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Student Serves Spam on Tufts Network

It must have looked like an easy way to earn a few dollars to at least one Tufts University student: A spammer offered to pay him $20 each month if he would install what was, bottom line, a message-transfer agent on the personal computer in his dorm room. The program, called Mailsafe.exe, then took advantage of the school’s gigabit connection to the Internet to relay thousands of e-mails offering services for burning CDs and DVDs.

“We received a flood of complaints that our domain was the source of spam,” says Lesley Tolman, director of networks and telecommunications at Tufts in Medford, Mass. “With our reputation at stake, we acted quickly to identify the IP address from which the spam originated, and then we confronted the student.”

Tolman adds that they had reason to believe that other students were involved, noting that using many addresses would increase the likelihood that the practice would go undetected. But identifying one student was enough to put an end to the practice which was clearly a violation of student-use policy.

“We have well-established processes for how students use the network and computer resources. As we monitor usage, we make contact with any student who is in violation. We remind him or her of the rules or clarify any misunderstanding, then we restrict access or discipline the student as appropriate,” Tolman says. “We work closely with the Dean of Students, and while we try to be open-minded on the first violation, justice is swift and tough for the small number of repeat offenders.”

In this case, the students involved were not contacted initially by the company. “They found the opportunity themselves,” says Tolman, who adds that keeping a close watch out for irresponsible or illegal activities such as this costs the university about $30,000 each year.

Contact Lesley at lesley.tolman@tufts.edu.
E-Portfolios

From the President
Jeanne Jansenius
University of the South

Will ePortfolios be the next hot item on university campuses? Although the concept is not new, the software tools are beginning to be integrated into existing campus information systems, and many include privacy features that allow students to regulate access to their portfolios. ePortfolios have been hailed as personal information portals that range from cradle to career. Instead of a student carrying around a folder of resumes, reference letters, transcripts, digital media, coursework and writing or project samples to interviews, digital portfolios can be placed into a Web format for professors, advisors, and future employers to peruse.

Portfolios can be divided in three flavors:

1. **Student Learning Portfolios** includes a collection of the student’s work that can range from resumes to their academic experience. The portfolio begins with the freshman year and can go throughout graduate programs—this could be an additional offering for alumni. How is this working on some of our campuses? When interviewing David DiBiase, Director of the e-Education Institute, College of Earth and Mineral Science at Pennsylvania State University, DiBiase reported that “last year, with support from Penn State’s Office of Information Technology Services and Division of Student Affairs, we created a new halftime position to manage the University’s student e-portfolio initiative. We were fortunate to attract Glenn Johnson, an experienced instructional designer. With technical support from our e-Education Institute, Glenn created an extensive Web site (http://portfolio.psu.edu) that provides a rationale and guidance for student portfolio developers and for faculty members interested in adopting portfolio assessment. Since completing the site, Glenn spends much of his time promoting the initiative throughout the Penn State system. The Institute’s most recent survey of student Web space usage suggests that Glenn is making an impact: academic use of student Web space accounts increased from 8 percent to 14 percent between December 2001 and December 2002. One of Penn State’s Colleges, the College of Earth and Mineral Sciences, has initiated a new class called Professional e-Portfolio Development. Several of the College’s academic departments are considering adding portfolio development as a degree requirement. As Penn State strives to become more student-centered, student e-portfolios are beginning to emerge as an important way to help students take more active and reflective roles in planning and representing their Penn State experiences.”

2. **Teaching Portfolios** provide a functional role in advising which demonstrates the student’s academic interest and academic experience; thus encouraging students to become more involved in planning and achieving their own educational goals and institutional portfolios. Other areas this might be useful is tenure committees that review online the candidate’s body of work, research groups, publications, and assessment results. Visit The University of Texas at El Paso Web site (http://www.utep.edu/ceta/porfoli/samples.htm) for examples of teaching portfolios.

3. **Institutional Portfolios** normally contain examples of institutional activities, program offerings, and how institutions are planning to achieve their mission. Georgia State University (http://www.gsu.edu/-wwwupp) presents an excellent example of an institutional portfolio.

