenses, and royalty income information and disbursements.

Other nVision News

- **Enhancements to Travel**

  A new report is available, "New Travel Authorizations Awaiting Final Voucher Report (TR-40)." The source system for the nVision Travel Business Area is NBS Travel (Gelco). The report is located in the nVision Travel Business Area under the "Travel Authorization Reports" folder.

  Created in collaboration with the members of the NIH travel community, this report aids users throughout the year by identifying travel vouchers that need to be finalized—specifically useful during the fiscal year-end close-out process. This report will identify authorizations under the following conditions:

  - No voucher has been submitted
  - A voucher has not been flagged as final

  Please note: finalizing a voucher will release any unused obligations, which may then be used for other purposes.

More Information about nVision

Learn more about nVision's capabilities, features and available business areas on-line via the NIH Portal. On the NIH Portal [http://my.nih.gov], click first on "My Communities" and then on "nVision"—where you will find everything you need to get acquainted, registered, and trained in the use of nVision.

Keep up to date on enhancements by reading "News & Updates" regularly—see the link in the upper right corner of the nVision Reports screen.

The NIH Business Intelligence team welcomes questions and comments. Please send them to the NIH Help Desk at *helpdesk@nih.gov*, or call 301-496-4357.

CIT's Backup and Recovery of Your Servers—Files Are Stored Off-Site

CIT offers automatic backup and recovery for your file servers—wherever they are located—via NBARS, the NIH Backup and Recovery service. NBARS provides a secure, centralized backup/recovery service that you can configure for your needs, leaving decisions and control in your hands.

NBARS logo

Whether your servers or workstations are on the Bethesda campus, in NIH rental buildings, or in the on-campus or off-campus co-location sites (at NIH or in Virginia), NBARS backs up your files to a secure location in the NIH Data Center.

NBARS uses the Tivoli Storage Manager (TSM) client/server software. TSM has three elements: a server component at CIT that stores and keeps track of the backed up files; a backup client for users to back up and restore directories and files from workstations; and an administrative client for central and local administration of the system.

Advantages of NBARS

Once NBARS service is set up for your server or workstation, backups occur automatically on the schedule you determine. When you need to restore a file, use the graphical interface on your own computer to select the backup file you need—and the file is quickly and securely transmitted back to your computer. Among the main advantages:

- **backups** - ***you*** specify what files to back up and how many backup versions to keep
  - ***you*** determine the frequency and time of backups
- **rapid recovery** - ***you*** can restore files any time, day or night
- **security** - ***you*** create a TSM password to protect data against unauthorized access
  - ***you*** have off-site data storage for your important data files

In addition, you have no hardware or software to buy. And the costs of file storage and transmission of data are inexpensive considering the alternative—taking the time to redo your work.

Security

You have the comfort of knowing that two backup copies are being kept. All backed-up data is stored in the secure NIH Data Center on the Bethesda campus. In addition, every night another copy is made to our off-site facility in Baltimore, Maryland. The TSM server database that keeps track of the backed up files is also backed up to the Baltimore facility, in case the current database develops a problem.

Data is transmitted between the client and server across the network with normal network security. TSM also provides keyed encryption methods for transmitting data.

NBARS provides a highly reliable and secure backup service for your file servers—whether you need a single file restored or need business to carry on as usual in the event of a disaster.

Charges for NBARS

Charges for this service are based on the number of backup files stored and the amount of data transferred over the network. The monthly charges are:

- **storage charge** $.00075 per file
- **transfer charge** calculated on a sliding scale that provides a discount for large transfers, ranging from $.015 per megabyte for the first 1000 megabytes to as little as $7.50 per gigabyte.

How Do I Get NBARS?

In order to use NBARS for your backup needs you must:

- be part of a policy domain (join NBARS public domain or set up your own custom domain)
- contact CIT to have a node name and initial password assigned
- install the free, downloadable TSM client software

Information is available on the NBARS web site [http://silk.nih.gov/silk/nbars]. The links to "Overview" and "Getting Started" will be especially helpful.

