



Information & Technology Services

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news

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## Realizing Technology: Building on a Solid Foundation

*By Diane Barbour, Chief Information Officer, [dhbci@rit.edu](mailto:dhbci@rit.edu) and  
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In the words of the great philosopher Yogi Berra, “The future ain’t what it used to be.” Technology continues to evolve at a dizzying pace. So how do you get to the future from here? It all starts with a robust technology infrastructure, but that is not enough. The technology must provide the tools and information to support education, business and research.

Over the past year ITS put into place scalable infrastructure for email, directory services, and student systems. We are well into the development of several other major projects - building a data center firewall, back up replacement systems and extensive web applications, especially for the portal. Laying a strong foundation with technology, while our primary role, is only part of what we believe is our role in supporting development efforts at RIT. Now that this technology is or will be in place, we are faced with ensuring that the technology can be used, and used well across all constituencies – students, faculty and staff.

This year’s goal is leveraging this technology – partnering with customers to provide all the infor-

mation and tools they need to use the technology to its capacity successfully, consistently and comfortably. Additionally, we continue our efforts to see that using technology is a safe and secure endeavor for all.

*“But in so far as IT is important to new business processes and designs, IT matters more than it ever did in achieving competitive advantage. And we’re not at the end of this revolution, we’re at the beginning. As IT goes into its next era, it is becoming even more important to enabling the business changes that distinguish a firm from its competition,”* said Don Tapscott, author of the book *Growing Up Digital*, in a presentation to CIO’s in 2003. In RIT’s strategic planning process there is an overarching goal of distinguishing RIT in the competitive higher education marketplace.

The goal of the infrastructure projects is to adapt to the demands of campus growth, user needs and technology changes. We have branched out into new areas requiring new data, networking integration and support. The foundations have been set – the student portal, online course list for the year, improved computer based train-

*continued on page 2*

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## Building on a Solid Foundation *continued from page 1*

ing, a vast email and calendaring system along with directory services, firewall technology for individuals and data centers and portal improvements and upgrades.

Much of this has been behind the scenes with improvements to miles of wire and cables, to equipment and structure, all to lay a foundation for new products and services necessary in the face of planned growth of the Institute. This needed to be done to keep RIT competitive, to support strategic planning and to build a community of users that can meet the challenges of new growth and industry demands.

Now at the end of this road we are launching a new set of goals:

- To give customers all the tools and information they need to use and optimize the new technology and systems well
- To integrate expanded functions of the technology taking RIT closer to its goals of achieving category of one status
- To incorporate additional security measures to safeguard all systems and instill confidence in our users

*“There is nothing more scarce than the right information at the right time or the perfect business model. IT-enabled busi-*

*ness innovation is a cumulative matter. No company wakes up one morning with the installed base, expertise and culture that distinguishes them. This is built over years. Firms need to constantly evolve their business designs, practices and underlying IT systems or they fail,”* Tapscott stated.

ITS has evolved. We have the tools in place. Now, how can we help customers use them to the fullest? Our role is not only to support and maintain the technology but to help facilitate using the multitude of features the technology offers as they were intended. We’ll do this through:

- More training opportunities, technology seminars, workshops and classes
- More information and “how to’s” through ITS News, and a new online version of the newsletter
- Complete and thorough documentation about products and services we offer
- Continued customer focus from staff in the HelpDesk, telecommunications, networking, desktop support, and Resnet teams
- Organizational enhancements – our co-op and student employees are well trained, customer focused and available for support
- Continued security efforts, with participation on the Critical Incident Management Team, integration of firewall technology for individuals and larger systems such as the Data Center and investigating the various reports of network abuse

RIT is in a position of stimulating and exciting growth. We are committed to this growth and a paradigm that combines relevant technology foundations and infrastructure with being on the forefront of optimizing this technology. We are well positioned to manage system challenges and focus on opportunities. Good to great is achievable. New business models are at our fingertips.

## In This Issue

- ◆ Building on a Solid Foundation (p. 1)
- ◆ Cullen Leads Management of Computer Conduct Caseload (p. 3)
- ◆ Network Security - Quarantine Process (p. 4)
- ◆ Note Taking Service (p. 5)
- ◆ Online Learning Department (p. 6)
- ◆ Using Exchange Calendaring Effectively (p. 7)
- ◆ Let the Music Play (p. 8)
- ◆ Recap of Summer Upgrades (p. 9)
- ◆ System Security Efforts (p. 10)
- ◆ Fieldhouse Cabling Project (p. 13)
- ◆ What is a Tablet PC? (p. 15)

# Cullen Leads Management of Computer Conduct Caseload

*Education, communication and intervention are primary goals for encouraging appropriate computer and network use*

By Michelle Cometa, Office of the CIO, [macits@rit.edu](mailto:macits@rit.edu)

Donna Cullen has taken on a new role in ITS Customer Support Services. She now manages RIT's response to computer abuse and works to better educate the RIT community about what constitutes the actions that might constitute a violation of the Code of Conduct for Computer and Network Use.