Some of the major hurdles noted from campuses that have already implemented this type of project:

- Providing enough web space for each student
- Creating pedagogical and support infrastructures such as training workshops and on-line tutorials
- Encouraging professors to incorporate e-portfolio assignment in the course assignments.
- Encouraging academic advisor to consult advisees on their personal e-Portfolios.
- Helping and encouraging students develop strategic approaches to career planning
- Privacy

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e-Portfolios
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Time will tell if e-Portfolios will be the dawn of a new wave. In order to be successful, campuses must embrace or require student and faculty participation. For an additional listing of portfolio projects already in progress, you might want to visit the American Association for Higher Education Web site at http://www.aahe.org/teaching/portfoliosearch3.cfm

As your organization makes the inevitable migration to IP telephony, you will be hearing a lot about SIP. Hopefully, by the time you do migrate, all the bugs will be worked out, or else you’ll be doing a lot of SIPping of something strong to drown your sorrows. But that’s another issue, sure to generate heated debate, so we won’t touch that one for now.

What we do want to do this month is fill you in on SIP, the Session Initiation Protocol. To its credit, it is a relatively simple little creature that is very good at what it does, and doesn’t try to do more than it should.

SIP is an application-level signaling protocol, and what it does is set up, change, and terminate multimedia sessions among participants on IP networks. These sessions can consist of something as routine as a two-way telephone call, all the way up to a collaborative conference session. This includes applications such as voice-enriched electronic commerce, find me/follow me services, web page click-to-dial, instant messaging, multiplayer gaming, and IP centrex services.

SIP, which comes to us courtesy of the Internet Engineering Task Force, dates back before IP telephony. It was originally devised as a means of inviting participants to large-scale multipoint conferences on the Internet Multicast Backbone. Some big-brained people saw in it the potential for setting up point-to-point sessions, or as we know them, telephone calls.

We said SIP is a simple thing, and here is why: Because it began as a mechanism for establishing sessions, it doesn’t bother with the details of the session itself. It just initiates them, manipulates them, and tears them down, all the while working well with other protocols with their own missions. SIP’s simplicity positions it well for scalability and ease of implementation in different architectures and deployment situations. SIP provides four basic functions:

- **Establishment of user location** - Translating from a user’s name to their current network address, ensuring that the call reaches its destination, whatever the location
- **Feature negotiation among participants** - Creating agreement on the call features supported, even if not all multi-call parties can support the same feature level (such as video)
- **Call management** - Adding, dropping, or transferring participants
- **Feature changes while a session is in progress** - Enabling video, for instance, in the course of what began as a voice-only call

SIP addresses users through an e-mail-style address. Each user is perceived as a hierarchical URL built around elements such as their phone number and host name. It uses the Domain Name System to deliver requests to the server that can best handle them, in a client-server approach. This makes it as easy to redirect a call to another phone as it is to redirect someone to a Web page.

The SIP servers provide name resolution and user location and pass messages to other servers. They also enable “forking,” a useful feature. Forking takes the incoming call and sends it to several devices at once - for instance, a person’s office, home, and cellphone. All ring at once, and the first device answered gets the call.

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Tech Talk
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SIP may be a viable alternative to H.323, although to some extent that is comparing an apple and an orange. H.323 operates as an entire suite of protocols that cover all the aspects of IP telephony, ensuring interoperability among systems. As a result of trying to do so much, however, H.323 is often seen as about as nimble as a Sumo wrestler.

SIP can offer a smaller footprint for more scalability and faster operation, improving performance in the area of call setup time, for instance. SIP can set up a call in 100 milliseconds, significantly faster than H.323, where call setup is sometimes measured in seconds.

There are a couple of Web sites you can visit for more information. Try SIP Center, at www.sipcenter.com, or the SIP Forum, at www.sipforum.org. Both are dedicated to the same thing, the advancement and commercialization of the technology.

As always, if there are specific topics you would like to see covered in this space, please let me know via e-mail at kevin@duxpr.com.