If you have questions or need help, contact the NIH Help Desk at 301-496-4357 or via the web page [http://ithelpdesk.nih.gov/].

See the following article in this issue on the new version of the TSM client software.

NBARS Users—New Client Software Is Available for Windows

The NIH Backup and Recovery Service (NBARS) offers backup and recovery services for the Windows platform, whether it is used as a server or personal computer. NBARS uses the Tivoli Storage Manager

(TSM) client/server product to provide a secure, easy to use and cost effective way to backup and recover your critical data.

A new version (5.2.34) of the TSM client software is available for Windows 98, NT, 2000, XP. This version is configured for use in the NIH environment.

New Features of TSM for Windows

This new version of the TSM client software has many useful features, including:

- **User-friendly interface**
  Users can change the options file.

- **Backup-archive client interface**
  Users can initiate backups or restores of data on their PCs or servers.

- **New security feature**
  Authorized administrators, helpdesk staff—with permission and using a password—or users (from home) can back up and restore data via a Web browser without having direct access to the PC holding the data.

- **Administrative client (Web browser)**
  Administrators can define storage management policies for files and to set up schedules for automated backup and archive services via the Web.

Downloading the Software

To download the new TSM client for the Windows platform, go to the NBARS Web page [http://silk.nih.gov/silk/nbars] and select the link, "Client Software. " Select the version for Windows. We recommend that you read the "Instructions" before you download the software.

More Information

If you have a question or need help, call the NIH Help Desk at 301-496-4357.

Disaster Recovery Tests in 2005

As concerns for security grow in this era of heightened alerts, owners of critical applications can rest easier by preparing in advance. CIT offers a disaster recovery program to customers using the z/OS (Titan) [http://datacenter.cit.nih.gov/mvs] and Unix (EOS) [http://datacenter.cit.nih.gov/eos] systems at the NIH Data Center. Participation in the disaster recovery program is completely voluntary and is provided on a cost-recovery basis.

The disaster recovery program [http://datacenter.cit.nih.gov/disaster] provides participating customers with facilities for continued processing in the event of an extended service interruption at the data center. The program includes computational, data storage, and data communications services at an off-site location referred to as the hot site.

During tests at the hot site, the NIH Data Center is responsible for restoring system and application software and data while customers are responsible for preparing their applications to run at the hot site. The data center works closely with customers to ensure that recovery procedures are effective and viable.

Two Tests in 2005

Two disaster recovery tests each year allow owners of participating applications to test and refine their disaster recovery activities. The tests this year are scheduled for July 19 and December 6.

If you wish to participate in the NIH Data Center's disaster recovery program or to discuss your critical application requirements for either z/OS (Titan) or Unix (EOS) systems, please call the NIH Help Desk at 301-496-4357, and ask to speak to the disaster recovery coordinator.

Do You Use the NIH Data Center's Printers?

The location for picking up output has changed temporarily. The NIH Data Center's Output Distribution Services on the NIH campus (building 12A) will be under construction beginning in April through late summer. Since the secure output boxes are in the construction area, you will not have access to your box during that time—although you will still be able to get your output.

Users who currently pick up their output at CIT's Offsite Distribution Center in the Parklawn building are not affected.

Where Will I Get My Output?

You will still get your output in building 12A—twenty-four hours a day, seven days a week—just in a different place.

In the lobby of building 12A where the elevators are:

- **Find the phone**—it's beside the main door to the machine room.
- **Dial the number**—either 301-480-0706 or 301-496-4715.
- **Supply your box number and box access code**—to staff.

The operations staff will deliver your output to you. If you have any questions, please contact the NIH Help Desk at 301-496-4357.

