ITS Information & Technology Services news

The official source of news from ITS Information & Technology Services

May/June 2004

Campus Network Attacks Managed Effectively Through Critical Incident Management Process

By Diane Barbour, Chief Information Officer, dhbcio@rit.edu

There has been much discussion in the local and national press concerning the increasing frequency and severity of Internet viruses, worms and spam messages. RIT has not been immune to these outbreaks. ITS is currently rejecting over 80,000 spam messages per day or nearly 3 million spam messages per month. Many of these messages contain destructive viruses and worms.

> *"As members of the RIT Community you can rest assured that we take very seriously the need to protect the campus network from hackers and viruses."*

In addition to our defensive activities we are engaging in many proactive activities as well. The Critical Incident Management Process (CIMP) was initiated several weeks ago to address these network threats. The CIMP process begins whenever an incident occurs or is about to occur that poses an imminent danger to the RIT community and has a foreseeable wide operational impact on the campus. A Core Team, led by Emilio DiLorenzo, ITS Director of Technical Support Services, is conducting planning and analysis to address the current threats and to take the necessary steps to mitigate further impact or loss. As members of the RIT Community you can rest assured that we take very seriously the need to protect the campus network from hackers and viruses.

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Compromised Computers Blocked or Quarantined from the RIT Network

Microsoft Windows Updates Critical to Maintaining Computer Integrity

By Dave Pecora, Customer Support Services, dlpits@rit.edu

This message was first sent to the RIT community in mid-April about actions ITS was taking to safeguard the computer network from viruses infecting operating systems. The RIT community was asked to participate in the process of updating their network patches and running anti-virus software as a means to protect systems and desktops. This problem affected all Windows users. It also affected any Macintosh or Linux user running VirtualPC or any similar Windows virtual operating system. We're repeating the information to ensure that all on campus users are aware of the issues and have acted to secure their systems.- Eds.

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Contact Telecommunications Services When Preparing for Summer Renovations and Projects

By Char Ipacs, Telecommunications Services, ccippt@rit.edu

With the summer months quickly approaching, Telecommunications Services experiences an increase in the number of Service Requests (SR) from customers. There are many construction projects and personnel moves that occur in the summer. Due to this increased activity, please allow extra processing time for service requests during the busy summer months. Telecommunications Services encourages everyone to plan ahead. Fill out an SR form early in your construction or renovation process and be as complete as possible. This includes current jack information as well as information about jacks in your new site, if known. In addition, contact and account information should be included on the SR form. The Service Request form may be found on the following RIT Web site address: http://www.rit.edu/~wwwits/services/tele/service_request.html. For additional assistance contact the Telecommunications office Monday-Friday (between the hours of 8:30 am-4: 30pm at 5-5800.

In This Issue

Protecting Yourself Online as Computer Hackers Become More Sophisticated

By Mike Young, Technical Support Services, mcysys@rit.edu

Since last August, and more specifically the beginning of this year, the methods employed by computer hackers, identity thieves, scammers and spammers have become highly sophisticated. In the past few weeks, the level of sophistication has increased to a point that even someone who is aware of these types of activity can be tricked into doing something that could compromise their own security.

Many of you have probably seen a news blurb or notice here or there about virus outbreaks, the recent "virus war", vulnerabilities in MS Windows or Office, etc. While each of one of these appears to be an isolated event, this is a continually growing threat and many of them coordinated by the same people.

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Exchange – the Golden Retriever of Email
Like a search and rescue dog, Exchange can retrieve deleted mail and recover it for you. It can also "herd" back messages that were accidentally sent out or have errors!

Have you ever wanted to:

- Un-send an email message? Well, now you can!
- Delete an email with a student project? Get it back quick….
- Forgot the meeting time but deleted the email because you knew you'd remember? Get it back quick…

For more information about the pilot and migrating to Microsoft Exchange, contact the Help Desk at 475-HELP (4357) or TTY 5-2810 or send an email to helpdesk@rit.edu The ITS website also has up-to-date information and frequently asked questions about the project, take a look at: http://www.rit.edu/~wwwits/services/email

Student Registration Changes: Full Year Schedule of Courses Available for 2004-2005 Academic Year

New online system developed in response to student registration challenges

By Joe Lofreddo, Registrar, jlrgr@rit.edu

Last fall the Retention Committee worked with Information & Technology Services (ITS) to administer a web-based survey of students following winter registration. This survey asked students to evaluate the registration process and their ability to schedule the courses they need. A follow-up survey was also administered to receive more information about the specific courses that students were having trouble scheduling.

The results of the surveys indicated that students are less than satisfied with the current registration process:

> *Of the 2,825 students completing the registration survey in November 2003, 37% indicated that they were dissatisfied or very dissatisfied with the registration process. In addition, 42% said their registration method adversely impacted their ability to get their desired courses.*

Key concerns are related to access and ease of use of the Student Information System (SIS). In addition, some students indicated that they were unable to get the courses needed to maintain progress toward degree completion:

> *Of the 2,825 students completing the registration survey in November 2003, 14% indicated that they were unable to make progress toward degree completion because all sections of the course needed were full.*
>
> *Also, of the 1,238 students completing a follow-up registration survey in February 2004, 12% were unable to get a full schedule of courses required to maintain progress toward degree completion through registration or through the drop/add process.*

In response to these survey results, a committee representing each of the colleges, a student representative, as well as representation from the Registrar, Bursar and Financial Aid offices, NTID Interpreting Services and ITS was formed. As a result of the work of this committee the following improvements have been incorporated into the fall (20041) registration:

1. A Full Year Schedule of Courses

The colleges have developed a schedule of courses for fall, winter and spring 2004-2005. ITS developed a web tool to permit students to search and review the year-long schedule online. Therefore, as students are planning their fall schedules, they also have the opportunity to consider plans for winter and spring quarters.

2. Helping Students Get the Courses They Need

After registering for fall, students who were unable to get the courses they required to maintain progress toward degree completion are given the opportunity to indicate course needs by using a newly designed website. This site tracks the students and the courses they need.

This information is systematically captured and triggers a concerted effort by the college/department offering the course, and/or by the student's program, to attempt to satisfy the course needs.

A benefit of this effort is individualized student attention which includes creating additional sections (given sufficient demand), arranging faculty overload scheduling, if needed, and advising about alternative or substitute courses. (The same process will occur after winter and spring quarter registration.)

