Computerized Campus: A Perspective on the Flow of Technology

Directly or indirectly, OSU computers now affect the daily experience of all students, faculty and staff. The past, present and future of both academic and administrative computing on campus are reflected by a brief but revealing look at two major computer organizations, the Instruction and Research Computer Center (IRCC) and University Systems.

The Numerical Computation Laboratory, forerunner of the IRCC, was established in Fall quarter, 1955, to provide computing service for research and to teach the use of computers. Also that fall, the first OSU computer course was offered. "Numerical analysis was the subject," according to Dr. Roy F. Reeves, professor emeritus of mathematics, who taught the course: "How to Use the Computer to Solve Numerical Problems." "...There's never been a quarter since, that there wasn't computer courses offered," he states.

Before the IRCC (as the computation laboratory now is known) officially came into existence, Reeves and two other members of the mathematics department provided computing services and consultation on an informal, part-time basis. When the IRCC was established, with funds from the OSU Research Foundation, Reeves became its director; he held the position until he retired from the University last September.

The IRCC's "first real computer" was an IBM 650, the speed and capacity of which, Reeves says with a laugh, were "probably hardly worth mentioning." One of the IRCC's current computers, the Amdahl 470V/6, has hundreds of times the memory capacity and is thousands of times faster than the old IBM, Reeves explains.

At OSU, as elsewhere, the spread of computer technology fed the desire for computer services and training. During the IRCC's first 15 years, Reeves reports, its budget "grew 35 percent per year, compounded annually. It went from something like $40,000 to somewhere near $4 million in that period of time."

In 1967, an academic department of computer and information science was created within the College of Engineering. Until then, IRCC-affiliated members of the mathematics faculty had provided programs for both service and instruction. From its offices in the Baker Systems Engineering Building and its branches in Hagerty Hall, Hitchcock Hall and Robinson Laboratory, the IRCC today offers computer facilities and services and provides and supports education and research in and with computers.

At first, IRCC courses and services attracted mostly mathematics and engineering students. That soon changed. Growth in demand for IRCC services and instruction was "exponential," Reeves claims. Computer capacity grew to meet the demand. Within the past five years alone, equipment worth about $5 million has been purchased for use by IRCC. Reeves describes IRCC's Amdahl 470V/6 and the University Systems Amdahl 470V/7 as the two "really big machines on campus." In addition, he says, "there are hundreds of small computers, many of which (equal the speed and capacity) of that first machine we had. Hundreds. So we not only have a couple of machines, each of which is hundreds of times as fast and has hundreds of times the capacity of that original machine, but we have hundreds of machines... and that's all happened in a short 27 years."

Students using older method of keypunching entry data.
Task Force Aims for Unified Approach to University’s Computer Needs

by Kathy Baird

If University computers are to be adaptable to many tasks and compatible with one another, a unified approach to their acquisition is important.

Therefore, the 19-member Task Force on Computers and the Future of the University was established last February in order to survey the University’s present situation, and predict how future needs can best be accommodated.

That task force — composed of 10 faculty members, 5 administrators and four staff members who are technical experts on computers — was to present its recommendations to the Office of Academic Affairs after OSU/Alumni Magazine deadlines.

“Our focus is on telephone and computer transmission of information,” says Devon W. Meek, professor of chemistry and task force chairman. “We feel that those two functions have to be integrated,” he says, explaining that the work station of the future will include a computer, a telephone and a device (modem) for high-speed data transmission via phone lines.

“Most people agreed that we need a high-capacity, very rapid, integrated voice-data network system,” says Meek. The system must be able to handle electronic mail as well as the rapid transfer of large files of data from one computer to another.

To keep a telephone operable while a modem is transmitting computer data, each phone will have to be connected with six wires rather than the present two.

In order to identify other computer-related needs, task force members interviewed representatives from each college. They found that the use of computers “is very widespread but very mixed, in terms of what people do with them and also who uses them,” Meek says.

Faculty members use them for research, teaching and electronic mail. Many individuals have purchased computers to do a particular job. In addition to being used as a tool — such as for word processing or spreadsheet computations — computers are used to teach students about computers, conduct computer-based instruction, and manage classroom records.

“There’s a large mixture of computers on campus, many of which do not presently communicate with one another,” Meek notes. “The central issue that we will have to address is compatibility — what we will have to do to make one work station talk to another.”

In order to accomplish this, “We will try to recommend that the University support two or three computer standards that are compatible,” Meek says.

Also needed, Meek says, is a central storage area for electronic mail that will allow it to be retrieved at the convenience of the computer user, rather than requiring both sending and receiving computers to be on simultaneously.

Another goal is to link faculty and staff offices, as well as dormitory area terminals directly to University computers rather than using modems. This would allow quicker data transmission.

The Task Force survey showed that within five years all colleges expect to have equipped every faculty member who is interested with a computer work station. This tremendous growth in use not only will present the need for computer hardware, but also for software, user training and equipment maintenance.

User-Friendly Teaching Program Needed

“The University needs to develop a user-friendly teaching program to help the faculty and staff members learn to use the computers in a productive way,” Meek says. Some such courses already are offered through the University’s Instruction and Research Computer Center and those course offerings could be increased.

The acquisition of compatible software will be just as big a problem as hardware acquisition, Meek points (Continued on page 14)
Project to Give OSU Almost Limitless Capacity to Communicate

A five-year, $29 million telecommunications upgrading at Ohio State's Columbus campus promises to provide almost limitless capacity for voice, data and video transmissions for at least the next decade.