CIT Training Program Gears Up for Spring Courses

The CIT Computer Training Program's Spring Semester 2005 is officially underway with more than 140 topics and 30 new classes. We have developed a wide range of courses to help NIH employees, staff, and other users of NIH computing facilities work as efficiently and effectively as possible. Classes will continue to be added throughout the term, and popular courses may have extra sessions added. Our classes are free of charge to NIH staff.

A full description of the course schedule is available at the CIT Computer Training Program web site [http://training.cit.nih.gov]. All courses are now open for registration on-line.

New Courses in CIT Services

- "NIH IT Enterprise Architecture 101" is a new course this semester, taught by Helen Schmitz, to support the NIH mission by creating a structured and dynamic NIH-wide information technology (IT) design in order to guide the implementation of applications and infrastructure. This interactive session is designed to introduce the concepts and terminology of Enterprise Architecture and detail its importance to you, to your IC, and to the NIH. Also covered in this session will be the purpose behind and what is needed in order to fully comply with requirements.

- A new course has been added in our Listserv category. The NIH Listserv currently hosts over 2,900 lists and was upgraded to the latest version in October 2004. Walter Lamar has specifically designed

"What's New in Listserv 1.8e for List Owners" to explore the differences between the old and current versions, as well as additional features in the newest version.

- The problems of control and space for servers are addressed in another new offering. With the new course entitled "Need Better Space for your Servers? Consider Co-location," Kathy Scalzi details the co-location services that CIT offers - both in the NIH main campus facilities in building 12 and in a commercial off-campus site in suburban Virginia.

- CIT addresses the increasingly critical issues regarding computer security by offering "Meeting the Challenges in Desktop Security Patch Management at NIH." Chuck Benjamin will share procedures and lessons from his experience with using automated patching tools in the NIH environment and will solicit suggestions and ideas from seminar participants. This timely class joins returning favorites in computer security courses, such as "SARA Basics," "Network Security and Firewalls," "Basic Security for Unix Workstations," and "Security Penetration Testing, A Practical Overview."

New Courses for IT Professionals

- "Introduction to Novell Linux Desktop" and "Introduction to Novell SUSE Enterprise Server" introduce open source standards and the common knowledge and skills needed in all Linux distributions. The Desktop course will assist the student in effectively operating within the new Novell Linux Desktop 9. Among other items, students in the SUSE Enterprise course will gain the essential skills required to log in to a multi-user Linux environment and to navigate the SUSE Linux file system.

- HHS Usability Seminars give web developers and those creating web requirements a better understanding of usability concepts and testing. Seminars include "Usability of Handheld Devices," "Universal Design: The Case of Lower Literacy Populations," "Developing Statements of Work for Engineering Usability Services," and "Designing Usability Surveys." These seminars are given free-of-charge as a partnership between HHS and GSA.

- Aaron Gee-Clough, DNST, will bring "The Open Source Movement – A Review of Available Tools." This class will give an overview of some of the more well-known Open Source tools and applications. It will specifically discuss the maturity of these items and what makes them ready to use.

- "Beginning Perl" is offered this semester with a new instructor, Dr. Rick Troxel. This course provides a basic understanding to Perl, a flexible programming language that excels at reformatting data and manipulating long strings of test. Perl is a great first programming language for those who find spreadsheets too limiting.

- With the introduction of "Fundamentals of Filemaker 7, " "Filemaker Pro 7 Level 1 (Windows)" and "Migrating to Filemaker 7" three new and cutting edge classes will allow student to take advantage

of the features of this new and substantially changed version of the software. Filemaker 5 and 6 courses have been offered at CIT for several years and the new generation of Filemaker courses will continue to serve NIH users. Users of Filemaker 6 may be interested to know that this semester will be the final offering in 6 classes.

New Courses for Scientists

- Neuroscientists have four new entries in "Presentation" courses from Neurobehavioral Systems, Inc. Presentation is a precision and powerful "stimulus delivery" and "experimental control" program for neuroscience; the program delivers auditory, visual and multimodal stimuli with sub-millisecond temporal precision. The courses include a general introduction to the Presentation software, information in programming experiments using Presentation Control Language, and a demonstration of the implementation of a complete visual fMRI experiment in Presentation from scratch to completion.