Donna has spent the last 23 years at RIT, starting in Information Systems and Computing, (ISC) the computer network organization before ITS. She served eight years at the HelpDesk watching its transition from a reception/intake area for software problems to the full service customer support team it has become. She has also seen the evolution of the campus infrastructure, from the earliest mainframe system to the extensive, high speed networking and telecommunications complex now in place.

Our high speed campus network makes us a target for misuse. This misuse ranges from peer-to-peer file sharing issues and the fall out from computer viruses to online harassment and intellectual property challenges. In her new role, Donna believes abuses can be effectively curbed with education and individual accountability.

Continuing to work with the First Year Experience program and the RIT community, Donna will be presenting information about proper network usage. Sessions will cover information about the risks of illegal downloading of files, the actions that can and will be taken by RIT and several alternatives to peer-to-peer file sharing. *[A pilot for a music service starts this September. More information about this can be found in the article by Paul Stella, Director, University News Services on page 8.]*

“The concept of intellectual property is not often introduced at the high school level,” Donna said. “Sometimes young people don’t see that a song is the essence of a person’s livelihood. They generally don’t feel sorry for someone like Bill Gates, so downloading software without purchasing it first is not viewed as something illegal. They also will occasionally download other students’ work such as photographs or drawings. Even citing material for papers they write for class is seen more as a task, not as recognizing the intellectual property of the resource.”

Computer and network abuse complaints are channeled to ITS for review and investigation. The complaints can come from both internal and external sources. Common internal issues include port

## Providing Header Information Essential for Abuse Email Investigations

There are central points of contact for sending messages you believe are spam and to begin an investigation of violations of the Code of Conduct for Computer and Network Use. To act on spam, forward a copy of the message to:

**[spam@rit.edu](mailto:spam@rit.edu)**

To report violations of the Code of Conduct, send the message (or log information when reporting a port scan) to:

**[abuse@rit.edu](mailto:abuse@rit.edu)**

To investigate, ITS needs as much information as possible about the email – where it came from, sender, Internet sources, etc. An investigation is conducted only if the reporter provides the full headers for the forwarded message. SpamCop, an online anti-spam resource, can give you specific directions for finding and copying the header information using your email client. To see the full list of directions for various email clients on SpamCop, connect to:

[http://www.spamcop.com/help\\_with\\_headers](http://www.spamcop.com/help_with_headers)

For example, those using Outlook 2003 are prompted to do the follow steps:

- Double click the email message to open it and at the top menu, click View.
- At the pull down menu, click Options.
- A new window will open that has the header information.
- Using the mouse, click to highlight the header information, Copy and Paste it into your new, forwarded message to [abuse@rit.edu](mailto:abuse@rit.edu)

*continued on page 14*

# Network Security – Quarantine Process Implemented for Vulnerable Campus Computers

## *Install Necessary Patches and Secure Computers upon Return to Campus After Summer Break*

*By Dave Pecora, Operations Manager, [dlpits@rit.edu](mailto:dlpits@rit.edu)*

Those returning to campus after summer break may find that their computers need to be updated with the latest network patches. These patches help ensure that computers are safe from compromise and are not quarantined as potentially infected systems. Upon return, several recommendations for securing computers include understanding the quarantine process and installing the most current patches and/or safeguards on computers.

### **Quarantine Process**

ITS is very concerned about computer and network security issues on campus, and take virus and vulnerability issues seriously. In an effort to curb virus/trojan infections, ITS has developed a scanning procedure to identify compromised or vulnerable systems on campus.

This quarantine process is in place to protect the integrity of the RIT network and protect resources hosted on our network. ITS runs a scan on the entire network several times a day to look for machines that may be infected with viruses or may be vulnerable to security flaws. If any computer on the network comes up positive on the scan, it is quarantined.

### **How do I know if my machine has been quarantined and what do I need to do?**

If your machine is quarantined, the only website you will be able to access is the Windows Update website. To remove the machine from quarantine, you need to complete the updates on your computer.

To access the Windows Update website: Open Internet Explorer and go to Tools>Windows Update (or visit <http://windowsupdate.microsoft.com>), and follow the directions on the website. When the updates are installed, the next network scan recognizes this and removes your machine from the quarantine list.

### **How do I prevent my machine from becoming quarantined?**

To prevent your machine from becoming quarantined be sure that you keep all of your anti-virus software up to date. You need to install all updates respective to your operating system as soon as they become available. (ITS usually sends an email to the campus community when an important update has been released.) If you fail to install the required updates expediently, your machine is quarantined when we scan the network for those updates.

As with all ITS services, if you have any questions or concerns, please contact the ITS HelpDesk at 475-4357 or 475-2810 TTY.