Perhaps the most glamorous aspect of the project is the installation of high-capacity fiber optics cable capable of connecting every building on campus to a main switch at the Eighth Avenue Ohio Bell building, which the University will purchase from the local telephone company.

A single half-inch fiber optics cable, which contains 144 individual glass fibers, currently has the same capacity as 27 bulky three-inch copper cables. Since the fibers carry light signals, not electricity, the only limit to their capacity is the ability of a transmitter to produce rapid pulses of light; as transmission equipment improves, the capacity of the fibers will increase.

Another phase of the project, a "uniform wiring plan," includes installing state-of-the-art copper wiring capable of handling high-speed data transmission, as well as simultaneous transmission of voice and data. The new wiring will connect virtually every office and dormitory room on campus to the main fiber optics network.

Dino Pezzutti, director of telephone services, likened the fiber optics cable to a super-highway and the wiring leading away from it to smaller access roads; the first is capable of handling heavy loads and large volumes of fast-moving traffic, while the second directs small amounts of traffic to specific destinations.

The uniform wiring plan also includes connecting a total of about 44,000 telephone outlets all over campus, freeing the existing telephone wiring system — which also is being purchased from Ohio Bell — for other as-yet-undetermined uses, such as smoke detection or energy control systems.

The project also will include the purchase of a new switch to handle anticipated transmission needs and the replacement, beginning January 1, of every telephone on campus.

The new system should stabilize expenses while upgrading services for faculty, staff and students, according to J. Carroll Notestine, assistant vice president for University Systems.

"It’s the only feasible technology that promises not to be out-of-date in three years," Notestine said.

Among the advantages of the new system will be a tremendous expansion in campus-wide video transmission ability, Notestine said. A lecture or demonstration given almost anywhere on campus, for example, could be piped into any campus building for showing. At present, only a handful of Columbus campus facilities possess such capabilities.

Another major advantage of the new system is that it will provide easier access to information through better computer-to-computer communication, Notestine said.

Most people who now use computer workstations at Ohio State still have to communicate with other offices and departments through a courier, personal visits or campus mail. An integrated computer system will allow rapid communication within departments or colleges through electronic mail.

In addition to the other features, the project will allow dormitory residents to make long-distance telephone calls for the first time. It also eventually will permit them to use personal computers to tie into other computer systems.

Vista United, which Pezzutti said has "more experience with fiber than anyone in the world" by virtue of its involvement with the fiber optics at Disney World's Epcot Center, is acting as a consultant in the project.
SONNET to connect campus 'neighborhoods'

For the past year, a search has been underway to identify a strategy for building a campuswide computer-to-computer network. After many months of investigation, a feasible solution has been found.

The solution is the Department of Defense (DOD) communications standard, usually referred to as TCP/IP. The TCP/IP will provide a route to exchange messages, data and information between the many medium-to-large computers on campus.

At Ohio State, the new computer network has been named SONNET, an acronym for System Of Neighboring Networks. The name was the idea of Patricia Ratz, a senior computer specialist at Instruction and Research Computer Center.

Components of the DOD standard include: TCP — Transmission Control Protocol; IP — Internet Protocol; SMTP — Simple Mail Transfer Protocol; FTP — File Transfer Protocol; and Telnet — Remote log-in capability. The combined standards are known as TCP/IP.

The path to deciding on the TCP/IP standard was not an easy one. An informal network study group, led by Robert S. Dixon, deputy director for IRCC, met more than 50 times in the last year. The group included people from IRCC, University Systems, Computer Science, Physics, Administrative Science, Engineering and other departments.

"A lot of people have invested a tremendous amount of time in identifying a solution to a very complex problem," Dixon says.

"The simplest solution seemed to be to build gateways, or translation systems, between dissimilar systems," Dixon says. "You could build a gateway between the IBM systems and the DEC systems and one between the DEC systems and the HP systems — a very elegant solution."

The network group found that such an approach had one major disadvantage — it simply did not exist.

"We talked to many vendors who had partial solutions and promises of total solutions. The more we looked at the manuals and asked questions, the more we decided that the gateway approach simply wasn't going to be feasible," Dixon says.

After several months, the group began to identify a standard communications code or protocol that many different systems could use.

"Rather than get DEC to talk directly to IBM equipment, we wanted to search for a scheme where DEC would talk to "X," IBM would talk to "X," and HP would talk to "X," says Dixon.

The problem was to identify "X."

The goal was to find a networking standard that was not dependent on vendors and to implement it on all computers in the network. That approach would ensure that every computer would have the same networking capability and would be compatible with every other computer on the network.

The DOD standard quickly emerged as the one available on most computer systems. The hardware and software needed to implement the network is available off the shelf from a large and growing number of vendors.

It is proven successful. Users include the Jet Propulsion Laboratory, Carnegie-Mellon University and the University of California at Berkeley.

Another advantage of TCP/IP for Ohio State is that the ARPAnet node soon to be installed here uses the DOD standards. Plus, the proposed supercomputer now under discussion would very likely also use the DOD standards.

Continued on page 4.
SONNET: A neighborly connection

Continued from page 1.

IRCC will begin placing its mainframes on the SONNET network in the next few months.

