

Summer/Fall 2009 [Number 244]



Major Articles

Wylbur Retirement: Preparing for the Transition

Introducing CIT's Virtual Server Service

Secure Email (and File Transfer Service)

Secure TN3270 Access to Titan Required as of November 1, 2009

The CIT Service Catalog

Ask the Help Desk: GovTrip, the New Travel System

Published By
Center for Information Technology
National Institutes of Health
Health and Human Services

Table of Contents

Articles

Wylbur Retirement: Preparing for the Transition 3

Are you ready for Wylbur's retirement on December 31, 2009? Find out about the resources CIT is making available to help with the transition.

Small Group Consulting on Wylbur Retirement Issues 4

If your group needs specialized assistance in finding an alternate strategy suitable to your particular Wylbur application, CIT offers free small group consulting for the transition.

Wylbur Retirement Wiki Available 5

Do you need alternate tools and procedures for your Wylbur commands? Visit the Wylretire wiki.

Introducing CIT's Unix Virtual Server Service 6

Are you looking for lower server hosting costs, more flexibility, and reduced downtime? Consider CIT's new Unix Virtual Server Service.

Secure Email (and File Transfer Service) 8

The File Transfer Service now offers secure email too. Easily send and receive encrypted messages via CIT's web-based Secure Email Service.

Secure TN3270 Access to Titan Required as of November 1, 2009 10

If you currently access Titan applications such as TSO, DB2, Model204, and IMS using QWS3270 Plus, you must upgrade your software to QWS3270 Secure before November 1.

The CIT Service Catalog 12

Have you browsed the CIT Service Catalog yet? Located on our website, it offers a regularly updated listing of all available CIT services.

Updated EOS User's Guide Now Available 14

The latest update to the Hosted Unix (EOS) User's Guide is available.

Ask the Help Desk: GovTrip, the New Travel System 15

The NIH Help Desk answers your questions about GovTrip and the NBS Travel module.

CIT Training Update

17

There's still time to sign up for CIT Training classes for the summer term.

Directories and Reference Information

18

Major Contributors

Inside Back Cover

<http://www.nih.gov> is one of the most frequently visited federal government websites.

	<i>May</i>	<i>June</i>	<i>July</i>
Total hits for the month	66,206,176	67,627,976	65,524,011
Hits per day	2,135,683	2,254,265	2,113,677
Different individuals per month	3,141,709	3,028,241	3,041,488

The server has been up 100% of the time* during July 2009.

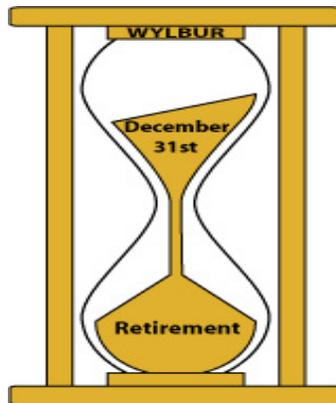
* *Server uptime is independent of network accessibility.*

Articles

Wylbur Retirement: Preparing for the Transition

As announced in issue 243 of *Interface* ([WYLBUR Will Be Retiring](#)) and *Titan News* ([April 7, 2009](#)), Wylbur, the Titan mainframe editing and batch processing system, will be retiring on **December 31, 2009**.

Many of Wylbur's text editing functions can now be performed with desktop computer tools. In addition, we have many off-the-shelf products on Titan that will provide customers with the same functionality as Wylbur command procedures.



It's time to prepare for the Wylbur retirement.

Help with the transition

CIT will do everything we can to help you find alternatives to Wylbur that suit your needs. We have set up the Wylbur Retirement website at <http://silk.nih.gov/silk/wylbur> as a central source of information about the transition and the different types of assistance available for Wylbur users. In addition, *Titan News* is running a series of articles on how to convert your Wylbur command procedures to alternate tools and applications, such as REXX EXECs (an interactive language for TSO) and ISPF (Interactive System Productivity Facility). ISPF is a multifaceted development tool set that runs under TSO (Time Sharing Option) on the Titan z/OS system. TSO and ISPF provide interactive access to the facilities of the mainframe system for application developers and other users.