# Note Taking Service: Then and Now

By Kevin Adams, Co-op Student, NTID, [kda7688@rit.edu](mailto:kda7688@rit.edu)

The National Technical Institute for the Deaf (NTID) has provided note taking services to students who are deaf or hard of hearing in RIT bachelor and master degree programs for over 30 years. Until 1997, classroom notes were copied and distributed to each student, instructor, and NTID support department faculty member. As a result of providing hard copies, NTID was distributing approximately one million pages of notes each year. The annual costs for paper and replacement of high volume copiers were significant.

In 1998, Dr. Peter Lalley, director of the former Center for Baccalaureate and Graduate Studies, initiated a program to distribute classroom notes on a website. Initially, students could access their notes on the web and/or receive a hard copy. As students adjusted to the change to web access, hard copies would gradually be phased out. By 2002, distribution of hard copies was completely eliminated.

Under this program, the process involved three steps: student note takers brought the notes to the support department as soon as possible after class. The staff collected and reviewed the notes for legibility. Three times a day the notes were brought to a scanning station and posted to the website. All notes were hand written on standard tablet paper in black ink. This process was a significant advancement over distributing hard copies, but clearly there was room for improvement in quality and usefulness of the notes, as well as the timeliness of distribution.

## The Beginning of Digital Notes

In spring 2003, Dr. Don Beil, a professor in NTID's Applied Computer Technology Program, along with Dr. Lalley began to investigate the possibility of using the new Tablet PC technology and Microsoft's new software, OneNote, to enhance NTID's note taking program. It quickly became evident that the combination of Tablet PC with the new software offered many possibilities to improve the quality and educational value of notes, and significantly improve delivery time through the use of wireless technology.

Parul Shah, Microsoft OneNote Product Manager worked with an NTID team to explore the possibility of establishing a OneNote Case Study Program at NTID/RIT. The proposal was approved, and Microsoft agreed to provide Tablet PCs and OneNote software to NTID for the study which began winter quarter 2003-2004.

## The Start of the Program

In winter quarter, the Tablet PCs were distributed to NTID's five academic support departments under the immediate supervision of the Note Taker Coordinators.

"I was excited for the possibilities that could arrive from this new technology," said Pat Rahalewicz, the Note Taker Coordinator for the Business and Computing Technologies Department.

The coordinators chose one or two student note takers to pilot the digital system. The students used the Tablet PCs in their classes throughout the quarter, building a familiarity with the OneNote software. This limited testing phase continued through spring quarter due to the newness of the highly technical note taking method.

*continued on page 12*

For more detailed program information, please refer to the NTID case study by Microsoft at

<http://www.microsoft.com/resources/casestudies/CaseStudy.asp?CaseStudyID=15482>

# RIT's Online Learning Department: Supporting Distance and Blended Learning



By Joeann Humbert, Director of Online Learning, [jmhetc@rit.edu](mailto:jmhetc@rit.edu)

Welcome back to a new academic year. Online Learning is gearing up for a productive and exciting year of working with RIT students, faculty, and staff. Our mission in Online Learning revolves around helping RIT faculty use online technologies that can produce more effective teaching and learning experiences. We are also the student-services support center for all distance learners at RIT.

## **Expanded Instructional Design Team**

We are pleased to announce that Online Learning has added to our team of Instructional Designers due to the increasing number of distance, blended and on-campus faculty using our services. Our experienced team helps faculty implement instructional technologies and strategies in ways that produce more effective teaching and learning in online, blended and on-campus courses. To make an appointment, contact Dr. Cheryl Herdklotz at 475-2030 or e-mail her at [cahetc@rit.edu](mailto:cahetc@rit.edu).

## **Improved Web Pages for RIT Faculty and Students**

Online Learning launched new faculty and student web pages to provide additional resources and support to these communities. The faculty pages offer teaching strategies and tools for online and blended learning. Effective practices in assessment, cooperative learning, and group discussion are featured with examples provided by top RIT faculty and adjuncts. <http://online.rit.edu/faculty>

The Online Registered Student pages guide new and returning students through the process of obtaining computer accounts, accessing online course(s), obtaining course materials and learning how to use courseware. The comprehensive site is a balance of information and support. We encourage RIT faculty and staff to direct online students to <http://online.rit.edu/students> for any online learning needs.

## **Enhancing Teaching and Learning without Increasing Workload**

The Online Learning Department is embarking on the second year of a “blended learning” pilot. The driving force behind the blended learning pilot is to show faculty how they can use educational technology software, in conjunction with effective, time-tested, online teaching practices, to enhance the teaching and learning experience without increasing their workloads.

We are applying the most effective practices and educational technology tools being used today for converting very specific portions of in-class interactive activities to online interactive activities. For example, discussion forums, group projects, one-on-one mentoring, various forms of testing, and the use of content modules for student review purposes can all be conducted online instead of face-to-face by using course and communication management tools such as RIT's myCourses.