- For the first time, there will be a full week of training courses by Dr. Matthew McAuliffe on Medical Image Processing Analysis and Visualization (MIPAV). In addition, a new class, "Writing MIPAV Plug-ins" will help users automate the processing and analysis of biomedical imaging data. Other courses offered during the MIPAV week are "Getting Started in MIPAV," "Visualization in MIPAV," "Writing Scripts and Plug-ins," and "Mapping to the Talairach Coordinate System."

Registering for Classes

All courses are available free of charge to NIH employees and other users of NIH computing facilities. For more information or to register for classes, please visit the web site at http://training.cit.nih.gov.

We also welcome your phone calls regarding courses, schedules, training issues, future needs, or teaching offers. Most of our instructors volunteer their time and talent to bring these timely and informative sessions to NIH staff. If you have a topic you would be interested in presenting to the NIH community, please contact us at 301-594-6248.

Training Calendar—Spring 2005

April

375	What's New in Listserv 1.8e for List Owners	4/21
750	Effective Management of Telecommunications Requests:	4/21

	A Dollars and Cents Approach	
263	Statistical Analysis with R	4/21
982	NCBI's Identification and Correlation of Disease Genes to Phenotypes	4/21
349	Remedy - NIH Central Service Ticket System	4/22
917	From Scan to PDF: Composing Scientific Figures with Adobe Photoshop and Illustrator	4/25
878	FileMaker Pro 7 Level 1 (Windows)	4/26
173D	NIH Data Warehouse Analyze: Human Resources	4/26
173C	NIH Data Warehouse Analyze: Human Resources	4/26
193D	NIH Data Warehouse Query: Human Resources	4/27
200A	Introduction to Statistics	4/27
640	Advanced CSS / XHTML	4/27
237B	SPSS: Statistics	4/27, 4/29
733A	Intermediate QVR Training	4/28
411D	Introduction to mAdb	4/28
964C	EndNote (PC) Basics	4/28
961	Library Skills: Using Online Resources to Your Advantage	4/28
959B	PDAs: Basic & Clinical Applications	4/28
733B	Intermediate QVR Training	4/29
729	Understanding the Grants Process	5/2

May

679	Secure .NET Development	5/2
280	Introduction to Statistical Issues and Procedures Using SUDAAN	5/3
913	Using Photoshop to Work with Scientific Images	5/3
861	New Features of VirusScan 8.0	5/3
193C	NIH Data Warehouse Query: Human Resources	5/3
831B	How to Get the Most out of Outlook 2003	5/4
734A	Advanced QVR Training	5/4
201	Introduction to Descriptive & Inferential Statistics	5/4
191B	NIH Data Warehouse Query: Research Contracts & Grants	5/5
243	SAS Programming I	5/10
104	Web Sponsor	5/10
410B	Statistical Analysis of Microarray Data	5/11
611	Seeking Information on the Web	5/18
511C	nVision Travel	5/11
965B	PubMed	5/12
971	Complementary & Alternative Medicine: Databases, E-Journals and Other Sources	5/12
962B	Reference Manager 11 (PC) Basics	5/12
264	Statistical Graphics in R	5/12
647	Introduction to Flash Application Development	5/13
926	Getting Started with Medical Image Processing Analysis and Visualization (MIPAV)	5/16