The collection of this data is part of an on-going process to identify student course needs and to evaluate the Institute's ability to respond to these needs. These types of efforts have occurred in the past during the add/drop process. However, this new process has formalized and documented the efforts. It also gives the colleges additional notice to attempt to address the student's course needs.

More Improvements to Come

Beyond fall 2004 registration, additional improvements are planned. A key "building block" will be to first design and build a new registration interface to SIS which will be made available during the 2004-05 academic year. Future enhancements to the registration process are dependent on this new interface. As we proceed with the new interface and future system enhancements, we will be seeking extensive student input throughout the process.

Links for both of the registration enhancements mentioned in the article are available on the SIS/Information Access Center page and also on the myRIT Portal. Information for this article was also provided by members of the Retention team – Kevin Dudarchik, Dave Hostetter, Dave Pecora and Jeremy Trumble.

Corporate Time Retirement – Coming Soon!

Exchange Calendaring Replacement Transition Plan Set for May

By Shannon Robinson, Technical Support Services, smrits@rit.edu

Throughout the month of March and into April, multiple faculty and staff forums were held communicating the upcoming transition to the new calendaring system Microsoft Exchange. Many people voiced their anticipation of the new calendaring system, eagerly awaiting the new functionality and benefits it would bring.

Some of the benefits that were discussed in the forums include:

- Integrated with e-mail. Faculty and staff, for example, will have the ability to combine distribution lists, such as multiple course sections or departments into one distribution list.
- The ability to invite people to events
- The ability to access calendar and e-mail through a single Web browser

A campus-wide team of RIT technical staff identified multiple methods of transitioning to the new Exchange calendaring system. The team faced many challenges throughout the planning process and researched each method thoroughly. This included:

1) Testing functions native to Corporate Time and Exchange utilizing export and import
2) Investigating third party tools
3) Developing an internal tool that would programmatically transition data for each user

Each of the first two methods had numerous limitations, however. The team came very close with the development of the third option, but was not able to overcome one key limitation common to all three - the limitation that links between repeating meetings are *not* retained.

A meeting that is scheduled as *Repeating* within Corporate Time will transition into Exchange as individual meetings. In other words, if you schedule a meeting that repeats monthly for six months, it will appear in your calendar, as well as your invitee calendars, as six separate meetings. If you need to change any details of the meeting, such as location for example, you will need to go into each of the six meetings and make the change. This can become confusing.

In addition, Exchange uses an Invite concept which means that when your calendar is converted, your invitees will receive an e-mail message for *each* meeting (including each separate, repeating meeting) requesting them to accept, decline, or respond as tentative. Although this is not a limitation, because of the potential amount of e-mails people could receive, it could cause additional confusion.

Additional communications will be sent to faculty and staff in preparation for the transition. If you have any questions, please contact the ITS Helpdesk at 475-4357 or send e-mail to helpdesk@rit.edu.

Thanks to the dedicated efforts the team and with significant input from faculty and staff through the information forums held over the past couple of months, a transition strategy and timeframe has been established for the retirement of Corporate Time.

Corporate Time to Exchange Transition Plan

- Due to limitations and concerns, users will manually recreate calendaring events into Exchange calendar.
- Users should begin manually recreating calendaring events into Exchange calendar as well as using Exchange calendaring starting **May 17, 2004.**
- Shutdown of Corporate Time is scheduled for **June 13, 2004.**
- On Monday, June 14, 2004, all Corporate Time users should use Exchange calendaring; Exchange calendaring will be the supported scheduling tool for the university.
- ITS will have a resources ready during the transition timeframe to assist users with creating calendaring events and using Exchange calendar by calling the ITS Helpdesk.
- Supporting documentation will also be available off the ITS Web site.

Frequently Asked Questions Regarding the New Exchange Calendaring

Do Exchange calendaring events count against my e-mail quota?

Yes, calendaring events count against the standard 50MB Exchange mailbox quota. Calendar entries are typically quite minimal and altogether don't consume too much space overall. For users running the Microsoft Outlook client setup for MAPI, you can check your overall mailbox size by following the instructions located at: http://www.rit.edu/~wwwits/services/email/exchange/mailbox_size.html

Do I need to delete old calendar entries to save space in Exchange?

Frequent housecleaning is always a good idea. You can easily archive or delete old calendar entries in Outlook 2003. To do so, see the following link:

http://office.microsoft.com/

a. Click on 'Assistance'
b. Under 'Browse Assistance' area, click on 'Outlook 2003'
d. Click on 'Calendaring and Scheduling'
e. Click on 'Removing items from your calendar'

Do all entries count toward the space quota or only those I create?

Those entries that you create, such as: e-mail, tasks, notes, journal entries, contacts, and e-mail drafts, do count against your quota. E-mails that you receive in your Inbox also count against your quota. For users running the Microsoft Outlook client setup for MAPI, you can see the usage breakdown by following the instructions located at: http://www.rit.edu/~wwwits/services/email/exchange/mailbox_size.html.

Does sending e-mail when acting as a mail delegate count against my quota?

If you create an e-mail on someone's behalf, a copy of the e-mail is stored in your sent folder and does count against your quota.

If you would like to learn more about delegate access within Outlook, please see the following URL:

http://office.microsoft.com

a. Click on 'Training'
b. Under 'Browse Training Courses' area, click on 'Outlook'
c. Click 'Next Page'
d. Click on Course 16, 'Delegate Access: Let someone else mind your busyness'

Can I create meetings within my PDA and add attendees? When I synch, will it update my schedule as well as the invitees?

Yes, using a PDA running Pocket PC, you can create new calendar entries and invite attendees.

To schedule attendees within your PDA, the format of the attendees e-mail address must match that of the GAL (global address catalog). The default e-mail address format in the GAL is username@rit.edu. If the format in your PDA differs from this (i.e. username@osfmail.rit.edu) then the invitee will not automatically be invited upon synchronization. This occurs because Exchange calendaring creates appointments using an *Invite* concept allowing it to leverage Exchange mail as a transport to send the invitation. When you schedule a meeting, you are *inviting* people to attend.

Provided the address in your PDA matches that in the GAL, these invitees will receive an e-mail with the meeting details and have the ability to accept, decline, or respond as tentative. If the e-mail address differs from that in the GAL, the invite will fail.

Yes, synchronizing your PDA that is running Pocket PC will update your calendar. Invitees will receive the meeting invite in their Inbox. If they choose to accept or respond as tentative, their calendar will be automatically updated. If they choose to decline the meeting, the meeting will not appear on their calendar.