For customers who use Wylbur interactively, we will be offering classes in ISPF, a full-screen editor in TSO. In some cases, we can arrange for small group consulting for an office or group of people who support an application using Wylbur. Please see the related article "Small Group Consulting on WYLBUR Retirement Issues" in this issue for more details.

More resources for you

CIT has also set up a wiki (at <http://wylretire.cit.nih.gov>) where users can find a growing library of information on the various alternate tools for Wylbur procedures, including advice on using ISPF for

basic mainframe tasks. CIT staff are constantly adding information to the wiki so be sure to check back from time to time. For more information on the Wylretire wiki, please see the relevant article “Wylbur Retirement Wiki Available” in this issue of *Interface*.

To facilitate discussion and exchange of information, we have also created a listserv that you can join at WYLRETIRE-L listserv (for more information, please see the June 16, 2009, *Titan News* article [Join the WYLRETIRE-L Listserv to Post Comments and Receive Information](#)).

We want to hear your questions and concerns

We want to hear from you and make sure we address your concerns. Please contact the NIH Help Desk at <http://ithelpdesk.nih.gov/support> or 301-496-4357, 301-496-8294 (TTY), or toll free at 866-319-4357 with your questions and requests for assistance. To keep up with the latest news on the Wylbur retirement, subscribe to the *Titan News* online newsletter at <https://list.nih.gov/cgi-bin/wa?SUBED1=cit-titan-news&A=1>.



Small Group Consulting on Wylbur Retirement Issues

As part of our efforts to ease the transition from Wylbur to other tools, CIT is pleased to offer small group consulting for an office or group of people who support an application that uses Wylbur. Although the Wylbur Retirement website (<http://silk.nih.gov/silk/WYLBUR>) lists several sources of help (such as the Wylbur Retirement wiki [<http://wylretire.cit.nih.gov>]) related to Wylbur’s retirement, some users may need additional assistance to identify a replacement strategy that is suitable for their particular Wylbur application.

Please contact the NIH Help Desk at <http://ithelpdesk.nih.gov/support> or 301-496-4357, 301-496-8294 (TTY), or toll free at 866-319-4357 to request a consulting appointment. A highly knowledgeable CIT staff member will arrange to work with your group, in person or by phone, to offer guidance on a replacement strategy tailored to your needs. This small group consulting service is offered to customers free of charge.



Wylbur Retirement Wiki Available

In order to help users navigate the transition away from Wylbur, CIT has set up a wiki (at <http://wylretire.cit.nih.gov>). This wiki functions as a storehouse for the Wylbur user community's collective knowledge and ideas about substitutes for various Wylbur commands and procedures. While CIT staff members maintain the wiki, Wylbur (or ISPF) users are welcome to add tips, tricks, or comments and questions.

If you are not sure how to use a wiki, the *Interface* #242 article "Kiwi Wiki Service Now a Full Production Service" (http://datacenter.cit.nih.gov/interface/interface242/kiwi_wiki.html) might be a good place to start.

Keep track of information

The Wylretire wiki offers step-by-step guidance on topics like using ISPF for basic mainframe tasks, such as converting your Wylbur (edit) format data sets to a format which can be used outside of Wylbur. You can also use it to find out about alternate (web) tools and procedures for tasks currently handled by Wylbur. CIT staff members add new information to the wiki frequently, so keep checking back for additional topics and replacement options that can help you find alternative solutions for Wylbur functions.

There are often many replacements for a single Wylbur function. ISPF "power users" may have their own favorite shortcuts to carry out a function, such as getting information about a data set (Wylbur's SHOW DSNNAME command). So, while the wiki offers suggestions, there is not necessarily a single "right" way to replace a popular Wylbur command. To learn more about ISPF, sign up for an ISPF training class at <http://training.cit.nih.gov?108-09S>.

Add your comments

We invite visitors to the wiki to add comments and suggestions to the discussion areas within the wiki. Use your Titan userid and password to log in to the wiki, and click on the discussion tab at the top of each article. Our staff will be monitoring the discussion areas to get input from other Wylbur users on ideas for transitioning away from Wylbur, suggestions for alternate tools, and other relevant topics.