Upcoming ACUTA Audio Seminars

Wireless Business and Regulatory Trends
Tuesday, March 4, 1:30 - 3:00 p.m. EST

Despite the popularity of wireless voice and data communications, wireless is still a developing and, in some cases, frustrating issue for our campuses. Wireless carriers seem reluctant to negotiate custom contracts for our institutions and students. Industry statistics show that half of the U.S. population already has cell-phone service, and 2003 is expected to be a tough year for U.S. wireless carriers.

Some industry experts claim that the Federal government structure for regulating spectrum is obsolete and creates roadblocks to technology development and deployment. How can your team make sense of industry and regulatory changes, and come out ahead?

Dewayne Hendricks, CEO of Dandin Group, Inc., a Fremont, California-based company which does research and product development in the area of broadband wired and wireless data devices and services, will be the presenter.

To learn more about this seminar or to register, go to http://www.acuta.org/Relation/DownloadFile.cfm?DocNum=701.

Network Security Issues
Wednesday, March 19, 1:30 - 3:00 p.m. EST

This session will explore a full range of network security issues in higher education networking. The presenter will differentiate between security breeches initiated beyond campus and those initiated by campus users. He'll discuss trends involving cracking and Internet probes and resources to prevent such intrusions. The session will include information about the risks involved with campus use of PDAs, wireless, instant messaging, teleconferencing, and IP phones. The presenter will explore possible threats to university information resources and strategies to involve executive management in solving security challenges. The session will also cover pressure from the Health Information Protection and Accountability Act, the Digital Millenium Copyright Act, the Family Educational Rights and Privacy Act, and the Student and Exchange Visitor Information System. Examples from Indiana University will demonstrate how one university is addressing security issues.

The presenter will be Mark Bruhn, Chief IT Security and Policy Officer at Indiana University. Bruhn advises the Vice President for Information Technology and Chief Information Officer and University Administration on technology deployment, usage, and security issues, and he directs the efforts of the University IT Policy Office and the University IT Security Office.

For more information or to register, go to http://www.acuta.org/relation/downloadfile.cfm?docnum=707.
Nominations Sought for Board of Directors

As announced in an e-mail early in February, the Chair of the Nominating Committee has issued the call for nominations for ACUTA's Board of Directors. We are seeking nominations for the positions of President-Elect, Secretary/Treasurer, and two Directors-at-Large.

President-Elect: As stated in the Bylaws (Article III, Sect. A6), "Candidates for the office of President-Elect must have served as a member on the Board of Directors for a minimum of one year, or served as the Chair of a permanent committee for a minimum of one year." Nominees for this position must also be prepared to serve the following two years as President and Immediate Past President.

Secretary/Treasurer: The ACUTA Bylaws were recently changed to lengthen the term of office for the Secretary/Treasurer to two years.

Directors-at-Large: Two positions shall be elected each year for two-year terms. The Nominating Committee will assemble a slate of nominees from names submitted by the membership. The two candidates receiving the most votes will be declared the winners.

Current President Jeanne Jansenius of the University of the South becomes the Immediate Past President, and President-Elect Walter Czerniak of Northern Illinois University becomes President for '03-'04.

Nominations must be received by 5:00 p.m., PDT, April 11, 2003. Send all nominations to Maureen Trimm, Associate Director, IT Systems and Services, Stanford University, 215 Panama Street, Poplar Room 113, Stanford, CA 94305-4134, or e-mail mtrimm@stanford.edu. Phone nominations will not be accepted.

FCC Acts on Local Competition

The FCC has reached a major decision concerning the future of local competition. The Order concerns the access of competitive carriers to the networks and facilities of ILECs, known as Unbundled Network Elements.

The FCC news release regarding the Order and statements from the Commissioners is available on the FCC Web site at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-231344A1.doc (with related documents at the same address except as follows: ...231344A2.doc, ...231344A3.doc, ...231344A4.doc, ...231344A5.doc, ...231344A6.doc, ...231344A7.doc, and ...231344A8.doc)

ACUTA Member Sites to See

The Web Site Recognition Task Force congratulates the two schools selected for the first quarter of 2003 for having outstanding sites that exemplify the best use of Web-based alumni pages and services.