Tim Johnson, HelpDesk Student-Staff Awarded Alumni Legacy Scholarship

Congratulations to Tim Johnson on his recent award of the Alumni Legacy Scholarship. This award, based on scholarship, leadership and financial need, is given to children, grandchildren or dependents of RIT alumni. Tim follows in his father's footsteps as an RIT student. Timothy Johnson Sr. is a 1978 graduate in the graphic arts and photography school. Tim, Jr. is a second year information technology student.

Among Tim's many accomplishments is his outstanding role as an ITS HelpDesk student-employee, working with customers to resolve computer issues and concerns. He also is news editor of the REPORTER and has helped publicize information about the new email system and security initiatives.

We are very fortunate to have students of Tim's talent and enthusiasm. Congratulations from the staff of ITS on this very well deserved honor.

Madore and Keeton Named Outstanding Undergraduate Scholars

ITS Student Employees Honored for Academic Achievements

Greg Madore is one of two ITS student employees who were named Outstanding Undergraduate Scholars this year for their academic achievements. The film and video major has aspirations to see his name in the credits on the silver screen. Until that time, he'll be looking into taking first steps at either Apple Computer or Kodak developing film and video software.

The longtime student employee had held several different positions within the ITS/DSS organization – Desktop, HelpDesk and ResNet support. Through this year, Greg was a Desktop Support Team Lead. Of the HelpDesk and Desktop support teams he worked with, "they are the best at customer support, I've seen. They're technically astute, but most of all know how to treat people well." Greg added that while here at RIT, he "made a family." Friendships made while at ITS and in the Film school are those that have meant the most to him. "There's such a mix of people, just in 7B – they're dynamic, technically oriented and artistic people'– all coming together. RIT is the sum of all its parts."

Like many of the ITS student employees, they are expected to participatein activities much like staff. And like staff, the student employees work directly with on campus faculty, staff and students resolving technology issues and concerns. This involvement served several purposes for Greg as it allowed him to interact with many people on campus, and helped him become actively involved in the day-to-day activities of RIT.

"DSS is known on campus and people from ITS are instantly recognized," he said. "If you can get involved this way, you can feel as if you're important and can make a difference. You have a part to play in the theater that is RIT. Too many people just work, go to class, that's all. At ITS, there are new things to do and see every day."

Sean Keeton, another long time ITS student employee was honored recently for his academic excellence as an Outstanding Undergraduate Scholar. His supervisor, Dianne Parker wrote about him and his team in an article on page 14. Sean also will graduate from the Film and Animation School and has aspirations to create his own animated characters. We wish him luck in all his endeavors!

New Storage Technologies: Multiple Options for Saving Data

By David Goddard, ITS Desktop Support Services Co-op, 755coop6@rit.edu and Michael Hoydis, ITS Desktop Support Services Co-op, 755coop7@rit.edu

There are more storage technologies available today than ever before. Zip Disks are no longer the only way to lug around more than a MG and a half! Newer, better devices are now available, such as USB Flash drives, CD-R/RW drives, External Hard Disks, and network storage. Below is a brief summary of storage technologies, as well as advantages and disadvantages of each technology.

Zip Disks

Advantages: Zip disks, developed by the Iomega Corporation, are a proprietary, removable storage technology that store computer data magnetically. Zip disks work like floppy drives in that when you insert your zip disk into a zip drive, you can easily drag, drop, and save files to it. Like a floppy, it saves your data on a magnetic disk that spins. Unfortunately, after a period of time this magnetic disk will wear out and you risk losing data.

To avoid losing data, ITS recommends that you do not work on files directly on a Zip disk, but rather move files to a temporary location on the local hard drive, such as the Desktop, and then back to the Zip disk when you are finished working. Zip disks are fairly expensive at $12 to $15 each.

Disadvantages: Zip Disks are gradually being phased out due to their largely unreliable nature. Newer, removable technologies such as USB flash drive key chains and CD-RWs are better alternatives.

Flash Memory

Advantages: USB flash drives use flash memory to store your data. Electrical charges are sent through the memory chips to store your data so there are no moving parts to wear out and cause you to lose your data (which is the reason Zip Disks fail). USB Flash drives are convenient to carry around. Most of them are designed to be put on your key ring as a keychain! Flash memory is becoming more and more affordable because it is being used in many consumer devices such as digital cameras and PDAs. Campus Connections carries a 265mg model – which is plenty of space for most students - for $60. USB flash drives are very reliable and easy to use. Just plug them into the USB port and they'll appear as a normal drive on both Windows and Macintosh systems.

Disadvantages: USB Flash drives devices fall short when it comes to bigger files. The larger models are not very affordable – the largest current model is 2gig for $600 – making it a poor storage solution for art students who frequently save lots of big stuff, like Photoshop or movie files. Additionally, due to their cost you'd likely own only one of them, making them less than ideal for project submission.

CD-RWs

Advantages: CD burners store data by altering (burning) the recordable media with a laser. There are two major types of CD writeable media: CD-R (write once) and CD-RW (rewriteable for many times). Recorded CD media can be read in any standard CD readers which are available on nearly all computers. Recordable media is extremely inexpensive (approximately $0.20 for a recordable CD, $1.00 for a rewriteable CD) and can store up to 700MB of data – which is enough for most all types of documents and pictures.

Disadvantages: Unfortunately, CD media is not quite as easy and simple to use; CD burning software must be used to write the contents on a CD, which can take 3-to-5 minutes. While this software is not difficult to use, it is one more step you must do to save your data. CD burners are not yet available in all computer labs on campus and like any other music or data CD, data can be lost if they get excessively scratched or misused. Additionally, CD-RW media also has a limited number of times it can be written to.

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Network Storage

Advantages: RIT has invested a great deal into making our network fast and reliable. Every student, both on and off campus, is allowed 20 MB of storage space on our FTP server. Saving your data to the network is easy!

> On a **Windows** machine, simply type ftp://username@grace.rit.edu in the address bar of any Explorer window. Type in your RIT password when prompted and you're in! Simply drag and drop files to this area just like any other Windows folder.
>
> On the **Macintosh** you can mount an FTP connection like a volume. Bring up the Finder menu and select Go > Connect To Server (or Command + K) and type ftp://username@grace.rit.edu in the field. After it prompts you for your password the volume will appear on the desktop.

