

IRM NEWS

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Innovations for 2001

New University-wide Telephone System by 2002

So it can take best advantage of changes in the fast-moving telecommunications industry, FIU is getting a new telephone system which will provide homogenous service for the entire institution. It will replace the system University Park leases from BellSouth, as well as Biscayne Bay's aging PBX.

The new system will employ Cisco AVVID (Architecture for Voice, Video and Integrated Data) technology. Cisco is the worldwide leader in networking for the Internet. As an intelligent network, AVVID allows FIU to take advantage of developing technologies such as:

- * Convergence of voice and data networks in one multi-service network.
- * Deployment of Voice Over Internet Protocol (VOIP).

Cisco's state-of-the-art technology will allow exciting new features which include:

- * Message waiting light available for a visual indication of new voice mail messages.
- * Screen display of name of any caller from within FIU.
- * Multi-line sets with an LCD screen for ease of programming (digital sets only).
- * Voice mail integration to forward voice mail anywhere in FIU.



FIU's New Phone Set

- * 5-digit integrated dialing among campuses and other FIU sites.
- * Caller Identification (Caller-ID).
- * Integrated headset functionality.
- * Selectable ringing tones.

During the next 18 months, Network Engineering and Telecommunications (NET) will begin to migrate the University to the new system. Procedures showing how and when each location will be switched from the old system to the new one, and a timetable, will be provided in detail prior to full implementation. New system training will also be provided to users at appropriate times during the migration.

Cisco's AVVID will be a strategic asset to the University. FIU can take advantage of Internet technology and networking services to increase capacity and reliability while minimizing its operating costs. This is a great choice, as FIU grows to meet the challenges of the new millennium. *

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Support Center Knowledge Base Debuts

The IRM Support Center is pleased to announce that it now has an on-line Knowledge Base for its users to access. There you can find detailed solutions to many common computing and networking problems.

You can access the Knowledge Base at <http://www.fiu.edu/~irm/sc/sckb/>. There, you may select your operating system (e.g., Windows 95, 98, NT, Mac OS9, etc.) and working group (student or faculty/staff) for which you need a problem solution. You may search the Knowledge Base by problem title, keyword, or Article ID.

“[The Support Center’s] on-line Knowledge Base... [contains] ... detailed solutions to many common computing and networking problems.”

- * To search by problem Title, simply click on the down arrow of the pull-down menu and select any title.
- * To search by Title Keyword, enter pertinent words or phrases into the text box and click on ‘Enlighten Me.’ For instructions on how to enter search keywords, click on ‘Search Tips.’
- * If you know the problem Article ID you are looking for, simply enter it and, once again, click on ‘Enlighten Me.’
- * If you click on ‘Articles By Title,’ you will get a list of all articles that

Continued on Page 4

IRM NEWS

What’s Inside...

New University-wide Telephone System by 2002	1
Support Center Knowledge Base Debuts	1
NET: DHCP Deployment Underway	2
NET: e-Classrooms Facilitate Instruction & Learning	2
FIU Libraries: GIS Center Comes of Age	3
Accounts & User Support: FIU On-line Telephone Book Improved	4
TIPS & FAQs	4

Network Engineering & Telecommunications (NET)

DHCP Deployment Underway

Network Engineering and Telecommunications (NET) is pleased to announce that it has completed Phase 1 of its goal to implement an automated DHCP network-address registration system at FIU.

DHCP is an abbreviation for Dynamic Host Configuration Protocol. Basically, it is a set of rules computers use to obtain an IP address, and other important network-related information, to access FIU's network, the Internet, and Internet2.

IP addresses are the unique numeric identifiers that allow computers, as well as any device connected to a network, to be identifiable and to participate in the global Internet. DHCP simply automates the process of assigning the IP address and other network-related information to each computer on FIU's network.

The benefits of using DHCP are many. Below are several examples where DHCP will notably ease the process of connecting to the campus network:

Access to the network will be simplified for mobile computer users. With DHCP enabled, users moving a computer from building to building can simply plug into a new network outlet, power up, and within minutes be automatically connected to FIUnet. Mobile users without DHCP enabled must manually change the network information in their computers each time they connect from a different building.

* Office moves will be transparent. Computers in the new office location will not need to be reconfigured to access the network. Computers can simply be connected to the network outlet, powered up, and they will automatically reconnect to the network.

* Users will no longer need to know their IP addresses. The DHCP system keeps track of all IP addresses leased to users and automatically issues an address only when a user connects to the network.

“With DHCP enabled, users moving a computer from building to building can simply plug into a new network outlet, power up, and within minutes be automatically connected to FIUnet.”

As a result, IP addresses are only issued if and when they will be used. This is very important, because FIU has a finite number of IP addresses, and they are a scarce resource due to the rapid growth of the Internet.

Phase 1 of the project implemented the processes to automate the registration of IP addresses for every device connected to FIU's network and to make DHCP services available from every building. Phase 2 will involve modifying the startup process of each computer to enable DHCP.