University of North Carolina: http://www.uncc49er.net
Washington State University: http://www.catalyst.wsu.edu
Pace University: http://www.utoday.com/pace
Kutztown University of Pennsylvania: http://www.kutztown.edu/alumni/wiesenberger

The topic for next quarter will be portals. Nominations are due by May 1.
Telecom Profits

According to The Telecom Manager's Voice Report, two of the major telecom companies showed profits for the fourth quarter of last year. Verizon separated itself from the telecom pack when it posted a fourth-quarter profit of $2.3 billion (83 cents per share) compared with its fourth quarter 2001 loss of $2.04 billion (75 cents per share). Sprint posted a fourth-quarter profit of about $39 million. A Verizon representative indicated that the "wireless, long-distance, and DSL businesses continue to position Verizon well in growth markets." (VR 2/10/03)

AT&T has announced plans to lay off 3,500 employees by the middle of this year. This will help them to reduce expenses and get closer to the profit side of the telecom business, according to Telecommunications Reports (TR 1/15/03). Earlier this year, WorldCom announced that it will be cutting 5,000 jobs over the next 60 days as one more effort to reduce costs. (VR 2/10/03)

CEOs

Sprint has been trying to hire a vice chairman at BellSouth to become their CEO, but a judge in Atlanta has let stand a restraining order granted to BellSouth that prevents the vice chairman from taking Sprint's job. The vice chairman has a provision in his contract that forbids him from moving to a rival telco within 18 months of leaving BellSouth. (VR 2/10/03)

Another interesting little note: WorldCom has received permission from a federal judge to sell a luxury-yacht building yard in Chatham County, Georgia, that it had foreclosed on to collect on loans it made to former CEO Bernard Ebbers. This sale is expected to net at least $7 million. (VR 2/1/03)

Do-Not-Call Lists

There is a lot of activity on Capitol Hill regarding the idea of a DNC list. The $16 million needed by the FTC to get the DNC list up and running this summer had not been funded as of mid January. The FTC Chairman has indicated that if this funding is not made available soon, the DNC list will not be available to consumers for a year or more.

According to Telecommunications Reports (TR 1/15/03), members of the House Energy and Commerce Committee, which is chaired by Tauzin from LA, met with the Chairman of the FTC on January 8 to discuss the issue of the DNC list. Several committee members indicated that the FCC needs to look closely at including telephone companies as has been requested by the FTC. The rules for use of the list did not require that telemarketers representing telecom companies had to use the list. Telemarketers who work for politicians and charities were also exempt from using the list.

A Representative from Texas said, "I understand the political sensitivities, but if you're going to have a do-not-call list, why not have a do-not-call list? Why not go all the way?"

Verizon has indicated that it prefers a single national DNC list, as long as it supplants state lists. A Verizon representative called it a hodgepodge, saying, "it is not especially convenient for us to comply with 25 different regulatory regimes. We urge the FCC to adopt a national list to preempt inconsistent state lists." AT&T Wireless also supports the idea of having telecom companies follow the DNC rules and having one centralized national DNC list that is administered by a federal agency. SBC, Qwest, and BellSouth all question the need for a national list. BellSouth indicated that they support the Commission's goal of

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protecting consumers from the inconvenience and harassment of unsolicited and unwanted telemarketing calls, as well as protecting other privacy rights, but felt that the Commission has not shown justification for changing current rules. WorldCom indicated that the increased costs to consumers would outweigh the benefits of such a list. They also argued that the restrictions placed by the rule would be unconstitutional restrictions of commercial free speech. (TR 1/15/03)

Mobile Phones While Driving

Concern over the use of a hand-held mobile phone while driving continues to grow. Bills are currently under consideration in at least 20 states, with some states considering multiple bills simultaneously. Most of these bills will only allow the use of phones with hands-free devices while driving. Several of the bills specify the fines, ranging from as low as $10 to as much as $500. One of the bills under consideration in Mississippi imposes a $1,000 fine if an accident is caused. Many of the bills are patterned after the New York law that bans only hand-held wireless phones and provides for a phase-in period. Under the measure, verbal warnings were issued for one month before law enforcement officials started handing out tickets. (TR 2/1/03)

At the federal level Senator Corzine from New Jersey has introduced legislation that would deny a portion of federal highway funds to states that refuse to prohibit use of mobile phones while driving, with certain exceptions. Similar legislation has been introduced in both the House and the Senate during the past two or three years but has gone nowhere. The cell-phone industry has been very actively opposed to all of this type of legislation.