Disadvantages: Unfortunately, you are only allocated 20 MB. ITS is working on a new solution to supply more space for users. If you are planning on saving many files or any large files like Photoshop or video files, this is not a great option for you. Additionally, by default you are the only person that has access to your data – so you cannot easily use it as a method to turn in assignments.

External Hard Disks

Advantages: External Hard Disks provide a solution for those who need lots and lots of space on the go. They are currently available in sizes up to 300 gigabytes! External Hard Drives with USB2 or Firewire interfaces also sport very fast access speeds. It's an ideal storage method for the nomadic video editor!
Disadvantages: However, External Hard Disks are relatively expensive, ranging from $100 to $300. They are also susceptible to failure if handled poorly (ex. dropped) or exposed to strong magnetic fields (ex. big unshielded speakers).

When buying an External Hard Disk, avoid models that are simply standard hard disks in an enclosure. While those might be cheaper, they were designed to sit on a desk forever – not for carrying around. Look for models that were explicitly designed for portability.

Recommendations/Conclusions

For many students, USB flash drive key chains are the best option as they are very easy to use, reliable, and available for as little as $30 (64MB models). They are much more reliable than Zip Disks and can be used in both Macintosh and PC computers.

For students that need a little more space and/or need to submit projects to professors, CD-R or CR-RWs are probably the way to go as they are extremely inexpensive and can store a fair amount of data.

For students who need very large storage capacities for large projects such as large photos or DV movies, external Hard Disks can reliably supply the space you need.

	USB Flash Memory	Zip Disks	CD-R	CD-RW	External Hard Disk	Network Storage
Low Cost	X					
Easy To Use	X	X			X	
Reliable	X		X	X	X	X
Good for Large Files			X	X	X	
Multi-platform Support	X	X	X	X	X	X

Information & Technology Services Salutes Our Student Employees and Co-ops for 2003-2004

Dear Abby had it right about wisdom and good grapes. Our May ITS News issue celebrates our student employees, our "good grapes." They've been a wonderful asset to the organization, all 316 students. They've worked at our HelpDesk, as Desktop support through the Exchange email migration as well as supporting our lab, network, telecommunications and systems staff members across the Division.

In addition to student employees, we have quite a few co-op students who have served multiple block terms with us. There is a standing joke within the Division that our co-ops are numbered, and often you may hear them refer even to themselves as "I'm Co-op One" or "I'm Co-op Nine." They have distinguished themselves well beyond the numbers and have participated side-by-side with staff to work with many of you on campus. (The numbers merely designate work areas in the Division, not the quality of these young people's work.)

There are articles in this issue *about* our students and several written *by* our students (see the New Storage Technologies article on page 7 and the Virtual PC Installations article on page 15). We've enjoyed their participation with us this year, their humor and camaraderie.

Martina Horner, president of Radcliffe College said, *"What is important is to keep learning, to enjoy challenge and to tolerate ambiguity. In the end there are no certain answers."* Our student employees have seen what it is truly like work through the challenges that come part and parcel with the information technology business – and they have done very well facing these challenges.

We salute our graduates, cheer on the co-ops who have completed their time with us and will welcome back returning student-staff for another academic year.

"Wisdom doesn't automatically come with old age. Nothing does – except wrinkles. It's true, some wines improve with age. But only if the grapes were good in the first place."

Abigail Van Buren

Congratulations to Co-ops…..

ITS and the English Language Center (ELC) would like to thank Ashley Walker, Student Affairs Co-op, for the work she completed on the ELC Student Records system project. Ashley was involved with this difficult project for two quarters developing and implementing a registration/tracking system for the international students in the ELC. Ashley is a CS major; and will be graduating in May 2004. Congratulations Ashley!

ITS News

Information and Technology Services would like to thank each of the 316 student employees and co-ops who have worked with us over the past year. These students are employed throughout the organization, working in Telecommunications, Networking, Systems, Operations, Web Services, Desktop Support, Customer Support Services, Distributed Support Services, the HelpDesk, Resnet, Administrative Services and Institutional Research and Policy Studies. A number of students have held positions in more than one area of ITS.

The accomplishments of these students are impressive, within the organization and throughout the University. Many of our students have been with us during their entire time at RIT and we are delighted to welcome them back each year.

Administrative Services:

Lauren Pickard

Customer Support Services:
Samrah Ahmad
Lukesh Alwani
Brandon Peterson
Ashley Walker

Desktop Support:
Willem Ave
Adam Backstrom
Chris Bopp
Shane Bushey
David Cai
Jacob Cebula
Brandon DeCoster
Bob Gendler
Nick Giard
Katie Giebel
Mike Goffin
Reynaldo Gonzalez
Michael Kurdziel
Fotios Lindiakos
Luke Macken
Greg Madore
Jessica Mills
Rob Paisley
Lisa Rosenberger
Sean Sims
Chris Szewczyk
Joelle Tannenbaum
Dave Walker
Jonah Williams
Mark Woitaszek

HelpDesk:
Ron Bauerle
Carlton Bonney
Scott Brattle
Benjamin Harris
Leigh Lambert
Michael Lee
Sidney Martin
Peter Roman

Resnet:
Marc Baumbach
Richard Brown
Nirmala David
Anthony DiPasquale
Knycos Ferguson
James Ferrier
Kevin Foster
Brian Gillis
Michael Heel
Nicole Lee
Vaughn Micciche
Aaron Mosley
Michael Muttitt
Andrew Nortrup
Brent Pack
Erin Preston
Kathyrn Romano
Colleen Robinson
Michael Schroll
Gregory Skinner
Reina Smith