Questions?

For questions about the Wylbur retirement or using the wiki, please contact the NIH Help Desk at <http://ithelpdesk.nih.gov/support> or call 301-496-4357, 301-496-8294 (TTY) or toll free at 866-319-4357.



Introducing CIT's Unix Virtual Server Service

The Center for Information Technology (CIT) is pleased to announce a new Unix virtual server hosting service using VMWare software.

What is server virtualization?

Server virtualization allows multiple operating system instances to access resources from a pool of physical servers, providing access to the memory and processors of that pool of servers. Each operating system runs in isolation, side-by-side on the same physical machine. VMWare acts as the intermediary between the virtual server's operating system and the hardware, allowing the customer to receive a service similar to a dedicated server, even though multiple "virtual systems" are running on the same server.

Virtualization: a lower-cost solution

Compared to standard dedicated servers, virtualization offers customers cost savings because it maximizes the efficient use of pooled resources.

- Virtualization decreases the number of administered physical servers, which reduces overall power and cooling requirements.
- Operational savings result in a lower charge for CIT customers. Virtual server customers pay about 25 percent less than those with dedicated servers.
- CIT's virtualized environment is highly robust with built-in redundancy. Customer configurations that require additional servers and load balancers for failover support can leverage the virtualized environment to significantly lower their hardware requirements and costs.

Why should I choose virtualization?

Along with the cost savings mentioned above, virtualization offers additional operational benefits and provides a high quality production environment.

Operational Benefits

Faster and More Flexible Provisioning: Virtualization expedites the server provisioning process.

- Virtual servers can be rapidly deployed through the use of preconfigured master images.
- Virtualization's flexibility makes it easier to set up additional virtual servers quickly.
- Additional test or development servers to validate system changes can be deployed according to customer needs.

Decreased Downtime: Virtualization allows servers to remain accessible during scheduled maintenance or physical server failure.

- During scheduled maintenance, such as hardware replacements, firmware upgrades, and network changes, virtual machines can be non-disruptively moved to other servers in the server pool, thereby allowing maintenance without downtime.
- In the event of a physical server failure, virtual machines automatically failover to other remaining servers in the pool. This failover with redundancy allows the customer's virtual server to remain accessible.
- The technology provides additional options for future disaster recovery and business continuity solutions.

Higher Capacity Utilization: Virtualization enables customers to effectively respond to fluctuations in the workload and adjust capacity as needed.

- Virtual machines can be moved from one physical server to another for workload distribution and improved performance.
- Capacity can be expanded and additional hardware can be added into the server pool without impacting the existing customers' virtual machines.

A High Quality Production Environment

Secure and Robust Systems: Virtualization maximizes uptime of business critical systems and minimizes service interruptions.

- Virtualized machines run in an environment completely isolated from the host machine and other virtual machines.
- Data does not leak across virtual machines, and applications can only communicate over configured network connections.
- A virtual system offers continuity because it absorbs the failure of one virtual machine with no effect on the others in the system.

CIT's standard hosting service: Customers using virtualization receive the same premium service that the NIH Data Center offers its customers with physical servers.

- Virtualization provides the customer with a reliable service identical to a dedicated server, without the complexity of shared servers.
- Other standard services include:
 1. Full technical support including full server support, 24 x 7 system monitoring and problem resolution.
 2. Software upgrades, hardware maintenance, and backup and recovery services
 3. Comprehensive change management.
 4. Security validated by a yearly SAS70 audit.

CIT's Unix Virtual Server standard offering

CIT's Unix Virtual Server offering provides a Solaris x86 environment running on a VMWare virtual server. The standard virtual server includes 2 GB of memory and 50 GB of storage. In addition to this basic offering, CIT can customize the virtual server to meet your requirements. Because virtual servers have access to resources from a pool of servers, customers can request more memory (in 1G increments), and more data storage (in 25GB increments). The CIT hosting staff provides the same operating system support, patching, security, backup, and monitoring as it does for the dedicated hardware solution. The initial offering does not include support for virtual servers that must reside behind application firewalls or load balancers, but there are plans to include that support in the future.