Wireless Quality

*Consumer Reports* (February 2003) surveyed nearly 22,000 of their members during September 2002. Some of the interesting information revealed by this survey includes the following data:

- one-third of those surveyed indicated that they were seriously considering changing their mobile phone carriers
- difficulties in completing 911 calls
- about 14% complained about dropped calls
- about 11% complained about difficulty hearing the other party during the call
- about 10% of the survey participants described poor service

*Consumer Reports* devoted 13 pages to describing the results of the survey. Those who wanted to change their carriers ran into a problem in doing so. Local number portability has not been enforced on the wireless area. Hence if they change carriers, they must change the telephone number. The wireless industry is against any plan by the FCC that might require them to adopt LNP. They are, however, urging the Commission to change its rules making it easier for wireline customers to retain their phone numbers when they switch to wireless phones.

The Cellular Telecommunications & Internet Association (CTIA) is concerned that the FCC's stance on number portability was just one of several "unfunded mandates" that CTIA President Tom Wheeler says should be eliminated. CTIA says the FCC shouldn't require wireless carriers to offer number portability until the agency removes barriers to customers' retaining numbers when they switch from wireline to wireless carriers." (TR 1/15/03)
In January, we conducted a survey of a sample of ACUTA members regarding their participation in Enhanced 911 (E911) programs and readiness to comply with possible Federal E911 requirements for multi-line business telephone systems (including PBX and Centrex). The results of this survey were used in preparing comments for the Federal Communications Commission (FCC) inquiry into the feasibility of enacting a national requirement for E911 compliance for PBX and Centrex, as well as emerging technologies such as Voice over IP (VoIP).

A copy of ACUTA’s comments to the FCC may be reviewed on our Web site at http://www.acuta.org/relations/DownloadFile.cfm?docNum=709.

We appreciate the time that members took to respond to this survey, and would like to share highlights of the results with the entire membership. The statistics form an interesting picture of the E911 readiness of the campuses that responded, although we cannot generalize the results to all college campuses in the U.S.

In reviewing and analyzing these results, it is important to note that the FCC reports that only seven states currently require E911 for multi-line telephone systems. In our survey, 13% of the respondents reported that their state has such a requirement. Educational institutions in those states have undoubtedly come into compliance in accordance with state law.

However, it is clear from our survey that far more responding institutions participate in E911 systems than are required to do so by state law. These include 37% of Centrex customers who participate in E911 systems through their LECs, and 55% of PBX owners who participate in an E911 system which routes information to an officially recognized Public Safety Answering Point (PSAP). 15% more operate an internal campus E911 program using their campus police, security or safety office.

Centrex Customers

While only 17% of respondents use Centrex service, nearly 40% reported that their LEC participates in an E911 system.

- 17% of those responding use Centrex services
- 37% of those responding report that their LEC participates in an E911 system.
- 17% of those responding reported that their LEC’s E911 system fully complies with E911 requirements; i.e., building, floor, and room are kept up-to-date in a master street address guide and supplied by routing equipment to the PSAP.

PBX Customers

Over half of PBX users participate in E911 systems that route calls to a PSAP, and an additional 15% route E911 calls to an internal campus emergency service.

- 96% of those responding operate one or more PBX systems.
- 55% of respondents participate in an E911 system which routes all 911 calls to an officially recognized PSAP.
- 28% reported that the Automatic Location Identification (ALI) supplied by their PBX fully complies with E911 requirements, (i.e., building, floor and room are kept up to date in a Master Street Address Guide and supplied by routing equipment to the PSAP).
- 15% of respondents with PBXs route E911 information to an internal campus police, security or safety office that is not officially classified as a PSAP.