There is no requirement that all computers must become part of SONNET. Also, the plan does not preclude continued use of any existing networking facilities, nor installation of any new facilities which by-pass the proposed network as needed for specific cases. SONNET need not be installed all at once and can proceed on an as-needed basis. However, the value to each participant increases as more join.

The network does not depend on any specific physical medium for interconnecting the computers. Twisted-pair cables, coaxial cables and fiber optic cables can all be used. All probably will be used in different portions of SONNET.

Presentations describing the network have been made to the Advisory Committee on Academic Computing, the College of Engineering Computer Planning Committee, the College of Medicine Research Computer Network Committee, and the Department of Computer and Information Science.

While the DOD standard is the most promising today, it will eventually be replaced by the International Standards Organization (ISO).

"The ISO standard will probably be adopted by all computer vendors," Dixon explains. It will probably be several years, however, until the ISO standard is final and equipment for using it becomes widely available.

The organizations currently using TCP/IP (including the Department of Defense) have declared their intention to "migrate" to the ISO standard when it ultimately becomes possible to do so.

The University eventually must change also, but fortunately this probably will be neither difficult nor expensive, according to Dixon.

Dixon found that the willingness of faculty, departments and computer centers to participate in the group has been a key to success.

"There was a good combination of technical expertise, an understanding of needs, and a strong desire to find a workable solution," he says.

Persons interested in learning more about SONNET can contact Dixon at IRCC, 292-4843.
"Structurally, the most important thing about a network is that each individual is at the center."
J. Naisbitt, Megatrends

Ohio State connections

A system to connect computers at the Columbus campus into a University-wide network is being developed.

As shown in black on the map at right, a fiber-optics cable extends from buildings to a geographic hub. Links from hubs to local connections are shown in red. The "backbone" for the SONNET network is shown in pink. The drawing represents many, but not all, of the connections on the Columbus campus.

The major hubs are:
- Telecommunications Network Center
- Baker Systems Engineering
- Kottman Hall
- Fawcett Center
- Bevis Hall
- Kinnear Road Center.

A fiber-optics path from one building to another must pass through one or more hubs. For instance, an electronic message sent over fiber optics from Hitchcock Hall to Robinson Lab must go through Baker Systems Engineering.

In January, the first stage of the network SONNET will link the Kinnear Road Center, Baker Systems Engineering and Hitchcock Hall. Departments then linked in a SONNET then will include the Instruction and Research Computer Center, the College of Computer and Information Science and the College of Engineering.
Some common standards

The following are definitions of some data communications standards:

- **X.25** Based on assembling and transmitting data in packets (packet-switching). The concept of packets is similar to that of envelopes that carry letters through the post office. Packet switching is most often used for transmitting data nationally or internationally. It can be used in combination with "higher level" standards developed by ISO.

- **X.400** A standard for constructing and addressing electronic messages across networks. Similar to the name, street address, state and zip code on an envelope, the X.400 lists information in a given order.

- **IEEE 802.3** Commonly referred to as "ethernet." Messages are broadcast randomly over the network. If two messages try to reach their destinations at the same time on the same path, a "collision" may occur. One message will proceed while the other is automatically re-sent. Many such networks are used at Ohio State.

- **TCP/IP** A "higher-level" standard for mail, file transfer and remote log-in. TCP/IP is the standard for the University's SONNET network.

- **IEEE 802.5** A standard commonly referred to as the "token ring." An electronic token is passed around the network; whoever "grabs" the token has the right-of-way for sending a message.

- **SNA IBM's System Network Architecture**. A statement of market direction for IBM and multi-mainframe environments.
Tying it together

Networks are constructed with three types of wiring or cabling:

- **Twisted-pair copper wire.** Within buildings, the typical wiring is twisted-pairs of copper wire. It also is the basis of most communication between buildings.
- **Fiber-optics cable.** Fiber-optics cable enables extremely high transmission speeds over extremely thin cable. Coding is based on variations in light intensity rather than electrical impulses. Ohio State will use its fiber-optics cabling primarily to send video and high speed data between buildings.
- **Coaxial cable.** Coaxial cable often is used for higher-speed data and video communications. Most coaxial cable is installed to meet the special needs of some computer equipment or video transmissions, usually within a building. It transmits faster than twisted-pairs cabling but slower than fiber optics.

Chatting with the neighbors

In computing and data communications, a standard enables one computer to "talk" to another computer. A standard might have one of three meanings:

- **A defacto or informal follow-the-leader model.** For example, in the microcomputer industry, competitors of the IBM Corp. have produced models that are compatible with the IBM PC. The usually less-expensive compatible models use the software packages developed for the IBM machine.
- **A formally agreed-upon approach or method adopted by an industry, professional organization, campus or department.**
- **An industrywide, agreed-upon rule.** For data communications, the International Standards Organization (ISO) will eventually publish comprehensive, "higher level," standards called the Open Systems Interconnect (OSI) model. They will be adopted by most companies, called vendors, that sell computers and software. In the interim, standards such as X.25 and IEEE 802.3 are methods that are the components of a more comprehensive set of standards.

SONNET network: No break

A campuswide computer network soon will link computers or local networks within and beyond the University. The network, called SONNET (System of Neighboring NETworks), is under construction at the Columbus campus.

The system will have central locations, called hubs (see map above), connected to departments or offices. The hardware necessary to interconnect the buildings on campus will be concentrated at the hubs.

SONNET is very reliable — an important feature, says Robert S. Dixor, deputy director of the Instruction and Research Computer Center.