The virtualized Solaris environment resides on pools of servers running under VMWare ESX software. The server pools consist of four to five servers, each with dual or quad core processors and up to 128 GB of memory with room for expansion. The server pools are connected to a 10 TB SAN that can be expanded to accommodate storage growth. For pricing information regarding these services, please check the CIT Rates page (<http://datacenter.cit.nih.gov/rates/>).

More information

For more information about the service, please contact the Help Desk at <http://ithelpdesk.nih.gov> or by phone at 301-496-4357, 301-496-8294 (TTY) or toll free at 866-319-4357 (toll free).



Secure Email (and File Transfer Service)

Data security is an important issue for all NIH users. As part of proper data management, we all have to comply with the security standards set by the [Federal Information and Security Management Act](#) (FISMA). A concrete step you can take to help protect data integrity at NIH, especially if you handle sensitive records like patient case files, is to know how to properly manage personally identifiable information (PII), such as social security numbers or birth dates. [For more on PII, see also the *Interface* article in issue 241, entitled [Using the NIH Guide for Identifying Sensitive Information.](#)]

It is especially important to ensure that email messages containing PII or other sensitive data are properly safeguarded. Although Public Key Infrastructure (PKI) encryption methods work well for users who share a public key within one directory (like the Central Email Service at NIH), making sure correspondents outside that directory have access to the correct public key is not always practical. Therefore, CIT now offers an alternative method to the existing PKI-based S/MIME mail – a web-based Secure Email/File Transfer service that makes it easy for NIH users to send secure and confidential email through our secure messaging platform.

What is Secure Email/File Transfer Service?

Secure Email is a new web-based CIT service now being offered alongside our existing Secure File Transfer Service. Secure File Transfer already allows NIH users to send large documents over a secure socket layer (SSL)/encrypted connection without having to obtain a PKI certificate. Initially, this service was meant for scientists (or other NIH staff) who wanted to send very large images or documents securely outside of the NIH network. It then became clear that this tool would also be very useful to NIH staff in need of a secure way to exchange information that can be categorized as sensitive or PII with patients or others outside of the NIH network.

Secure Email extends the existing Secure File Transfer service to email messaging, enabling NIH users to securely send and receive emails with or without large document attachments. While non-NIH customers cannot use Secure Email to send messages, they can receive encrypted email from the service. Using the Secure Email /File Transfer Service ensures the protection of PII and thoroughly secures all data and information being sent via email. Secure Email also offers a level of non-repudiation and tracks correspondence history.

The CIT Secure Email/File Transfer Service

All NIH users are preregistered to receive deliveries through this service and can access their messages at <https://secureemail.nih.gov/bds/Login.do>. Users are authenticated either through their Active Directory (AD) account (for NIH and HRSA users) or with a registered email address and password in the case of non-NIH users who are registered in the NIH External Domain. Currently, there is a 2 GB size limit on all email messages due to browser limitations, and stored files and emails will be deleted after 90 days. There is a small fee charged to your IC for using Secure Email/File Transfer Service.

How do I use it?

Secure Email is easy to use. As an NIH user, all you need to get started is to register for the service with the NIH Help Desk at <http://ithelpdesk.nih.gov/Support/> or call 301-496-4357 (6-HELP) (local), 866-319-4357 (toll free), or 301-496-8294 (TTY). Once you have registered with the NIH Help Desk, you will be able to SEND your messages via Secure Email, after signing in at <https://secureemail.nih.gov/bds/Login.do>.

As a registered sender on this system, you can use it to send to any email address. Recipients, including non-NIH users, can always 'reply' back to the message they receive through the service.

Who can use Secure Email/File Transfer?

All NIH users and those non-NIH users registered in the NIH External Domain can use Secure Email to SEND and RECEIVE secured emails/files.

Other non-NIH users can only use Secure Email to RECEIVE and REPLY TO secured emails/files sent from NIH users. They **cannot** send messages.

Need help or have questions?