Faculty who may wish to take part in this project during the upcoming winter or spring quarters can apply by visiting <http://online.rit.edu/blended>. Faculty who participate in the pilot this year will receive a one time stipend.

## **Online Course Evaluations**

Online Learning introduced a new online course evaluation service this fall. Our surveys indicate that students in online courses prefer to complete course evaluations online. Faculty will have the option of conducting online evaluations instead of paper-based evaluations for all their distance courses. The online course evaluation tool offers robust reporting features and allows departments to customize and automate many administrative functions.

In short, RIT's Online Learning Department serves as the operational support and services center for online learning at RIT. For more information, visit us in the lower level of Wallace Library, on the web at <http://online.rit.edu>, or phone 585-475-5089 or 585-475-5896 TTY.

# Using Exchange Calendaring Effectively – Starting Out

By Michelle Cometa, Office of the CIO, [macits@rit.edu](mailto:macits@rit.edu)

CorporateTime Calendaring was phased out in mid-June and replaced with the Microsoft Exchange Calendar. Being integrated with the email system allows users several advantages including being able to send meeting requests directly from the calendar, and dragging and dropping meeting-related files into the messages. Exchange calendar continues the ability to schedule conference rooms and equipment.

Training sessions for using Exchange calendar began over the summer and continue through the fall with ITS trainers. Hands-on training using the calendar is tailored for new users as well as designates (staff assistants who keep calendars for those in their department).

## Finding the Calendar

The Exchange calendar can be found on the main email page in Outlook. Move to the folder list on the left side of the main page, Outlook Today. Click “Calendar” and this will open your working calendar. You can set your view to be *day*, *week* or *month*, depending on your preference.

Going back to the Outlook Today listing, you notice under the Personal Folders area another Calendar notation. The difference between the two items is that the calendar in the Personal Folders area is not the public calendar that other Exchange users can view to schedule meetings with you. It is for personal use and will not be accessible to others. The main calendar at Outlook Today is where RIT business appointments can be viewed by others and meetings requested.

Calendar notations count toward your mailbox quota on the main Exchange server. Keep this in mind as you use both email and the calendar. (A way to save space and save important messages is to use the Personal Folders area for email. Set up a series of folders for your own needs and move messages off the Exchange server to your local computer.)

## Using the Global Address List

Email addresses of RIT Exchange users are included in the Global Address List (GAL). This information is helpful as you address email messages to individuals and begin to schedule meetings with individuals or groups of people.

For calendaring, click “New” to create a new appointment. This brings up a screen to insert the meeting name, location and descriptors such as Start and End Time, as well as Labels – Business, Important, Personal, Travel Required, for example – all meant to help with time management and meeting planning.

To work with the GAL, open a new meeting screen. At the Scheduling tab, look to the bottom of the screen where prompts “ADD Others” and “ADD from the Address Book” are located. This brings up the GAL screen called Select Attendees and Resources. Type in the meeting attendees’ names, starting with the first name then last name. Click on the specific individual. Their name as well as schedule appear in the meeting list. This determines availability for the suggested meeting participants. This is similar to CorporateTime in that blocks of time can be seen that are open or already scheduled. For delegates, specific meeting information can be made private so that the only information a meeting planner can see is the time blocked, not the specifics of the meeting.

These are merely the basics of a system that is rich with features. Each issue of ITS News will explain features so that users can make the most of the system and communicate easily with others on campus. For more information about the Exchange Calendar, see the ITS web site: <http://www.rit.edu/its/services/email/exchange>.

# Let the Music Play

*RIT offers legal music download service*

*by Paul Stella, University News Services*

## RIT students can let the music play—and do it legally—thanks to a new service available on campus this fall.

The Division of Information and Technology Services has signed an agreement with Cdigix, a company offering digital entertainment to colleges and universities. In doing so, RIT becomes one of the first schools in the nation to take part in the company’s digital music service, designed as an alternative to illegal file sharing.

Peer-to-peer file-sharing technology has experienced rapid growth over the past several years, putting many students across the nation at odds with the music and entertainment industry. That has led to recent crackdowns targeting individuals who illegally share copyrighted material. Now, colleges and universities are being called upon to address the problem.



“RIT must comply with federal copyright laws,” states Diane Barbour, chief information officer. “At the same time, we understand the convenience and appeal of listening to music online using student computers.”

Through Cdigix, students have the option of purchasing a subscription at \$2.99 per month, allowing them to listen to music online. Individual songs can be downloaded in MP3 format for 89 cents. The first 3000 students that sign up for a 9-month subscription will receive a full rebate payable in the spring quarter. Purchases can be made by credit card, but plans are being finalized to incorporate RIT flex card transactions.