If parts of the network fail, the system still will survive, he says. For instance, if construction workers should accidentally cut off a power line, SONNET will automatically redirect the electronic communication pathway away from the trouble spot.

Art Krumsee, assistant director of the Office of Continuing Education, says that SONNET will unify the office's two mi-
Not only an inside job

crocomputer networks. One network is in Sullivant Hall and the other is in Mount Hall. Each location has a cluster of microcomputers connected by a local area network, called a LAN.

"Staff members won't have to learn a new computer system, because SONNET will join the pre-existing electronic networks," says Krumsee.

SONNET connections will be available through subscriptions to departments and offices.

IRCC will buy, install and maintain all the electronic equipment for SONNET's backbone hubs and connections. Departments will be required only to pay for connections to the backbone, and will therefore be heavily subsidized.

"This solution is less costly and more efficient for the University in the long run," says Dixon. "Otherwise many colleges could develop their own networks without concern for ever communicating with each other or with the world outside Ohio State."

For more information on SONNET, call Dixon at 292-4843.
University networks

There are several major computer-related networks on the Columbus campus that work in concert to provide campuswide communications.

They are:

- **UNITS (University Network Integrated Telecommunications System)**
  Includes:
  - Inter-building fiber optics cable;
  - Intra-building and inter-building twisted-copper wire;
  - A Northern Telecom SL-100 voice/data switch upon which the University telephone system is based; and
  - Thousands of information outlets in offices, classrooms, laboratories and residence halls to enable connection to a variety of information services.

- **SONNET (System Of Neighboring Networks)**
  Used for connecting mainframes, minicomputers and microcomputers. Based on the TCP/IP standard. Most of SONNET will run on the UNITS fiber cabling.

- **MICOM, XYPLEX, ROLM and SL-100 switches**
  Data switches that enable a microcomputer or terminal to connect to different computers (usually minicomputers or mainframe computers). Used by the Instruction and Research Computer Center; the colleges of Engineering, Business and Agriculture; and University Systems.

- **University Systems Bisynchronous Network; University Hospitals Bisynchronous Network**
  Based on an IBM terminal-to-mainframe technology. Used primarily in heavy production interactive environments such as the Office of Admissions. Traditionally based on coaxial cable, but future installations also may use twisted-copper wire and fiber optics.

- **BITNET**
  An international university-based research network, of which Ohio State is a member. There are 240 members with 800 nodes (or computers) from more than 20 countries. The Instruction and Research Computer Center administers this network for the Columbus campus.

- **ARPANET**
  The Department of Defense's international network, heavily used for research communication among universities, government agencies and industrial firms. There are about 2,500 computers on this network. Ohio State is scheduled to have an ARPANET connection for the Columbus campus in place by the end of 1986, to be administered by the Instruction and Research Computer Center.
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Fiber optics replacing copper lines

By Lucy Clithorne
Lantern staff writer

Ohio State is taking advantage today of the telecommunications technology of the future.

The old copper telephone lines have been augmented by a network of fiber optics cables. These are tiny glass strands which can carry computer data, sound or two-way video signals, said David Bricker, manager of the engineering and consultation division of the Center for Teaching Excellence.

The center has put together “crash carts,” four-foot-high rolling carts equipped with a camera, television, and a sound system with microphones and speakers. Bricker said he envisions these carts being used for two-way television by faculty who want to link remote classes, or to divide a large class.

The center will set those up for any faculty member who wants to use them, he said.

The two-way video capability was demonstrated last fall by two links between Ohio and Drake Universities during Michigan week.

Michael Fidler, Associate Director for Operations at the Instruction and Research Computer Center, said they are using the telecommunications network to link computers around campus.

He expects the System of Neighboring Networks to connect the university’s major computer systems and “local area networks,” or computers connected within a limited area, by next summer. This will enable the departments to share software programs.

“This is part of the university’s effort to get control over the whole problem of communications from different departments,” Fidler said. Departments will be able to communicate using electronic mail once the wiring is completed.

“Every office and classroom on campus will have the same minimum set of wiring, equipped for two-way video or telephone transmission.”
SONNET is link to future

It took a special mind to create the beauty of a Shakespearean poem. In today's issue of onCampus, discover a different kind of SONNET created by special minds at Ohio State in the last three years.

SONNET, which has redefined the meaning of computerized tasks, is a technological work of art, one based on fiber optics and linked computers.

See the mid-section of the paper for an overview of networking.
Networking...Discover the possibilities

By Robert S. Glass
Acting Director of the Instruction and Research Computer Center

Quickly for the last three years, the Instruction and Research Computer Center, with assistance from other departments at Ohio State, has led the grassroots effort for new computer technology. These advances permitted innumerable research and educational needs, supplement phone and mail communications, help manage administrative data and even permit a warm handshake in the social milieu, it's called networking.

The program opened with a SONNET—the campus network that serves as the University's link to national and international networks.

SONNET enables users to connect computers on campuses to each other but also to some in other networks worldwide.

SONNET enables users to communicate with colleagues down the hall or on the other side of the world through electronic mail messages.

SONNET transmits educational, research and business-related documents between universities and supercomputers.

SONNET allows people connected to computers in places far removed from their workplace to access mountains of information in hundreds of data bases.

SONNET might even enrich the personal interactions of people who use it. New associations and friendships can develop through network forum such as bulletin boards and conferences designed for "conversing" and sharing information, experiences and expertise on topics of mutual concern.