If you need help or have question relating to Secure Email, please contact NIH Help Desk at <http://ithelpdesk.nih.gov/support/> to submit a request for support using our web form, or call 301-496-4357 (6-HELP) (local), 866-319-4357 (toll free), or 301-496-8294 (TTY).



Secure TN3270 Access to Titan Required as of November 1, 2009

In order to guarantee secure access to Titan applications such as TSO, DB2, Model204, and IMS, **beginning November 1, 2009**, the CIT Data Center will **only allow access to Titan via SSL encrypted TN3270 sessions**. CIT provides **QWS3270 Secure** to our customers for this purpose. **Titan customers who are currently using QWS3270 Plus must upgrade their software to QWS3270 Secure by November 1, 2009.**

How to get the new QWS3270 Secure software

You can download QWS3270 Secure from the Titan website at <http://titan.nih.gov/> by following these steps:

- Click on "NIH Connectivity Tools" under the Connectivity category.

-
- Enter your Titan USERid and password.
 - Select QWS3270 Secure (TN3270) from the options for Windows 2K/XP.
 - Review the License Agreement and click “Agree.”

You will then find installation and configuration instructions for the software.

To install the software on your PC you must have an administrative account (AA). Your “AA” account is used for making system changes, installing software, and running applications that require it. The AA account is required due to changes mandated by the Federal Desktop Core Configuration (FDCC) implemented at NIH. If you do not have an “AA” account, please contact the NIH Help Desk for assistance in installing the software.

No matter who installs the software, it is recommended that you print and read the installation and configuration instructions before the software’s installation.

Be sure to follow the instructions for configuring a secure Titan or IMS session.

Macintosh computer user considerations

Customers using Macintosh computers to access Titan have two alternatives to allow secure communication.

One choice is to download TN3270X Release 3.2.4, which also supports Secure Sockets Layer (SSL) communications, from Brown University. To install the TN3270X 3.2.4 client, please follow these instructions:

1. Download the software from <http://www.macupdate.com/info.php/id/8193>.
2. The download and install parameters can be completed by using the defaults.
3. After the download is complete, the tn3270 x folder can be opened and a new session started. Please use the following parameters to start the session:

Host name Titan.nih.gov
Session name Titan

Click the Special icon and enter:

Port 2323

Terminal type Auto

Click the SSL button

Set SSL/TLS as the default

Click the Negotiate SSL button

Click OK

Click Open Connection

The other choice is to use 'Parallels Desktop for Mac,' a hardware emulation virtualization software package that allows Windows applications, such as QWS3270 Secure, to run side-by-side with your other Macintosh OS X applications. Once the Parallels Desktop environment has been implemented, Macintosh users can download the QWS32370 Secure software from the Titan website at <http://titan.nih.gov/>. For more information on the Parallels Desktop, please visit <http://www.parallels.com> for details.

Note: The reference to other non-NIH Internet sites is only for the convenience of web users. NIH is not responsible for the availability or content of these external sites, nor does NIH endorse, warrant or guarantee the products, services or information described or offered at these other Internet sites.

Need help to install QWS3270 Secure or have questions?

If you need help or have any questions regarding installing QWS3270 Secure, just submit a service request via the NIH Help Desk's website (<http://ithelpdesk.nih.gov>) or give them a call at 301-496-HELP (301-496-4357), 866-319-4357 (toll free), or 301-496-8294 (TTY).



The CIT Service Catalog

In the beginning

In early 2007, seeking to improve the level of service provided to our customers, CIT committed to a new service management framework named ITIL (Information Technology Infrastructure Library). Although there are many objectives to the ITIL framework, the most important is to deliver effective IT services to our customers.

In order to accomplish that objective, the Service Catalog was born. The Service Catalog provides a comprehensive listing of CIT services, which not only allows customers a transparent view into CIT offerings, but also provides easier access to ordering these services.

Providing benefits to our customers

The structure of the Service Catalog improves the visibility of CIT services to our customers and delineates the range of our capabilities. Services are categorized into high-level groups, highlighting our main areas of business for customers. By having an authoritative list of services in a single trusted location, our customers can make plans and take actions knowing that CIT will provide the service they require to support their business needs. The Service Catalog also gives customers one place to easily find contact information for ordering services and learning more about CIT services.