ITS will host a server that makes the service run more quickly and efficiently.

“By offering this service, we are hoping to protect our students and their parents from becoming involved in expensive lawsuits as a result of illegal music sharing,” says Barbour.

ITS is working with Student Government to publicize the Cdigix digital music service. Subscriptions may be made online at [media.cdigix.com](http://media.cdigix.com).



# Recap of Summer Upgrades and New Service Roll Outs

*Several product upgrades and new services were rolled out this summer for the RIT community. Here is a review of some of the different notices.*

## **RITTS Drop-off Moves to ITS HelpDesk**

The RITTS (RIT Test Scoring) drop off point is now the ITS HelpDesk. You must bring all test forms to the HelpDesk for processing. A secure drop box is available at the HelpDesk for your convenience. The HelpDesk is also the pickup point for processed forms. Processed forms are available for pickup 24 hours after drop off Monday-Friday. Forms left at the HelpDesk for more than one quarter are shredded. ITS appreciates your cooperation as we adapt our services to match resources and customer demand. We anticipate the central location will serve the RIT population well.

Note: The Data Center (building 10) no longer accepts RITTS forms.

## **NEW Web Based Training Solution: E-Learning Zone**

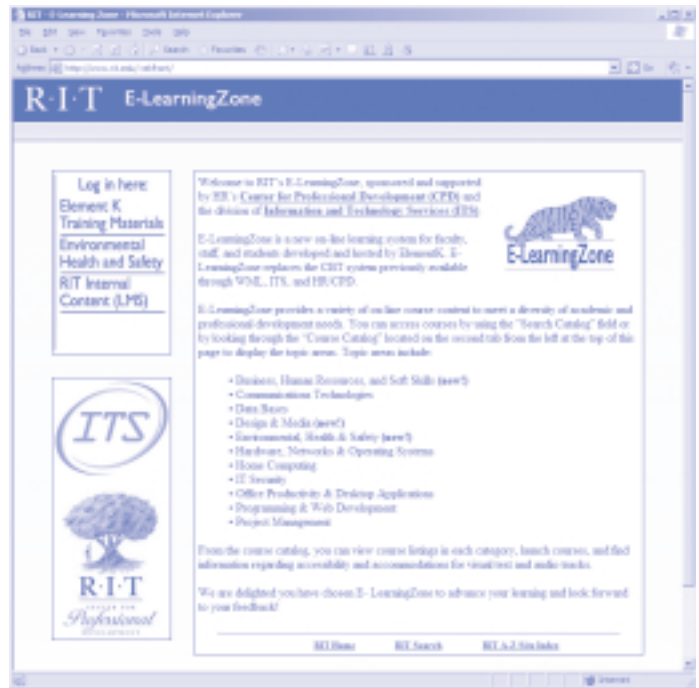
Looking for an alternative or complement to expensive classroom training? A new web-based training solution available to RIT students, faculty, and staff may be the answer.

ITS and the Center for Professional Development are pleased to announce the implementation of a new web-based training solution. E-Learning Zone is available to all current students, faculty, and staff. The system is available at no incremental cost to all users with an RIT computer account.

E-Learning Zone is hosted by Rochester-based company, Element K Solutions. It replaces the computer based training system developed by SmartForce.

The new system offers many improvements over the previous computer-based training application, including:

- Much improved course selection, including exciting new content in Business & Soft Skills, Design & Media, and Operating Systems
- Brainbench exams designed to test users' expertise in many different areas
- Sample certification exams designed to help users prepare for advanced business and technical certification exams
- The ability to download and take training classes while not connected to the Internet
- The ability to track your training through an on-line transcript



Accessing E-Learning Zone is easy: just go to <http://www.rit.edu/elearningzone>, click on "Element K Training Materials," enter your RIT username and password, and get started. For help or with questions, contact the ITS HelpDesk at 5-HELP (4357) voice or TTY 5-2810.

*continued on page 11*

## System Security Efforts: Spoofed Email Messages Can Contain Viruses; Often Ask for Personal Information

*In upcoming 2004-2005 ITS News issues, we'll devote space to updates, tips and information about system security efforts. This will include information about necessary patches for systems as well as tips about questionable email/spam.*

An email message was passed along recently to ITS supposedly from US Bank (similar messages have been reported appearing to come from other banks as well). In the text of the message, the sender asked the individual to confirm personal account details with the warning, "...otherwise, your access to the system may be blocked."

The note looked official with the US Bank logo and some information about accounts. However, the note is a "spoof." Opening the message may put your system at risk by downloading a virus. Also, disclosing account information would put you at further risk - allowing access to private information, in this case your finances, to an unauthorized person.

Delete messages like this or forward them to [abuse@rit.edu](mailto:abuse@rit.edu).