Voice over IP

It is clear that much work remains to be done by VoIP manufacturers in developing E911 compliance capabilities for their products.

- 21% of respondents reported that VoIP is used on their campus.
- 11% of respondents reported that they are not able to provide E911 service on IP extensions.

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Survey Results...

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• 1% reported that their IP extensions fully comply with E911, and another 1% reported that the location could be identified within 300 feet of the hub/router.

Readiness for E911

We asked members who are not currently in compliance with E911 if they have capabilities via their PBX, telemangement system, or other equipment to comply without purchasing additional hardware and/or software. Only 13% are capable of E911 compliance. 54% reported that they would need to acquire additional equipment and/or software.

Cost

The cost of initializing E911 service and maintaining it varied widely, depending upon the type of equipment that the campus has in place and other factors. The cost of implementing E911 for our survey respondents ranged from a low of $1,000 to a high of $80,000, with the average expenditure at $22,584. The majority spent between $15,000 and $30,000. We also asked about the annual maintenance cost. The responses ranged from $0 to $24,800. The average expenditure was $5,645. The majority spends between $2,000 and $10,000 annually to maintain their E911 systems. We caution that these figures cannot be generalized to all situations, and your actual cost may vary a great deal from the “average”.

Planning Time

We asked E911-compliant institutions in our survey how long it took them to implement E911 on their campuses, from the planning stages to completion. 17% of the respondents required over 24 months, 17% required 13-24 months, 30% required 7-12 months, and 35% were able to complete the implementation in six months. This data indicates that the majority can complete the task within 12 months, but we must keep in mind that budgeting generally takes at least one additional year.

I hope this information on the E911 readiness of our survey respondents is of interest to you as you plan or maintain E911 service on your campus. Thanks again to those who took the time to respond to our survey. This type of information is very helpful in preparing credible comments to agencies that are considering the enactment of regulations with broad implications for our member institutions.

Board Report

February

The ACUTA Board of Directors met via conference call on Thursday, February 6. Following are highlights of that meeting:

The Board discussed ACUTA's financial position with a look toward the future. The discussion was tabled due to time constraints.

There was general agreement to renew the MiCTA agreement for another year; Jeri Semer is going to pursue other possibilities with the MiCTA leadership.

The Board agreed to change the term of the Secretary/Treasurer from one year to two years.

The meeting concluded with a discussion of several proposed modifications to the bylaws. The Board was asked to be prepared to vote on the changes at the next meeting.

Respectfully submitted,
John Bradley
Rensselaer Polytechnic Institute
ACUTA Secretary/Treasurer
Welcome New Members

Institutional Members

Husson College, Bangor, ME T1
www.husson.edu
Kevin Casey, Director of Information Resources, 207/941-7123
Manchester College, North Manchester, IN T1
www.manchester.edu
Larry Gyrlion, Telecommunications Administrator, 260/982-5438
United States Military Academy, West Point, NY T2
www.usma.edu
Phillip Scalone, Chief, IT Plans and Policy, OCIO, 845/938-7315

Corporate Affiliate Members

Copper Members

Call Sciences, Inc., Edison, NJ
Armando Diana, 732/767-5580
www.callsciences.com

Cobite, New York, NY
Dean Wiech, 212/937-5800
www.cobite.com

Communication Planning Corporation, Jacksonville, FL
Diane Santarelli, 904/645-9077
www.wireville.com

Foxcom Wireless, Vienna, VA
Meredith Lawrence, 703/217-9971
www.foxcomwireless.com

Foxcom Wireless is a leading manufacturer of in-building wireless coverage solutions for corporate enterprises and wireless service providers. Our fiber optic-based distributed antenna systems enable seamless wireless coverage in corporate campuses, hospitals, and universities.

SCUP, the Society for College and University Planning, is offering a live, satellite telecast Thursday, April 10, 2003, 12:00 - 2:00 p.m. ET, entitled “Got Sustainability? Plan For It!” The telecast will focus on making sustainability a foundation of higher education learning and practice. For further information, go to http://www.scup.org/sustainability/telecast2003.htm.