Web Services:
Scott Andrews
Sameer Khanna
Kevin Sheurs

Distributed Support Services:
David Adams
Travis Ah King
Dipti Arora
Taher Attari
Shibaditya Bagchi
Bajaj Rishi
Shweta Bansal
Joe Bauman
Pratik Bavishi
LaurenBedugnis
Michael Bell
Jared Berbach
Navin Bhaskar
Mittal Bhatt
Nagaraj Bijjala
Pratima Bijjala
Roman Blagovirny
Akhila Bodduluri
Kate Bond
Timothy Book
Douglas Cole
Heidi Coots
Brigitte Cornwell
Larry Courtney
Aaron Cripps
Shana Dagel
Heather Dashnau
Justin Davis
Jeremy DeCausemaker
Patrick Dempsey
Harshad Deshmukh
Anthony DiPasquale
Phu Do
Thy N Do
Stephen Edmonson
Kim Edwards
William Farner
Gregory Firestone
Chris Fradenburg
Ryan Fraser
Hemantkumar Gai
Minali Gala
Brian Gallagher
Sarah Gentry
Emily Getman
Manav Ghildiyal
David Goddard
Natesha Greaves
Neha Gupta
Nupur Gupta
Elizabeth Hall
Jesse Harrington
William Hedglon
Jon Heise
Jennifer Herman
Theresa Hesley
Lauren Hodulich
Isaac Holze
Rohit Hooda
Victoria House
Michael Hoydis
Eugenia Huang
Kevin Hui
Garuav Jain
Rashawn James
Senthilkumar Jayachandran
Shelina Jiwani
Giraldo Johan
Miranda Johnson
Marlon Joris
Ashit Joshi
Keerti Kalia
Timucin Karaca
Shagun Kaushik
Sean Keeton
Patrick Kelly
Emily Kent
Matthew Kent
Amit Khanna
Hardeep Kharbanda
Rashmi Kinariwala
Theresa Kochmanski
Johnathan Kohles
Yaniv Koter
Sarah Kucerak

Lauren Lanigan
Rudy Latta
Mark Ledford
Mauvis Ledford
Jennifer Lee
Brian Lenker
Michael Lepelstat
Ben Leven
Jacqueline Licht
Jeffrey Lichtfuss
Diana Lin
Simien Lin
Yung-I Lin
Christopher Lister
Terry Mahaffery
Bridget Maloney
Lindsey Manley
Mark Marcello
Edward Martin
Carter May
John McGovern
Seth McLaughlin
John McNeil
Andrei Migia
Cody Miller
Nicholas Minerowicz
Ritesh Modi
Ali Mohamad
Josh Morelli
Jeremy Morgan
Michael Moses-Eichler
Marcos Mota
Pooja Munim
Amit Naik
Colin Nelson
Khoa Nguyen
Mary Nguyen
William Nickerson
Jeremy Nieman
Tyler Oderkirk
Suruchi Pahwa
Ankur Pandhe
Ayush Pant
Steven Parish
Tigran Parvanyan
Snehal Patel
Narendra Patil
Timothy Patterson
Wallace Patterson
Ted Pearson
Sampada Peshwe
Gaurav Poodar
Maesa Poolshup
Qinghau Pu
Amina Rab
Stephen Rahavy
Darshan Rane
Ashish Rathour
Mayank Rathour
Paul Read
Aman Relan
Johnathan Rivera
Jeffrey Robertson
Ricardo Ruiz
Rachel Sager
Aditya Sanghi
Gaurav Sanghi
Ritul Sanghvi
Ryan Schaefer
Carrie Schreck
Michael Schultheisz
Sani Seesuchart
Mitul Shah
Tapan Shah
Artyom Shamtsyan
Suchit Sharma
Nicolas Shayko
Bigyan Sijapati
Jessica Simmons
Chandanjeet Singh
Ken Slater
Jessica Smagner
Kyle Smith
Tom Smolenski
Aleksandra Soldo
Alisa Solovey
Sheetal Sonar Pardeshi
Kiran Sonawane
Stephanie Sorce
Reginald Stephens
Abbie Stokes-Riner
Pamela Stomel
Felton Strickland
John Sullivan
Farzana Sultan
Tiffany Swasta
Michael Szebenyi
Tejas Tanna
Jason Tavarez
Christopher Taylor
Jignesh Taylor
Brian Teaney
Corey Thibeault
Sam Thieme
Kedar Timblo Kedar
Abhishek Toshniwal
Jennifer Treuting
Leah Vanwhy
Paul Ventura
Douglas Vereecke
Ashley Walker
Aaron Walsman
Yuan Yuan Wang
Nicholas Waringa
Matthew Waters
Michael Weiskopff
Tia White
Stephen Wiedmaier
Chris Williams
Patrick Wilson
Wendy Wu
Yi Ning Xue
Vivek Yadev
Ding Ye
Benjamin Yonda
Bilal Yousufzai
Siqi Zhang

Institutional Research and Policy Studies:
Ray Saltrelli

Technical Support Services: Data Center:
Neil Carvalho

Networking:
Benjamin Kantor
Mark Peterson
Timothy Wicks

Systems:
Randy Boland
Bill Kuker
Bob Miller
Lucas Morris
Sean Neubert
Matt Pawloski
Peter St. John

Telecommunications:
Nadia Amireh
Rangtiem Hoomkwap
Regina Koshy
Rebecca Nelson
Britni Reid

Congratulations to all who are graduating. Please know that you have made a difference in the fine work you have accomplished for Information and Technology Services in support of the RIT community. ITS is proud of your many achievements and wish you all the best in your future endeavors.

Fran Versace
Manager, ITS Student Employment Program

Great IT Careers Begin With Co-op Experiences in ITS

Sometimes finding a good company to work for during co-op is as easy as looking in your own backyard

By Judy Winn, Customer Support Services, jvwdss@rit.edu

ITS Distributed Support Services (DSS) hires RIT students as computer lab assistants, as well as seven, double block co-op positions, three part time technical assistants and a Kronos supervisory assistant. These positions fill a need for technical help in the various colleges while giving hands on experience in a fast-paced, customer-orientated environment.

Co-op 1: Daytime Operations
Jason Caine

Co-op 2: Evening Operations
Chris Taylor

Co-op 3: MAC Labs Technical Assistant (Liberal Arts, NRH and NTID's Art and Computer Design Lab)
Nick Minerowicz

Co-op 5: Technical Assistant (Desktop Support – COE and Lab Support - NRH)
Sean Sims

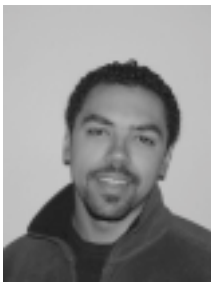
Co-op 6: PC Labs Technical Assistant (Liberal Arts and COE)
Dave Goddard

Co-op 7: PC Labs Technical Assistant COS
Michael Hoydis

Co-op 9: Technical Assistant, Desktop support COS (Previous lab assistant, lab supervisory assistant, Time supervisory assistant, Co-op 1 & Co-op 7)
Heidi Coots

DSS Part Time: Technical Assistants Desktop Support

Jay Sullivan
COS (Previous computer lab assistant, lab supervisory assistant, Co-op 6 & Co-op 4)