And SONNET is easy to work with. The key to measuring effectiveness on the network is in how well it solves complex communication problems. Once users understand this, they'll find networking functions (electronic mail, file transfer and remote login) are accomplished with simple commands.

IRCC stands ready to help faculty, staff and students become familiar with SONNET and networking. We've prepared installing assistance and new documentation to get people started. And our consultants are on hand to answer during usual business hours.

SONNET: It's not just a little poem anymore.
SONNET can extend computing horizons

I f the SONNET acronym sounds
odd, it’s the idea of using networking as a computer organization to an extent as alien as writing research in physics courses?

Then you’re probably asking yourself some of the following questions.

- Your question is not covered, call Robert Dow at the SONNET Research Computer Center, 250-8000. If there’s something you still want to know, or if you think the computer is already connected to SONNET, send him E-mail at Dow@Rice.edu.

Q: What is SONNET?
A: It’s a name of a network, the 16-site University of Houston Network – SONNET. It’s a computer network designed to link all the computer systems in the University of Houston system so that each other in a uniform way. It’s standardized so that if at any time the intellectual characteristics – in addition to high-speed transaction capability and network administrative manageability provided – SONNET will provide facilities in the net beyond the University, such as NREN and ARPANET, bringing computer users into touch with academic, governmental, and commercial computer users nationally and internationally.

Q: What does it do?
A: SONNET can enhance and streamline communications for faculty, staff, and students in a variety of ways that appear to the user as seamless methods of the U.S. postal service and telephone.

In service includes: (1) campus real-time communication, (2) remote access to campus, (3) office automation of computer usage, and (4) network administrative management.

Campus vision evolves into high-tech reality

In three and one-half years, network- ing at the University of Houston has grown from an experimental basis to a reality thrust among the major universities of the nation.

In early 1964, then President Daniel Johnson established the Task Force on Computers and the Future of the University. It charged 15 members to recommend what would become the University’s electronic campus within the decade.

After a year of study, the task force made several recommendations, including the establishment of a computer center that would be the focal point of all the computer-related activities on campus. They recommended that it be the single most important unit in the university to make the campus a computing center.

Two people deeply involved with the implementation of these recommendations were Robert S. Drexler, now acting director of the Office of Research Computing Program, and Martin B. Solomon, the former director of the Office of Research Computing Program.

Drexler notes that the task force’s recommendations were: (1) establishment of an electronic network connected to a network of computer users and (2) development of computer software and hardware.

In 1965, the center began its permanent location. Drexler noted that the center was a unique facility that could perform the functions of a computer center.

A growing number of students and faculty members began using the computer, and the center began to expand.

In 1969, the center began to expand its services to include computer networking. The growth of the University’s network has been rapid, and the center has been successful in meeting the needs of the university community.

The center’s success has been due to the dedication and hard work of its staff and to the support of the university administration.

The center is now a model for other universities around the world, and it continues to grow and evolve as the needs of the university community change.
Networking

Wayne Redenbarger

American University of Beirut Language and Literature and University College of the Holy Land, Beirut, Lebanon

Wayne Redenbarger signs on to his E-Mail system as an undergraduate student, but he has a lot of experience with computers. He says that he uses his E-Mail system to keep in touch with friends and family. He also uses it to send and receive messages about his classes and research.

Redenbarger is a computer science major and says that he likes using E-Mail because it is more efficient than traditional mail. He says that he can send and receive messages in minutes, whereas traditional mail can take days or even weeks.

The Joys of E-Mail

E-Mail is a powerful tool for communication. It allows people to send and receive messages instantly, regardless of where they are in the world. E-Mail is used for everything from personal messages to business communications.

Many ways exist to talk, listen to computers

Bulletin boards, newspapers, mail, and other forms of communication can all be used to talk to computers. The bulletin board system (BBS) is a popular way for people to communicate with each other and with computers. It is a text-based system that allows people to send messages to each other and to read messages that others have sent. The messages can be anything from news updates to personal messages.

Wayne Redenbarger

Wayne Redenbarger is a computer science major at American University of Beirut. He says that he uses E-Mail to keep in touch with friends and family. He also uses it to send and receive messages about his classes and research. He says that he likes using E-Mail because it is more efficient than traditional mail. He says that he can send and receive messages in minutes, whereas traditional mail can take days or even weeks.

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Universities to ‘merge’ via CICNet

By January 1989, Ohio State will have connected to one of the Big Ten universities via the CICNet network. CICNet is a cooperative venture of the Committee on Institutional Cooperation (CIC), a regional academic consortium of Big Ten universities and the University of Chicago. In its 23-year history, CIC has focused cooperation on small and large problems in both academic and administrative areas.

"CICNet initially will connect 10 CIC universities; other institutions will join the network soon," says Michael L. Filler, associate director of networking and operations for the Universities Research and Education Computer Center. Filler also is a member of the CICNet Technical Advisory Committee.

CICNet also will provide network access to Argonne National Laboratory and Fermi National Accelerator Laboratory. Within a year, Filler says, the network will expand. Among the universities to be connected are Ohio University in Athens, Ohio; Ohio Wesleyan University; the Ohio State University; and the University of Chicago.

Within a year, Filler says, CICNet will be available to all Ohio State students, faculty, and staff. In the future, other research and educational organizations will be able to connect to the network via the University of Chicago.