## phishing

(v.) Pronounced "fishing," the act of sending an e-mail to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft. The e-mail directs the user to visit a Web site where they are asked to update personal information, such as passwords and credit card, social security, and bank account numbers, that the legitimate organization already has. The Web site, however, is bogus and set up only to steal the user's information.

Phishing, also referred to as brand spoofing or carding, is a variation on "fishing," the idea being that bait is thrown out with the hopes that while most will ignore the bait, some will be tempted into biting.

<http://www.webopedia.com>

## Summer Upgrades and New Service Roll Outs

*continued from page 9*

### **Telephone Circuit Upgrade**

This summer, ITS Telecommunications Services upgraded the inbound and local calling outbound telephone circuits. The upgrade allows RIT phone users with digital phones and LCD displays to see available caller ID information for off campus calls. Caller ID information is not available for analog extensions at this time. Outbound calls from RIT still display “Unavailable” to off campus phones. If there are any questions about the upgrade, please contact the ITS Telecommunications HelpDesk at 5-5800.

### **SAS 9.1 Now Available at ITS HelpDesk**

ITS maintains an annual academic subscription license for SAS for Windows. SAS 9.1 brings you a complete suite of products for data access, data management, data analysis and data presentation.

The license provides the opportunity for RIT students, faculty, and staff to subscribe to a suite of SAS products:

AF	ASSIST	BASE	CONNECT
DB2	EIS	ETS	FSP
GIS	GRAPH	IML	INSIGHT
LAB	OC	ODBC	OLE DB
OR	ORACLE	SECURE-WIN	SHARE
SPECTRAVIEW	STAT	SYBASE-SQL	Server

Online Tutor: SAS Programming AND PC File Formats

A limited number of SAS subscriptions are available at the ITS HelpDesk at a cost of \$143 for one year. The term of the current license is April 16, 2004 to April 15, 2005. On payment of the subscription fee, you are provided with the 6-CD media set and installation guide (this can be picked up at the ITS HelpDesk). The license update will arrive via email for SAS 9.1 for Windows. If you wish to re-activate your SAS 8.2 installation, the update files will be provided by email. The cost for SAS 8.2 reactivation is also \$143 for one year.

The ITS HelpDesk has the license form available at the HelpDesk or you can request a form be faxed to you. Be prepared to supply your department budget number or to provide a check payable to RIT for \$143.

If you have questions, contact the ITS HelpDesk at 475-4357 or 475-2810 (TTY). You can also submit a question online at <http://www.rit.edu/its/help>

More information about various licensing agreements and usage guidelines can be found on the ITS web site: <http://www.rit.edu/its/services>

[This site lists information about the Apple TAP (Technology Assurance Program) agreement, Adobe Software Products Licensing, SAS and the Microsoft Campus Licensing Agreement, for example.]

## Note Taking Service

continued from page 5

### The Program

The Digital Note Program’s technological success comes from the utilization of Microsoft OneNote combined with functionality of the Tablet PC. The student note taker is trained to operate the Tablet PC and OneNote. After training, the note taker uses the Tablet for all the lectures of the class through the duration of the quarter. Before each lecture begins, the note taker imports a digital cover page on the first page of the section (Figure A.) The notes are then digitally written in the following pages of the section. Important information is cited with an appropriate note flag (Figure B.) After the lecture concludes, the note taker saves the notes as a TIF file using Microsoft Document Image Writer and posts the file to a share drive on NTID’s server. The TIF file is then converted to a PDF file by the database technician and posted to be viewed through the class notes server.

### Advantages of the Program

“Tablets enhance the paperless approach eliminating not only paper notes, but eliminating the current logistical process of getting the notes from the classroom to the coordinators and then on to the class notes scanners in NTID. The use of tablets will dramatically improve upon the availability of the notes. Notes that currently take a few hours to get posted with the manual process can be made available within minutes,” stated Steve Campbell, Manager, Technology Support Services.

The notes are kept exclusively in a digital format. This makes posting notes to the Internet more efficient.

“Tablet PC notes can be submitted immediately after class. This means that the students will be able to access their notes more quickly and gain valuable time to study for exams, write papers, and do projects,” stated Dina Stier, the Note Taker Coordinator for Liberal Arts.

### Improved Quality of Notes

The use of Microsoft OneNote allows notes to become highly dynamic. Due to scanning limitations, notes can only be transcribed in black ink; therefore emphasis is placed on the use of white space (Figure C).