Felton Strickland
Active Directory Migration (Previous lab assistant, lab supervisory assistant, & Co-op 4)

Fran Bourdon
CAST (Previous computer lab assistant, lab supervisory assistant, Co-op 4 & Co-op 8)

Tim Book
Kronos Time Supervisory Assistant - Oversees approx.180 student employees payroll and time corrections (Previously Co-op 1 & Co-op 2)

Students Share Impressions About Working Experiences in ITS

By Dianne Parker, Distributed Support Services, dlpdss@rit.edu

"Life is made of millions of moments, but we live only one of these moments at a time. As we begin to change this moment, we begin to change our lives.
Trinidad Hunt

We are currently on the cusp of a major change for 30 of our student employees. They will be graduating from RIT shortly and moving on to a new chapter in their lives, a new beginning. The majority of these people worked for Information and Technology Services (ITS) Distributed Support Services at least a year - most longer. Therefore, we would like to take this opportunity to publicly thank these students for a job well done and to also wish them well in future endeavors. I have asked our soon to be graduates a few questions concerning their future plans, how they liked working for DSS. Here are some of the responses:

Above: Chris Fradenburg, Bilal Yousufzai and Abishek Thoshniwal

Abishek Thoshniwal from Calcutta, India will be receiving his MBA degree in Marketing and will be working with Transcat Inc. right here in Rochester. His plans are to work a year in the U.S. then set up a business and move back to India. He says of working in ITS, *"…it was a great experience and it served as my first few lessons on customer service"*. Good luck Abi.

Bilal Yousufzai from Hyderabad, Pakistan will be receiving his MBA in Marketing and Finance. Bilal is currently looking for a position in the United States. He has an aunt in Florida and some friends in Dallas and San Francisco. As Hyderabad has a climate very similar to Phoenix Arizona, Bilal would like to move where the weather is a little more like what he is used to. *"I really love marketing, especially sales…I would like to work in a multinational bank"*. As for working for ITS, Bilal says, *"I am thankful to the DSS team for having faith in me and building up my confidence"*. Bilal feels that he learned a tremendous amount while working in our computer labs, in his words, *"providing the best labs, technology, environment and over and above all the best customer service to our patrons"*. Thank you, Bilal.

Chris Fradenburg is from Plattsburgh, New York. He will be receiving his BS in Management Information Systems. After graduation he will be looking for a job in either Rochester or Plattsburgh. Long term he would like to get into education and bring more technology based learning opportunities to the Plattsburgh area. Chris has worked many different jobs within DSS, lab assistant, supervisory assistant, operations co-op, office coverage. He has done an exemplary job in each of these positions. As Chris puts it, *"Working for DSS has given me a lot of different opportunities… Doing my coop here was especially good because I was given a lot more freedom than most other places and was able to get experiences that most students don't get until after they graduate"*. We truly appreciate the work Chris has done for DSS and we wish him well.

Theresa Kochmanski from Buffalo, New York will be graduating with a BFA in Illustration. Right after graduation she plans to take the summer off to "regroup". Then she would like to go to California and do character design for film and animation. Someday she would also like to have her own line of children's books. As for working for IT'S the past four years it, *"was one of the best choices I made… I feel that it was one of the best jobs a student can have on the RIT campus"*. Good luck Theresa. We can't wait to see some of the characters you create.

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Kate Bond from Lancaster, Pennsylvania will be graduating with a BFA in New Media Design and Imaging. She hopes to move to California to pursue a design career and work primarily in web/ interactive design. Future goals are, *"to have my own creative design studio and possibly become an art director/creative director"*. She says that she only worked for DSS for three quarters and, *"I've enjoyed working in the computer labs and meeting new people.*" Well, we have enjoyed having you here.

Heidi Coots from Canisteo, New York will be graduating with BS in Information Technology. Shortly after graduation she will be marrying the love of her life and moving to Raleigh, North Carolina. She plans on working in the information technology field while taking graduate classes to obtain an MBA. Heidi has worked in every available position within DSS. From lab assistant to co-op (management and technical) to Kronos administrator for approximately 190 student workers, she has done it all. In her words, *"This has allowed me to learn a broad range of skills from basic troubleshooting to management, and from working in a lab environment to working with faculty. I have also learned the importance of a good work ethic and being precise. Working with DSS has not only been a learning experience, but also an enjoyable one. As I move on I will take with me many fond memories."* Her contributions to our department are immeasurable.

Josh Morelli from Syracuse, New York will be receiving a BS in Computer Engineering. He is hoping to move to Boston and obtain a position as a circuit design engineer with Sun Microsystems. Josh plans *to "make money, be happy, and go wherever life takes me.*" As for working at DSS Josh says, *"Best job possible while I was at school! The people are truly what make it great. I met a lot of wonderful individuals while I was at DSS and it's been a fun time!"*

Jeff Robertson from Darien, Connecticut will be graduating with a BFA in Graphic Design. He is currently pursuing job opportunities in Connecticut's Fairfield county and New York City. Callanen International is interested in Jeff. They are a watch company that designs, produces and markets Guess, Nautica, Ecko and Timberland watches. Jeff tells us that *"Through DSS I have gained further interpersonal skills working with people. Being the Supervisory Assistant of the CIAS PC lab has helped me understand how to have others working under your watch. I will definitely miss the fun I had in the office.*" We will definitely miss you as well Jeff.

Sean Keeton from Princeton, New Jersey will be receiving a BFA in Film and Animation. Sean is currently seeking employment in character animation. He would eventually like to move back to California, where he grew up, and delve deeper into the character animation field. Sean says of working for DSS, *"I loved it a lot…I received a lot of satisfaction from helping other animation students…Our lab (the 3D lab), was its own mini-community, we helped each other and everyone had a lot of respect for each other.*" Good luck Sean.

Although we have only profiled 10 of our graduating student employees we would like to also acknowledge the 20 additional students who are also graduating in May. All have diligently worked for us these past couple of years. They are: **Ali Ali, Pratik Bavishi, Jason Caine, Cheng Chen, Suryanand Chintalapudi, Brooke Chornyak, Shana Dagel, Justin Davis, Theresa Hesley, Emily Kent, Hardeep Kharbanda, Johnathan Kohles, Yung-I Lin, 0Mary Nguyen, Suruchi Pahwa, Aman Relan, Jay Sullivan, Brian Teaney, Leah Vanwhy, and Siqi "Rose" Zhang**. We truly appreciate the work that each and every one of these people did for ITS/DSS and RIT.