Sally V. Rudmann
Program Director of the Division of Medical Technology
Ohio State University, Columbus, Ohio

Sally Rudmann has been a part of E-Mail for over 10 years. She has worked in the health care field for over 20 years and has been involved with E-Mail for 15 years. Rudmann has coordinated the development of the E-Mail system at Ohio State University.

Lewis Greenwald
American Professor of Zoology
University of California, Berkeley

A new technology has emerged in the past 10 years. It is called E-Mail. E-Mail is a system of communication that allows people to send messages electronically. It is a way of communicating that is fast and efficient. It is also a way of communicating that is less expensive than traditional methods of communication.

I like the immediacy of E-Mail.

Ohio State is progressive and good about helping us get familiar with new technologies.
Networking

Lauren J. Krivo
Assistant Professor of Sociology
TSIS@stern.nyu.edu

I am an E-mail fan. I use E-mail to communicate with my colleagues and students. E-mail is a great way to keep in touch with the outside world. E-mail is a great way to stay current with the latest developments in my field.

Mary Borne
Administrative Assistant, Academic Affairs
TSIS@stern.nyu.edu

She is an E-mail user who uses E-mail to keep up with the latest developments in her field. She finds E-mail to be a great way to stay current with the latest developments in her field. She finds E-mail to be a great way to stay current with the latest developments in her field.

The Joys of E-Mail

Everyone loves E-Mail now. It really changes your life.

I've got my computer set up to automatically log on to check my E-Mail.
Interest groups explore specialized subjects

There are many publicly accessible DISC-30 online services that maintain scattered bulletin boards on artificial intelligence topics, plus other specialized private groups. Some bulletin boards include:
- Canine, Dinosaurs, Flowers, Hard, Hassan, Euthys, Lines, Mars, Moons, Mus-
- nav, Navnet, Obit, Patent, Projects, Solc, St. Paul (STP), Experts, Supercomputers,
  Symons, Ten, Texas, Video, Visiware, and Zzuds.

The ARPANET, a network accessible through BACKNET, carries more than 200 mailing lists and groups. Some of the lists or groups and their current activities:
- ADVISE: forum for discussion concerning the University of California system
- AG-EXPL: Expert Systems, computer science
- AIDS and AIDs
- AIDS and Aids
- AMIGA-RELAY: general or relay for Amiga user
- AVATION: conference, software, information for pilots
- BICYCLES: mailing, racing, commuting, equipment or parts
- CONSID: forum for writing professionals in the computer field and teachers in computer-based classes
- CSS: computer system sciences
- DISC-30: desk publishing technology
- DISC-30: discussion and more on the national computer language called Eisen
- EXPATRIATE: discussion and more on the national computer language called Eisen
- HYPERBRAHMA: using the Apple Macintosh Hyperbrahma
- IBM-MIT: IBM mainframe and networking
- ICSNET: InterUniversity Consortium for Educational Computing
- INFO-CC: C-description of language
- INFO-GRA: graphics and software
- INFO-IBM/RISC: technical discussion of
- INFO-IBM: technical discussion of
- INFO-LINK: language description
- INFO-LASER: laser printer hardware, software, and systems
- INFO-LIB: Latin-American studies and issues
- INFO-MEDICAL: medical data processing
- INFO-NETWORK: electronic bulletin board
- INFO-POLITICAL: political discussion
- INFO-PC: personal computer
- INFO-POPUL: personal computer
- INFO-RAILROAD: transportation issues
- INFO-SECURITY: electronic, physical and computerized security
- INFO-VLRLS: visual programming languages
- INFO-X-WINDOW: system software

Interest groups offer more than 250 newsgroups and discussion that cover topics in science, technology, literature, and social issues. Some of the newsgroups and discussion include:
- A computer bulletin board
- A society discussion board
- A discussion board
- A discussion board
- A discussion board
- A discussion board
- A discussion board
- A discussion board
- A discussion board
- A discussion board
- A discussion board

The joys of E-mail

"I like to use E-mail to contact those who are hard to get to by mail or phone," he says.

As chairman of the Department of Management Students, Schilling has for the last three years served on the faculty's committee for handling administrative details such as arranging for meetings. He strongly believes that for those who are computer users, E-mail greatly enhances communication.

In addition to sending electronic mail through the College of Business's

PRIME computer, he has used the DISC-30 network to send files from a computer at the University of Santa Cruz and contact an associate in Copenhagen. The latter he describes as "anonymity on the Internet."
Networking

THE OHIO STATE UNIVERSITY'S SONNET NETWORK CONNECTED TO NATIONAL AND INTERNATIONAL NETWORKS, CAMPUS MAINFRAME COMPUTERS, LOCAL AREA NETWORKS, AND MICROCOMPUTERS

ARPA NET

NSF NET

BIT NET

LAN SERVER

SONNET NETWORK

Mainframe

Microcomputer

Clear words in documents guide users

Documents from the Instructional and Research Computer Center explain SONNET and network functions in non-technical language. The tutorials present simple, easy-to-grasp instructions accompanied by helpful examples of each function. They are available free from ICCC's Reference Desk (Baker Library, Room 328) and Information Center (USM Baker Library, Room 302). If students request it, the tutorial can be printed. For more information, contact the Printed Media Section at ICCC's Information Center.