With OneNote, note takers have the ability to choose from multiple pen colors and highlighters (Figure D). These added features provide a vivid capture of ideas, graphs, and/or charts. OneNote is cross integrated with all Microsoft Office programs to allow for direct import into the note pages. PowerPoint presentations, Excel spreadsheet, and Word documents can be placed into the notes and be digitally inked. This results in a complete transcript so students do not have to toggle between multiple documents when reviewing lectures. As previously mentioned, note takers can add emphasis to parts of the notes by flagging sections (featured on the bottom of Figure D). This infusion of color allows for a fuller and more robust set of notes to increase students’ information retention.

continued on page 13



Figure A

- ! Exam Info. (Ctrl+1)
- ☆ Important (Ctrl+2)
- 🏠 Homework (Ctrl+3)
- ? Question (Ctrl+4)
- 🔑 Answer (Ctrl+5)
- ➡ Definition (Ctrl+6)
- 📅 Date Change (Ctrl+7)
- 🕒 Time Change (Ctrl+8)
- 🔍 Refer To... (Ctrl+9)
- 🗣️ Guest Lecturer
- 👤 Good News

Figure B



Figure C

# Fieldhouse Cabling Project

By Jim Collins, ITS Telecommunications Services, [jpcppt@rit.edu](mailto:jpcppt@rit.edu)

As part of RIT’s continuing effort to provide a diverse physical environment for our students, the Gordon Fieldhouse was added this year. ITS Network Support and Telecommunications Services teams worked alongside Student Affairs and academic partners in the planning of this facility, and with Facilities Management Services (FMS) to help create a dynamic space for the enjoyment of campus and off campus groups.

ITS installed more than 100 each of data network and telecommunications jacks as well as the cable television system. In addition to the traditional “wired” connections, the building has five wireless Ethernet access points. This equipment provides coverage for the entire playing field floor, seating area, as well as the first and second floors of the Fitness Center, the pool area and adjacent spaces. Laid end-to-end, the cables used for the Field House would stretch for seven miles.

The planning for the project was extensive and we are pleased that the project was completed on time for graduation and the grand opening ceremonies this fall. ITS looks forward to continuing our partnership with FMS in an effort to further enhance the RIT campus. Questions regarding the network and telecommunications capability of the Gordon Field House can be directed to Telecommunications Services at 5-5800.

## Note Taking Service

*continued from page 12*

### Cost Savings

Benefits of the Digital Notes Program are the ability to increase the level of service provided to students and reduce costs for the Institute. The elimination of thousands of pages of notes a year will result in substantial savings in paper, printing, and scanning expenses. Digital web posting is the best method for an effective and cost conscious delivery of a valuable access service.

### The Future of the Program

“In two to three years, I foresee 70 percent of all the notes being taken on Tablet PC,” said Dr. Lalley. He is seeking additional funding venues to expand the program and is excited at the possibility of converting this large note taking enterprise to a completely paperless system and into the next echelon of quality.

For more detailed program information, please refer to the NTID case study by Microsoft at <http://www.microsoft.com/resources/casestudies/CaseStudy.asp?CaseStudyID=15482>, or contact Dr. Peter Lalley at 475-5481 or [palbgs@ntid.rit.edu](mailto:palbgs@ntid.rit.edu).

*NOTE: Kevin Adams, a fourth-year marketing student, completed his co-op experience with Dr. Lalley’s group this summer quarter. He had been hired during spring quarter by Dr. Lalley to continue development of the program to allow NTID to use the Tablet PC technology to its full capability. “It was an honor and a challenge to setup a system that has so much potential for students,” he said. “The program will be up and running at the start of the 2004 fall quarter with at least eight tablets being used full time.” See Kevin’s article, “What is a Tablet PC?” on page 15.*

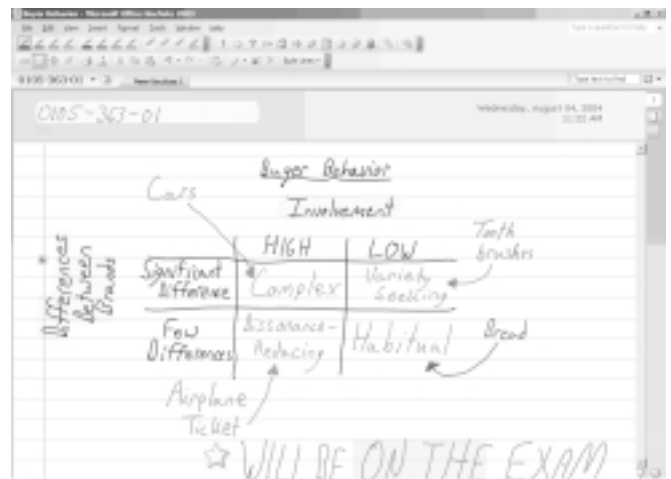


Figure D

## Cullen Leads Management of Computer Abuse Caseload

*continued from page 3*

scans or increased bandwidth usage that are routinely investigated by ITS system staff. On campus users can send what they believe are abusive email messages to the online address [abuse@rit.edu](mailto:abuse@rit.edu) (For more information about this resource see the side bar article on page 3.)

External sources include the Recording Industry Association of America (RIAA). This national organization has subpoenaed mostly college students who have downloaded music files illegally and have used their computers as servers where others can download these songs, sometimes free of charge. The Motion Picture Association of America and the Business Software Association contact colleges or businesses about pirated movies and software.