The implementation of Phase 2 will involve visiting departments and enabling DHCP in every computer. IRM has already visited several departments and enabled DHCP in their computers. If the computers in your department have not been configured for DHCP, IRM will contact you soon to schedule a visit.

We greatly appreciate the hard work of Assistant Director Maria Rosa Drake, Network Systems Administrator Helvetiella Longoria, and others who have made this a smooth and painless implementation.

To learn more about DHCP and how to set up your computer to use it, please visit the NET DHCP web sites at:

<http://www.net.fiu.edu/dhcp>

and

http://www.net.fiu.edu/dhcp/dhcp_FAQ.htm

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FIU e-Classrooms Facilitate Instruction and Learning

FIU has developed multi-media classrooms to help students have a better learning environment and to help faculty be more informed about the use of information technology in instruction. \$170,000 from the President's iNET initiative was recently used to equip seven multi-media classrooms— otherwise known as electronic classrooms or e-Classrooms. The University Park Campus now has 22 of these rooms and the Biscayne Bay Campus has eight.



*NET's e-Classroom in University Park,
Green Library, Room 165*

The classrooms are fully equipped with a video data projector, VCR, network connection, laptop connection, and an electronic screen. English, Biology, Business, and Speech Communication classes are most commonly held in these special facilities, but any subjects can be taught there. “There's a huge demand for these classrooms,” says Carmen Perdomo, NET's Coordinator for Educational Media.

E-classrooms have many benefits. They are meant to enhance learning through multi-media technology. Students can watch a movie on a movie size screen instead of a small TV, or give an *MS-PowerPoint* presentation to the class. Changing the communication source is very easy. For example, changing from the projector to the computer screen, at the push of a button, takes about a minute.

The Media Equipment Services Department dedicates its time to maintaining these classrooms and offering any type of instruction required to use them. They regularly host hands-on, five-day training sessions in the middle of each semester and during the breaks between semesters to show faculty and staff how to best use the equipment. They also tailor sessions for a more limited presentation and audience.

In 1997, FIU only had five e-Classrooms at University Park. “We've come a long way in three years,” says Perdomo, “the electronic classrooms are a great success.” They help students learn better in a technological environment and help faculty educate their students more efficiently. “This program provides a means for facilitating the learning process.”

For more information, visit the NET Electronic Classrooms web site at <http://www.net.fiu.edu/eclass.htm>. *

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FIU Libraries

GIS Center Comes of Age

The Library's Geographic Information Systems/Remote Sensing Analysis Lab (GISRSAL), (a.k.a. the GIS Center or the GIS Lab, supports all computing and research needs for the FIU community in the areas of Geographic Information Systems (GIS), remote sensing, geo-statistical analysis and Computer-Aided Design (CAD). Further detailed information about GISRSAL activities and products is available at our web site <http://gislabs.fiu.edu/gisrsal/frames/>.

FIU's Regional Geo-spatial Data Depository:

FIU, being the only State University System (SUS) institution in Miami-Dade County, is in a unique position to provide leadership in research and training in the very populated and dynamic South Florida region. By creating a regional geo-spatial data center for South Florida, the GIS Center can elevate FIU to a more competitive position in the field of geographic information systems.

The GIS Center Research Lab has created a web-based, geo-spatial database, which contains geo-spatial data created by various agencies—U.S. Geological Survey (USGS), U.S. Census Bureau, Florida Department of Transportation, Florida Department of Environmental Protection, Florida Geographic Data Library, Miami-Dade County, Broward County, South Florida Water Management District, etc. This user-friendly, web-based interface allows query and downloading of public-use, geo-spatial data. Our immediate future goal is to expand this database to be a regional geo-spatial data clearinghouse, which will put FIU in a unique position—so far, no other SUS universities or state and county government agencies have created anything like this.

“In Fall 2000, there are eleven credited courses (five AutoCAD and six GIS/Remote Sensing classes) held in the GIS Center Teaching Lab. We have over 200 students intensively using the lab for GIS and CAD programs.”

GIS and University Outreach Program:

The GIS Center Teaching Lab is working with the University Outreach Program to offer both introductory and intermediate *ArcView* GIS data analysis courses to the general public. This is a way to offer FIU's educational resources to the community, and at the same time generate funding for GIS Center training and research activities.

GISRSAL Collaborating with USGS:

GISRSAL has collaborated with USGS, Water Resources Division, Miami Sub-district, on a mini-contract project. The GIS Center Research Lab created *ArcInfo* (GIS data analysis) coverage based on USGS's scanned images of water elevation contours for South Florida. Future projects in the area of management of geo-spatial databases for the Water Resources Division are also under discussion.

GISRSAL and FIU Institute of Government:

The GIS Center has been collaborating with the FIU Metropolitan Center on developing GIS training workshops for planners and managers. Future collaborations in the areas of community economic development, human services analysis and planning, and health research are also under discussion between these two parties.