Potential Virus Infiltration on VMWare and VirtualPC Installations

By Jeremy DuMont, Information Security Office Co-op, jrd6974@rit.edu

Virtual operating systems can be as vulnerable to viral attack as their "real" counterparts. This article explains why and what you can do to protect your computer.

What is VMWare or VirtualPC?
Computers have much more memory and processing power today than in the past. To fully utilize these expanded capabilities, people are using a number of products that allow them to build another complete virtual computer on top of their current operating system.

Macintosh users often chose a Microsoft product called **VirtualPC** that allows a copy of Microsoft Windows to be run inside the Macintosh Operating System (OS). Users of Linux and Windows use **VMWare** to allow any operating system to be installed and executed on top of those systems.

It is virtual, so what is the problem?
The problem with virtual machine is that although the hardware is virtual, the operating system is not. Many of these virtual machines are connected directly to the Internet through the host machine. Viruses can infiltrate these virtual machines just as they would a regular computer running that operating system.

So what do you have to do to protect your machine?
Consider the virtual machines as another machine you own that has all the vulnerabilities of the virtual operating system. This means you should run all of the standard security software that you need to run on a machine of that type. Examples include an anti-virus scanner on both the host and virtual machine and a spy ware program such as Ad-aware.

Depending on the setup of the virtual network, you may need a personal firewall also. VirtualPC has an option called "Virtual Switched Network" that allows a virtual machine to be connected directly to the network without protection from the host machine. VMWare has an option called""Bridged Networking" that does the same thing.

If you use either of these options, a virus or worm can infect the virtual system just as it would a real system. Therefore, you should run a personal firewall* on the connection. If you are not running a personal firewall, you should allow the host machine to protect the connection to the virtual system by using "Shared Networking" on VirtualPC or using Network Address Translation (NAT) on VMWare. This approach allows you to concentrate security on the host machine's connection to the Internet.

What else do you need to know?
There are many different programs that allow you to run a virtual computer on a host machine. Become familiar with the software that you use to create the virtual machine and how it works. Remember that whatever operating system you run within the virtual machine, it is vulnerable to any viruses and worms that attack a real machine.

For example, if you are running Windows 2000 through VirtualPC, your machine is vulnerable to any virus or worm that can attack Windows 2000. You need to install all Windows patches regularly, run anti-virus software and use sound judgment when opening attachments or clicking on URLs in e-mail**.

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Remember, you really do have two computers to worry about protecting – they are just inside one box!

Where can you get more info?

Below are some sites that will give more information about potential problems and how to secure your virtual machine. Many of these articles are written for regular (non-virtual) machines but the steps are exactly the same for a virtual machine. Or visit your favorite security website for more information about current threats against the operating system you are running on your virtual machine.

Virtual PC May Be Vulnerable to Virus Attacks: http://support.microsoft.com/default.aspx?kbid=828574&product=vpcmac
Microsoft Protect Your PC Website: http://www.microsoft.com/security/protect/default.asp
McAfee Virus Scan for Windows: http://www.rit.edu/~wwwits/services/security/viruscan-windows.pdf
Microsoft Virtual PC 2004: http://www.microsoft.com/windowsxp/virtualpc/
VMware: http://www.vmware.com/

*** Additional Firewall information can be found in a recent article in ITS News – April. Check the ITS web site at: http://www.rit.edu/its/news**

**** In this issue of ITS News, information about viruses found in email attachments can be found on the cover, article by Dave Pecora.**

Graduate Co-op Students Congratulated!

ITS offers a special thanks and congratulations to the following students who have completed co-ops with us and are graduating in May. We wish you all great success in your chosen fields!

Chris Fradenburg	COB (MIS)
David Goddard	GCCIS (Information Technology)
Emma Perry	GCCIS (Information Technology)
Felton Strickland	GCCIS (Information Technology)
Francis Bourdon	GCCIS (Information Technology)
Heidi Coots	GCCIS (Information Technology)
John Sullivan	GCCIS (Information Technology)
Jose Laguna	GCCIS (Information Technology)
Luke Mellon	GCCIS (Information Technology)
Marlon Joris	GCCIS (Information Technology)
Mike Hoydis	GCCIS (Information Technology)
Sean Sims	GCCIS (Information Technology)
Steve Parish	GCCIS (Information Technology)
Tim Book	GCCIS (Information Technology)
Travis Crawford	GCCIS (Information Technology)
Ashley Walker	GCCIS (Information Technology)
Peter St. John	GCCIS (Information Technology)
Brandon DeCoster	GCCIS (Information Technology)
Erin Preston	GCCIS (Information Technology)

Contributed by:
Daniel Rosica, DSS, Lead PC Systems Administrator

(Continued from page 2)

Protecting Yourself Online as Computer Hackers Become More Sophisticated-

Presently, some security experts estimate that there are more than 1 million compromised or infected computers world-wide. Many of these computers are being used by computer hackers to further their exploits. Their intentions are less than honorable.

These compromised computers are essentially in their control. They are being used to attack other computers or send e-mail containing everything from unsolicited advertisements to malicious code intended to infect or compromise another computer. This is often happening without the knowledge of the owner of the computer.

Some of the techniques employed by these hackers include:

- **Directly** attacking a computer to see if it is vulnerable. This includes the operating system (like MS Windows), the software, or the accounts on it (for weak passwords)
- **Indirectly** attacking a computer, by enticing the user of the computer to open an attachment or visit a web site that contains what are commonly termed "exploits".

The indirect methods are the most prevalent and the most dangerous. These include:

- An attachment containing a virus.

- An e-mail message inviting you to a web site, disguised as SPAM. Sometimes you might even be able to buy the product being advertised, but the web site may also have given your computer something you did not intend to buy – a virus, or worse – your computer may have been added to the "network" of computers being used to send the SPAM and/or host a web server like the one you just visited to buy the product

- An e-mail message inviting you to open an attachment or visit a web site, disguised as a "security notice", "billing notice", "verification of information", "cancellation of account", "credit card charge", etc.

Recently, at RIT, we have seen e-mail messages that have claimed that "*your account has been cancelled*" or "*your account is overdue*". We have also seen messages that appear to be from AOL, PayPal, Visa, and others requesting you to confirm your information. These have been frauds with the intent of creating confusion or stealing your personal information – including your name, address, social security number, credit card numbers, etc.