The CIT Service Catalog – all CIT service offerings in one location.

Learning along the way

As with many organizations, we discovered that when instituting a new way of doing business, changing the culture can be one of the most difficult challenges you face. While CIT divisions were doing a great job offering and supporting our services, we discovered (through the implementation of ITIL) that despite our strengths, we had been working too much in a “stove-piped” environment. In order to provide our customers with a consistent method of service delivery from CIT we needed to collaborate more and encourage teamwork across divisions.

Teams were established, and meetings were held on a recurring basis to discuss how to better communicate our service selection to our customers. This process brought us more gains than we ever dreamed possible because we were able to combine resources and work cohesively to develop our best practices. We became better service providers because we thoroughly reviewed every aspect of services and shared information with our customers that was accessible, accurate, pertinent, and current. The Service Catalog was the result of this collaboration and teamwork.

Successes along the journey

The initial CIT Service Catalog was released in November 2007. This was the first time in CIT history that a complete listing of services was produced and shared with NIH. The listing encompassed approximately 100 services, categorized into logical groups with detailed descriptions, and the entire document was available in print and PDF format.

The next milestone occurred in August 2008, when CIT published a new level of the Catalog. Now the Catalog included 120 services in eleven different categories. Every service was broken down into key

components, including: Service Description, Customer Benefits, Hours of Operation, Customer Market, and Related Links. In keeping with CIT's focus on creating something that customers would find easy to use, this version was published on the CIT website and included a printer-friendly view.

The future is bright

The customer is always our first priority. Each step that we take on the Service Catalog is meant to not only help you find what you are looking for, but to make the whole process as easy as possible. Currently scheduled for October 2009, the newest version of the Catalog will be even more robust, with additional information for each service, including: Service FAQs, Service Level Agreement, and Service Reviews. Then in mid-2010, our authorized customers can look forward to actually ordering a service directly from the web, just as you are able to order a book or CD.

While there has been a lot of progress made in the area of Service Catalog Management, there is so much more that can be done. In the strides we take towards a state-of-the-art product, the customer is always the most significant consideration for us. After all, with every new version you are the ones most affected. Collaboration and communication are key to the Service Catalog's success, and CIT will continue its tradition of commitment to the customer.

For more information on the Service Catalog go to: <http://www.cit.nih.gov>.



Updated *EOS User's Guide* Now Available

The latest update to the *Hosted Unix (EOS) User's Guide* (April 2009) is now available. You can view this guide online, print a copy in PDF format, or order a hard copy from the CIT publications web page (<http://publications.cit.nih.gov>). Look for the link to "NIH Data Center User's Guides."

The hosted Unix environment

The hosted Unix environment (also referred to as EOS) at the NIH Data Center is comprised of more than 160 servers that host a variety of production and development applications; providing a stable, robust

hosting solution for enterprise-wide Unix applications. It features both high-end and mid-tier servers, as well as shared and stand-alone servers for Oracle databases with related options, and complete web capabilities.

Hosted Unix services are available on a fee-for-service basis, with the costs charged to your CIT account.

For more information

For more information about these services, contact the NIH Help Desk at <http://ithelpdesk.nih.gov/support> or 301-496-4357, 301-496-8294 (TTY), or toll free at 866-319-4357.



Ask the Help Desk: GovTrip, the New Travel System

Have you been wondering about something called GovTrip in relation to the NBS Travel module recently? Find out more about this new travel system in this article.

What is GovTrip?

GovTrip is the travel management system scheduled to replace the Gelco Travel Manager in the NIH Business System (NBS). It is a “shared” web-based enterprise application used by DHHS, DOT, DOE, DOI, Smithsonian, Treasury, EPA, FAA, and several other federal agencies. GovTrip software was developed by Northrop Grumman Mission Systems (NG) to support the federally mandated eTravel service program. Its software modules are housed, configured, and supported by NG at its Fair Lakes, VA facility.

How do I access GovTrip?