944	Beginning Perl	5/16
928	Writing Scripts for MIPAV	5/17
620	Extreme Google	5/17
382	Wireless LAN & VPN Client Training	5/17
199	NIH Data Warehouse Query: Advanced Query & Reporting Workshop	5/18
927	Visualization in MIPAV	5/18
939	Introduction to Novell SUSE Linux Enterprise Server	5/18
930	Writing MIPAV Plugins	5/19
929	Mapping to the Talairach Coordinate System using MIPAV	5/20
367	Building a Home Network	5/20
420	Hands-On MatchMiner and GoMiner: Software Resources for Analysis of Microarray Data	5/23
914	Intermediate Photoshop	5/24
411E	Introduction to mAdb	5/24
792B	Improve Your Public Speaking When Using PowerPoint	5/24
877	Migrating to FileMaker Pro 7	5/24
853	Meeting the Challenges in Desktop Security Patch Management at NIH	5/25
350	Remedy Queries and Reporting Using Access and Excel	5/26
962C	Reference Manager 11 (PC) Basics	5/26
958	Reference Manager & Endnote Drop-In Clinic	5/26
964D	EndNote (PC) Basics	5/26

June

200B	Introduction to Statistics	6/1
734B	Advanced QVR Training	6/1
977	NCBI's Blast Quick Start	6/1
823B	Creating Presentations with PowerPoint 2003 for the PC	6/1
253	Categorical Data Analysis Using Logistic Regression in SAS Software	6/7
442B	Partek: Identifying Differentially Expressed Genes	6/8
441B	Partek: Visual and Statistical Analysis of Microarray Data	6/8
444B	Partek: Basic Features for Microarray Data	6/9
443B	Partek: Classification of Microarray Data	6/9
649	Introduction to Flash MX Application (with Accessibility)	6/10
473	An Introduction to Sciware	6/14
407	Introduction to Principal Component Analysis and Distance Geometry	6/15
876	Fundamentals of FileMaker Pro 7	6/22
411F	Introduction to mAdb	6/28

Dates to Remember

Now . . .

- The NIH Portal—in a major upgrade by CIT—has an enhanced "Communities" environment and is integrated with Exchange (including Outlook's e-mail and calendar). [http://my.nih.gov]
- nVision has a new business area reporting tool—Technology Transfer. [http://my.nih.gov]
- A new NIH password policy is in effect.
- CIT Training Program spring 2005 term is under way. [http://training.cit.nih.gov]
- NBARS users can upgrade their TSM client software for Windows to version (5.2.34) on-line.
- The NIH Data Center has a new temporary pick-up location for output in building 12A. E T

Later this year . . .

- A second co-location site—double the size of the original area—will open at the NIH Data Center. [http://datacenter.cit.nih.gov/colocation]

July 19
- Disaster recovery off-site test. E T [http://datacenter.cit.nih.gov/disaster]

December 6
- Disaster recovery off-site test. E T [http://datacenter.cit.nih.gov/disaster]

E EOS (Unix system)
T Titan (OS/390 system)

Articles in other issues of *Interface* appear in brackets [ ].

Subscribe to the "Interface" list via Listserv to receive notification of new issues as soon as they are available on the Web [http://list.nih.gov/archives/interface.html].

Publications

The following documents have become available since the last issue of *Interface* and can be obtained from the CIT publications web page [http://publications.cit.nih.gov/]. Publications are provided in hardcopy, on-line, or PDF versions under the "View/Print on Demand" (VPOD) system.

To be notified when new or updated documentation that has been added to the VPOD system, join the Listserv list, "CIT-doc-renew" [http://list.nih.gov/archives/cit-doc-renew.html].

Mainframe Systems (IBM z/OS Servers)

Updated

Titan User's Guide, November 2004
Titan Batch Processing, December 30, 2004
Network Access to the Titan System, March 2005

Directories and Reference Information

NIH Computer Center Hardware and Software
[http://datacenter.cit.nih.gov/if.backpage.html]

Computer Services Telephone Directory
[http://datacenter.cit.nih.gov/tel.num.txt.html]

Online Services Directory
[http://datacenter.cit.nih.gov/online.access.txt.html]

Popular Web Sites for NIH Computer Center Users
[http://datacenter.cit.nih.gov/www.dir.html]

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DCS	Division of Customer Support
DECA	Division of Enterprise and Custom Applications
OD	CIT, Office of the Director