What can/should you do?

- **Change your passwords on a regular interval**. This includes online sites where personal information of yours may be stored. Use a complex password. Use different passwords at different sites. This will protect you in the event that a site where this information is stored is compromised. Should this happen, you may not even be notified.

- **Keep a list of all places that have your personal information**. Become familiar with their terms, policies, and in particular how and when they will communicate with you.

- **Be stingy with your personal information, in particular your credit card or banking information.** Be wary of who you give your information to, and when shopping online – don't click on the "save your credit information for future use". While this takes away the convenience offered, it helps to prevent that information to fall into the wrong hands. If the site's database is ever stolen, this will help limit your information to only your name/address.

- **Keep your computer up to date**. This includes patches for both the operating system and software. This is especially the case for Microsoft Windows, including Microsoft Office. Microsoft Windows is currently the most targeted operating system. If possible, configure your computer for automatic updates.

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Keep your anti-virus up to date. Anti-virus products are being updated daily to protect computers from many of these threats. Configure your product to update itself at least daily. If you don't have an anti-virus product, install one.

Install and configure a personal firewall product. This provides an additional layer of protection beyond the operating system on your computer.

Don't open or click on anything you weren't expecting to receive. This includes e-mail attachments, web links in e-mail, files sent through file sharing software, etc. If you didn't specifically ask for it or look for it, then you probably don't want it. This includes attachments sent to you by friends, co-workers, relatives, etc. Most of the viruses today disguise where they came from, including addresses of people you may know and/or trust. This includes patches claiming to be from Microsoft or other vendors. Microsoft does not distribute patches via e-mail, nor do most other software vendors.

Instead of clicking on a web address provided in an e-mail, manually type the web site address into your web browser. This will prevent you from visiting a disguised or hidden alternate web address. This is one of the most prevalent methods today for compromising a computer or spreading a virus.

Don't install ANY software if you don't know who wrote it AND where it came from. If a program, tool, or neat little trinket is floating around via e-mail, don't install or run it. Many of these little "toys" also contains viruses. Only download software from reputable, trusted, sites. Go directly to the source. If you can't find a source, then it probably contains a virus.

Be skeptical. If you receive something that seems "too good to be true", "unlikely" or "unexpected""– it probably is. Confirm the information with a reputable source before taking action.

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Campus Network Attacks Managed Effectively

As this planning process continues, you will be called upon to help protect the network. An initial step in this process is to ensure that all members of the RIT Community who utilize the RIT network have secure passwords. The RIT Information Security Officer provides guidelines for constructing those secure passwords. Additional protection initiatives will be introduced as the planning and analysis process identifies other opportunities to protect RIT staff and assets.

We have heard reports that many universities and corporations have resorted to shutting down their networks in order to combat these unfortunate network threats. We did not want to take that action here at RIT because of the obvious negative impact on teaching, learning and work productivity. Due to the proactive measures developed by the CIMP Team we have been able to keep the RIT network up and running even though, at times, the network might become slow due to the congestion resulting from network attacks. RIT has not experienced a major impact from the current (Sasser) worm because of the scanning and quarantine process that has been put in place.

I urge you to be aware of both the business and personal threats that these network attacks present and to cooperate with the CIMP Team as they identify potential protectionist mechanisms.

Compromised Computers Blocked or Quarantined from the RIT Network-

(Continued from cover)

ITS has determined that there are over 1,200 computers connected to the RIT network that have NOT been brought up to date with the latest Windows updates released in mid-April. These computers are at risk of infection from a number of known viruses and worms quickly spreading through the Internet. Some of these viruses allow the attacker unlimited access to your desktop computer. Others will save and copy passwords and other sensitive data, allowing an attacker to gain unauthorized access to Institute systems and information.

To protect the information assets of the university, ITS took the following actions:

- **Compromised computers - blocked**: Any computer that is infected with one of these viruses and worms will be completely blocked from connecting to the RIT network. Users of blocked computers must contact their systems administrator, local support team, or the ITS HelpDesk to be cleaned, patched, and put back on the network. A CD and instructions is available at the ITS HelpDesk and the ResNet office for those that would like to scan and clean their own computers.

- **Vulnerable computers - quarantined**: Computers that are not infected, but have not yet been patched with the latest Windows critical updates, will be quarantined from the network. A quarantined computer can only access the web page http://start.rit.edu. From this page, the user can download and apply the latest Windows patches and reconnect themselves to the network.

By the time this newsletter is published, ITS estimates that more than 1,200 computers will have been blocked or quarantined until updates and patches are installed.

To avoid being blocked or quarantined at any time, please do the following immediately:

Download Windows critical updates, install, and reboot: Cut and paste the following link into your browser (http://www.windowsupdate.com) or go to Start > All Programs > Windows update. Click "Scan for updates" or "Product updates" and follow the instructions. Be sure to reboot after the process has been fully completed. (Do NOT reboot while the patches are downloading or installing as this can corrupt your operating system).

Download the latest Anti-Virus definition file and run an Anti-virus system scan: Double click on the Virus Scan icon in your system tray on the lower right hand corner of your screen. Then double-click on "Auto Update" and click "Run Now". Once this is completed, click on "Scan My Computer", and click "Run Now."

If you need help, please call: If you need assistance with either of the two steps above, please contact your systems administrator or the ITS HelpDesk at 5-4357, TTY at 5-2810 or submit a question on line at http://www.rit.edu/its/help. Students may also contact the Resnet office at 5-2600.

[Note: Finance and Administration users do not need to run either of the two steps above, as they are run automatically by the FAST team.]

We regret the inconveniences we know these actions will cause. These steps need to be taken to protect the informational assets of the Institute.

ITS Update

ITS Contact Information

DSS Computing Labs

Hours, locations, hardware, software, and reservations information available at: http://www.rit.edu/its/services/computer_labs

Telecommunications Services

Located in the Facilities Mgmt. bldg. (99)
To contact the Telecommunications Services call 475-5800.

ITS HelpDesk

Located in the Gannett building, rm. 7B-1113

To contact the ITS HelpDesk

- Call 475-HELP or 475-2810 (TTY)
- Send e-mail to helpdesk@rit.edu

Regular hours

Sunday	12 p.m.–6 p.m.
Monday–Thursday	8 a.m.–8 p.m.
Friday	8 a.m.–5 p.m.

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