As of this writing, only OD and NINDS are involved in the pilot program for GovTrip. Once fully deployed at NIH, you will need to take the required training, and then fill out and submit a User Access Request form to the NIH Help Desk through the HPOC. The User Access Request form will be available on the NBS GovTrip Community Page.

How do I get trained to use GovTrip?

Training is now being conducted by the NBS Management Center (NMC). Eventually the NIH Training Center will take over the training – probably in the fall.

Every user must take training prior to being granted access.

When will my IC come on board?

The ICs will be deployed in increments, perhaps as early as the fall.

Each IC's Advocate receives up-to-date GovTrip information. Users can check with their Advocate on these types of issues.

What are the main benefits/differences between GovTrip and Gelco Travel Manager?

Aside from the functionality and general appearance of the application, one of the main differences will be the terminology used.

One of the new system's largest benefits includes the online booking tool. Users will be able to do their own booking for travel reservations, such as airline flights (and rail trips), as well as make reservations for seats, hotel rooms, rental cars, and such things themselves.

More information

For more information, users can inquire with their IC Advocate, or they can contact the NIH Help Desk at <http://ithelpdesk.nih.gov> or give them a call at 301-496-HELP (301-496-4357), 866-319-4357 (toll free), or 301-496-8294 (TTY).



CIT Training Update

Although it is nearing its end, summer is still a great time to attend a class in our CIT Training program. During this time of the year, we can provide extra sessions for some of our more popular courses, as well as offer a greater variety of new classes. Volunteer instructors for our program have been diligent in their efforts to provide a wide range of sessions for the varied interests and expertise of those at the NIH. Take advantage of this!

Did you know that the spring/summer 2009 term is available for registration through September 30, 2009? You may still be able to sign up for such courses as:

- [Section 508 Compliance and WCAG 2.0 Guideline for Web Developers](#)
- [Mac OS Tips and Tricks](#)
- [Advanced Excel 2007 - Pivot Tables & More](#)
- [Introduction to ImageJ](#)
- [Advanced ImageJ](#)

If you missed our summer offerings, or you enjoyed the one you did take so much that you want to find more like it, then check back often at the CIT Training website at <http://training.cit.nih.gov> and keep an eye out for the beginning of our fall/winter term.

Our website

For many years, the NIH community has been visiting the CIT Training website at <http://training.cit.nih.gov>. While the website's look and feel has not changed since inception, CIT Training is currently working on improving our user's experience. As the implementation nears in the coming months, more details will be forthcoming.

A complete list of courses currently available for summer 2009 can be found on our website, <http://training.cit.nih.gov>. While there, you can also register for classes, join our CIT Training Mailing list, and check out your transcript or current application status.

Most of the courses offered through our program are free of charge to NIH staff! While NIH employees get first priority for classes, contractors are welcome to attend when space is available, the class is related to their NIH work, and they have approval from their NIH supervisor.

Questions?

If you have any questions about the CIT Training program you may contact us by phone at 301-594-6248 or email us at CITTraining@mail.nih.gov.



Directories and Reference Information

NIH Computer Center Hardware and Software

[<http://cit.nih.gov/ProductsAndServices/ApplicationHosting/RelatedServices/HardwareSoftware.htm>]

Computer Services Telephone Directory

[<http://cit.nih.gov/NR/rdonlyres/CD8200B2-35E6-424C-A1C9-48DA35CE8155/0/TelephoneDirectory.pdf>]

Online Services Directory

[<http://cit.nih.gov/ProductsAndServices/ApplicationHosting/AboutDataCenter/OnlineServices.htm>]

Popular Websites for NIH Computer Center Users

[<http://cit.nih.gov/ProductsAndServices/ApplicationHosting/AboutDataCenter/PopularWebSites.htm>]

Major Contributors

Carleen Akeem, DCSS

Surya Chunduru, DCSS

Phil Day, DCS

John Dussault, DCSS

Sarah Fichter, DCSS

Robert Klein, DCSS

Mike Malone, DCS

Katherine Matthews, DCSS

Michele Schwartzman, DCS

Norma Stern, DCSS

Jonathan Thomas, DCSS

DCS Division of Customer Support

DCSS Division of Computer System Services