Introductory Guides

- Getting Started with SONNET: Provides a brief overview of SONNET, how it relates to other networks, and what role Ohio State computer users play. It also introduces the basic SONNET operations. (Printed #496)

- Overview of Electronic Mail, Remote Login and File Transfer on SONNET: Discusses the underlying mechanisms that support the SONNET network and how to access the principal services the network provides to Ohio State users. (Printed #496)

- Policy for SONNET Subdomains at The Ohio State University: Explains a collaborative and how to use a subdomain. (Printed #496)

Tutorials

- Easy Guide to Networking in SONNET from CMS: (Printed #496)

- Easy Guide to Networking in SONNET from the MSYSYSTEM: (Printed #496)

- Easy Guide to Networking in SONNET from the C3D: (Printed #496)

- The SONNET Cookbook for College of Engineering Faculty: Provides examples of networking via SONNET from a YAS system. (Available from the Designated Faculty)

References

- ICCC SONNET User's Guide for CMS: Provides detailed information on FTP (the transfer) and TELNET (console terminal) protocols, plus the various commands for each when working from a CMS host system. (ICCC's CMS 300) in SONNET. (Printed #496)

- ICCC SONNET User's Guide for YAS: Provides detailed information on FTP (the transfer) and TELNET (console terminal) protocols, plus the various commands for each when working from an MPS (Massachusetts Institute of Technology's Samba) to SONNET. (Printed #496)

Short courses explain communication

Among the many computer courses offered each quarter by the Instructional and Research Computer Center are several on networking and E-Mail applications. The sessions address different levels and needs. More information is available in the Computing Education & Training sessions available from ICCC's Information Center (USM Baker Library).
LAN gives computers central storage point

Sharing resources such as printers, disk drives, and software is one good reason to consider a local area network (LAN) to connect an organization's computers. Multiple communications links to other systems and networks create another, vital purpose for a LAN.

At Ohio State, a LAN can provide a link to the SONNET campus network. For some people at Ohio State, communicating over networks with users at other universities, companies, and even in other countries already plays an important part in their jobs and research.

Robert Dixon, acting director of the Instruction and Research Computer Center, describes a LAN as "a way of connecting a number of computers that are located relatively close to one another."

"Relatively close" is an arbitrary distance dependent on the type of networks and computers being connected; usually, but not necessarily, everything on the network is located within the same building.

A computer can be connected to SONNET without the aid of a LAN; however, very few microcomputer users can justify the cost of installing a single connection from SONNET to their stand-alone computer. And only a few can afford it expensive but, according to Dixon, "it is a mismatch of technology, one that we discourage."

SONNET's many benefits cannot be fully realized by a microcomputer directly connected to this network, he explains. For example, separate microcomputer users can receive information (e.g., electronic mail) only when their microcomputers are turned on; otherwise, there is no receiving destination and anything sent to them piles up somewhere.

The solution is to connect the microcomputers to a server — another computer that connects to SONNET. The server provides a destination for all communications to everything on the LAN. In this way, all SONNET and LAN communications can be sent to the server, which keeps it until the appropriate user is logged on to the network, or until the appropriate network system or printer is available.

Using a LAN to connect several computer systems to SONNET reduces the overall cost per computer, because for all of them only one connection need be installed between the server and SONNET. In some cases there may be several servers connected to one server that is linked to SONNET.

A server can provide many other file services, including storing and maintaining database software and any other information shared by the computer users on the LAN. For example, a group of writers who share documents they create can put the information into a data base and store it on a server. All the writers can access the data whenever they want. Updates to the data need only be made in one place, and everyone sees the same information.

In addition to communications and file server capabilities, a server enables LAN users to access various printers. To use the writing department example again, there may be a microcomputer and printer for each writer but only one laser printer for the entire group. An easy, cost-efficient solution is to use a LAN to connect all microcomputers to a server, which is connected to the laser printer.

Even with all these advantages, a few drawbacks to LANs must be considered.

A LAN is an intricate network, the initial implementation of which is expensive, although as the networking industry expands, companies are becoming more competitive and prices are dropping. In addition to start-up costs, maintenance costs must be taken into account. A LAN requires a knowledgeable computer person to manage it.

One organizations decide that a LAN is the appropriate solution for communications needs, the next step is to choose one — and IRCC recommends that SONNET be considered when making this choice. Offices may not need SONNET now, but the chances are great that they will in the future. It is cheaper and easier to choose and design a LAN that is compatible with SONNET than to attempt to make it so later on.\]

The University recommends three types of LANs: BANYAN (which IRCC has used successfully with SONNET, NOVELL and 3-COM.

"The University does not recommend purchasing any of the cheaper networks available, because these are not always reliable or compatible with many University computer resources." Dixon says.

For further information and assistance in choosing a LAN, call Dixon or Alan Alberts at IRCC (292-4843).

Buildings connect to SONNET

Every month more buildings are connected to SONNET. As of this month, these are the buildings that are on the network:

- Agricultural Administration Building
- Baker Systems Engineering, Bevis Hall
- Biological Science, Bricker Hall
- Brown Hall
- Caldwell Laboratory, Civil and Aeronautical Engineering, Calsdon Hall
- Cline Hall, Dean Hall
- Rhodes Hall
- Dodd Hall, Dreeze Laboratories
- ElectroScience Laboratory, Evans Laboratory
- Forestry Laboratories, Geos Laboratory, George Hall
- Health Sciences Library, Hitchcock Hall
- Kinnear Rand Center, KoffLab Laboratories, Kettman Hall, MacQuigg Laboratory, McKenna Chemical Laboratory, Mount Hall, New Chemistry Building, Ohio Union, Parks Hall, Robinson Laboratory, Sassen Hall, Smith Laboratories, Upham Hall, Veterinary Hospital, Watts Hall, Welding Engineering, 1212 Kinnear Rand, and 1224 Kinnear Rand.