West Broward Economic and Demographic Study:

At the request of Vice Provost Judith Blucker, the FIU Library GISRSAL staff has completed the West Broward Economic and Demographic Study, which compares 20-year population growth in Dade, Broward, and West Broward, along with the areas' demographic profiles: age distribution, educational attainment, race, and income, as well as constructions (ranging from 1970s to 1997), and employment by industry. By using GIS technology, we are able to present the study results graphically and geo-graphically.

GIS Center Supporting Activities:

In Fall 2000, there are 11 credited courses (5 AutoCAD and 6 GIS/Remote Sensing classes) held in the GIS Center Teaching Lab. We have over 200 students intensively using the lab for GIS and CAD programs. We are also accommodating Dr. Michael McClaine's graduate students for their Amazon Basin Project. More projects are being directed our way from the Southeast Environmental Research Center (SERC). Meanwhile, International Relations is establishing a new BA program in Geography; it recently hired a new faculty member with a GIS background. Architecture just hired Dr. Esra Ozdenrol, who has a GIS and remote sensing background.

More GIS classes are developed for the Spring 2001 curriculum. This means that we will be supporting more and more GIS teaching and research activities. We have extended the GIS Lab (UP, GL-274) open hours to 96 per week due to the growing demands for GIS from many different academic units such as Architecture, Biology, Civil Engineering, Computer Science, Geology, Environmental Studies, International Relations, International Hurricane Center, and SERC. ✪

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With the Microsoft/U.S. Geological Survey TerraServer database, available via the GISRSAL web site, you can effectively position a photographic “spy satellite” right over your home or office. In the center of this “zoomed-in” 1996 photo is FIU's University Park PC Building. .

Tips & FAQs

TIPS

Q. I teach an FIU class. Is there some simple way for a faculty member to look up a student's FIU E-mail address?

A. Up until just recently, there was no simple way to find a student's E-mail address except to call IRM AUS and have someone look it up for you.

Now, to complement the University's decision to provide each student with an FIU E-mail address, the IRM Support Center has added a search engine feature to its new Knowledge Base (see story on page 1) which will allow faculty and staff members to look up any student's E-mail address.

Knowledge Base *continued*

are currently entered into the Knowledge Base. On the top of that list, select an operating system. If a solution is available for the combination of title and operating system, you will see an Article ID displayed to the right. You may select that article by clicking on the link.

* To print problem solutions, simply click on the printer icon on the top right of the page. This will remove the web page header and footer to speed up the printing process. Then, in your browser, click on 'File' and then 'Print Frame.'

* The Support Center will continue to add more and more helpful information to the Knowledge Base for the benefit of our users. Should no solution come up for your keyword search, a simple E-mail form will pop up that will enable you to request the addition of such solution to the database.

We hope that you enjoy the Knowledge Base, and that you will give us feedback on it. Please send your comments to scknows@fiu.edu. *

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To use this search feature, link to the Knowledge Base web site at <http://www.fiu.edu/~irmsc/sckb/>, and click at the top of page on the link to 'Faculty/Staff Knowledge Base.' On the resultant page, click on the 'Student Email Lookup' link from the choices given in the left-hand margin. You will need to sign-in with your faculty / staff username/ password to get access to the student E-mail data base.

There, you can look up student FIU E-mail addresses by first name or by last name.

You can also do a reverse search—by submitting a particular FIU E-mail address, you will be given the corresponding student name.

If you are teaching a course, there is also a feature to give you a complete list of FIU E-mail addresses for all the students in your class.



FIU

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FAQs

Q. I've missed a few issues of *IRM NEWS*. Is there some place I can obtain this publication on-line?

A. We have printed copies of most of the old issues at IRM Publications in UP, GL-150, but the answer to your question is: Yes, if you prefer, you can always obtain the newsletter via the web. Link to our web site at <http://www.fiu.edu/orgs/irm/pubs/compnet1/newslet.html>.

There, you will find links to all the old *IRM NEWS* issues. They are published in Adobe PDF format, so to read them, you will need to have a copy of *Adobe Acrobat Reader* software installed on your PC.

FIU On-line Phone Book Improved

IRM is very pleased to announce improvements to the web-based, FIU Faculty / Staff Telephone Directory.

How many times have you used the on-line phone book to find that the person you are looking for has moved to a new location, changed their phone number, or perhaps even their name? The information there was just not up-to-date.

Accounts & User Support (AUS) has recently written update software that will allow you to amend your own entry in the on-line phone book information; the changes you make will take effect immediately after their submission. You now have the ability to keep your on-line phone book information completely current.

IRM is striving to improve support to the University Community and to move forward with the best of today's technology.

Please visit the on-line phone book at <http://www.fiu.edu/phonebook.html> and try the new update feature. *

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What's Next ..

o LOOK FOR OUR NEXT ISSUE IN MARCH, 2001

o PLEASE SUBMIT YOUR OWN FIU COMPUTING EXPERIENCES TO irmpubs@fiu.edu FOR PUBLICATION

o TIVOLI SERVICE DESK