Not all online abusers are students; online abuses know no age or gender. Adults also download music files and movies. Sometimes they use work computers for personal business, a violation of the RIT Policy Manual and Code of Conduct for computer and network use. Other abuse complaints include online harassment, threats, and conflict of interest cases which ITS investigates. ITS provides case information to Risk Management and Safety Services and the Office of Student Conduct.

Illegal music downloads generate the majority of copyright violation notifications sent to RIT. Some individuals are not aware that the music files they just downloaded are illegally gained. Some know, and do so anyway, adding to their individual collections. Some say they don't care that file sharing is illegal and others respond that they don't have the money to support their "music habit."

"There is a gap between the technology some young people have grown up with and their understanding of the laws and policies that govern using technology," Donna said. "Harassment by email is no different than in person. There are laws already written, but not often considered applicable because of the vision of electronic media as new.

"Some laws have not kept up with the culture. There has to be a shift in the mind set and in the culture. It will happen. There will be push back from this generation that has had computers since they were born. And there will be push back from the other side, such as the RIAA. There will be give and take needed on both sides." Donna's role is to help educate the RIT community on the current state of the law and to join with others to influence the academic community's response to legislation and technology solutions.

## Staff Assume New Roles at the ITS HelpDesk and Resnet



**Dave Bradstreet** is now the ITS HelpDesk Team Lead. Dave established Resnet seven years ago, and has led the Resnet

team very effectively during his time in ITS. Under his leadership, Resnet has undergone many changes including the establishment of a tech center that allows students to drop off equipment for troubleshooting. In his new role, Dave is now responsible for the management of the HelpDesk staff and all associated processes and procedures. Dave is working to transition the current role he has with computer abuse cases to Donna Cullen.



**Dan Swab** is now the Team Lead for Resnet. Dan has been with ITS for over two years and currently manages the Resnet

student staff as well as the Resnet service call and ticket dispatch process. Dan has been steadily taking on more responsibility since he started at Resnet, and is well prepared for this new opportunity.



# What is a Tablet PC?

*By Kevin Adams,  
co-op student, NTID,  
kda7688@rit.edu*

Microsoft released one of its newest innovations Windows XP Tablet PC Edition\* on November 7, 2002. From that, a myriad of computer manufacturers (Acer, Fujitsu, Hewlett Packard, Gateway, and Toshiba) released the first generation of Tablet PCs.

The tablet comes in two forms: Slate and Convertible. The Slate model most closely resembles a personal digital assistant (PDA, with the attributes of a laptop) that ranges from 11-to-12 inches in length, 8.5 inches in width. Like a PDA, there is no keyboard built into the computer but it could be an easily-added peripheral. The Convertible model emulates the look of normal laptop. The added feature of the convertible is the rotating screen that folds on top of the keyboard, to mimic the look of the Slate.

The primary defining characteristic of Tablet PC is the inking feature (a digital pen). As seen in Figure 1, a user can navigate within the computer with a specialized stylus. The stylus serves as a digital pen (known as inking), which is the primary input mode for Microsoft OneNote. Serving as the mouse, the right button is built into the shaft of the stylus. Together, these provide a brand new method of notebook computing. Much like a PDA, the tablet can accept a user's handwriting as a form of input.



**Figure 1**

For the Digital Notes Program, NTID is exclusively using the Toshiba Protégé 3500, a Convertible model. The Toshiba Protégé line has been acclaimed as one of the best Tablet PCs, winning the Editor's Choice Award from Laptop Magazine.\*\* This model continues to provide dependable and efficient service for a wide variety of technical demands from the note taking program at NTID.

For further information on Tablet PCs and their many applications, please go to <http://www.microsoft.com/windowsxp/tabletpe/default.mspx>

\* <http://nts.jhmi.edu/desktop/sourcedocs/tablet/tableteval.cfm>

\*\* Laptop Magazine June 2004, pg. 112

## 2004 Customer Satisfaction Survey: Thanks to all who Participated

ITS sincerely thanks the 650 faculty, staff, and students who took the time to respond to our second annual customer satisfaction survey last spring. Along with our usual summer activities, we are in the midst of compiling the results, reviewing comments, discussing trends, and developing action plans. We received a lot of useful and constructive feedback and will be using it to guide our objectives for the coming year. Look for more newsletter articles reporting results and action plans related to the survey findings in the future.

## ITS Contact Information

### DSS Computing Labs

Hours, locations, hardware, software, and reservations information available at:  
[http://www.rit.edu/its/services/computer\\_labs](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](mailto:helpdesk@rit.edu)

### Regular hours

Sunday	12 p.m.–6 p.m.
Monday–Thursday	7:30 a.m.–8 p.m.
Friday	7:30 a.m.–5 p.m.

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