Contributors

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Special contributions by Fred Blake, Cliff Collins, Bryan Dunder, Mike Fedler, Doug Kall, Karl Kistle, Lynda Mackey, Terry Martin, Martin Solomon, Bob Sutkerfield, Jim Wagner and Joe Warren.

The main advantage to E-Mail is avoiding telephone tag.

Howard L. Gauthier Jr.
Associate Provost in Academic Affairs
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When Howard Gauthier arrived at the Office of Academic Affairs, one of his initiatives was to upgrade computer operations in the office. Now, just a year and a half later, Academic Affairs has its computers connected to SONNET through its own local area network.

The Joys of E-MAIL

work and staff members can communicate among themselves and with other campus offices through E-Mail.

- The vice provost uses E-Mail to communicate with college and dean's offices on the Columbus campus. He also keeps in touch electronically with colleagues in professional and administrative research activities concerned with assessment, accreditation and program reviews.

A professor of geography, Gauthier is writing a manuscript with an associate in Australia. The endeavor normally would involve a mountain of paperwork and plenty of turn-around time, but happily, he has found that E-Mail exchanges significantly reduced both.
New process allows mail to be sent electronically

By Melissa L. Randles
Lantern staff writer

It's faster than the postal service, cheaper than long distance and more convenient than answering machines.

Electronic mail, or e-mail, is the communications media of the future and, since last week, is available to OSU students, said Bill Miller, director of marketing for the Instruction and Research Computer Center.

E-mail uses a mainframe computer to link messages from one computer to another. Messages stay in the mainframe until they are read.

Few other universities offer students access to electronic mail, Miller said.

"We're working on a library model," he said. "With proper identification any faculty, staff or student can check out a book. We want the same access for e-mail.

"In addition, students with computers in their home or office can use a program that will allow dial-in access through a modem," Miller said.

A modem links a computer to telephone lines so it can communicate with other computers.

The modem communications program is available through the IRCC customer service office in 508 Baker Systems.

"This is a great opportunity for students to share information with other students," Miller said. "Group projects would be much easier to manage, since you don't have to be there to get the message.

"You could send files, too," said Elaine Getz, PC lab manager at Haggerty Hall. "That way, instead of having to set up a meeting place and exchange information for a group project, you could just send it through e-mail.

"As a staff member and student, Getz has had an e-mail account for more than a year.

"It's a great way to communicate with people that I work with, since we're in the office at different times," she said. "I think it's a great idea for students. If they can't get a hold of a professor by phone, they can leave an e-mail message because professors read their mail, just like a regular mailbox."

Messages can be accessed at any time. Once they are read, they can be filed, deleted, or responded to, according to IRCC handouts.

In order to send a message the sender must know the address of the e-mail account. Two new services have been introduced at OSU that will allow easy access to the address. The services are called Whois and Puxa-e-mail.

Instructions for these services are available when an account is opened, said Miller.

Messages can also be sent across the country and internationally through services such as Internet and Bitnet, and there is no additional charge, Miller said.

The only requirement is knowing the recipient's address.

Once a person sends a message to an address within the Bitnet or Internet system, the message is relayed to the final destination within minutes.

Eric Karoalk, a doctoral student in history, is looking forward to communicating with family members in Germany and Poland.

"My cousin is in grad school at the University of Warsaw," he said. "I know she has access to Bitnet, and I will definitely get an account so I can send her messages," he said. "The really cool thing is the ability to share information with other people through the bulletin boards."

"There are 600 national bulletin boards," Miller said. "You can sign up to have the messages sent to your account, or you can subscribe to individual boards so that if you always want to look at, say, five of them, they will automatically pop up everytime you log in. And you can change them at any time.

"I think this will be a great opportunity for students who might want to send information to a local bulletin board," he said. "For example, they might have a bicycle for sale. Or if they're doing research, there are international boards for marketing and they could request information."

There are some restrictions for usage, Miller said. For example, an account can not be used for commercial purposes. To request an account, students should go to 508 Baker Systems with their student I.D. Some paper work is required, and the account should be ready within a day or two. Handouts on how to use e-mail are available, and IRCC offers free sessions on using e-mail every quarter.

In addition, services such as CompuServe, a national database service, are available for a fee after an account has been established. Students interested in getting the free communications program for use with their personal computer should bring a blank disk to exchange for the program disk. Handouts to use the program are available on request.
Electronic mail available to students

By Kristi Mohrfield
Lantern staff writer

With the introduction of a new, larger computer system, students are now able to get an electronic mail account where they will be able to send and receive messages across the country and have access to many other functions as well.

The mail access global news UNIX system is an informational system where several people will be able to connect to a computer at once. It is a multi-user, multi-tasking system, said Bill Miller, leader of marketing and customer services.

The computer is made by Digital Equipment Corporation where students and faculty will each be given a full account, giving them access to send messages anywhere around the country.

Robert Dixon, IRCC (Instructional Research Computer Center) acting director, said the DECSystem will serve as the basis for a campus-wide information system.

“This will mark the beginning of a new era at IRCC,” Dixon said. “The DECSystem is extremely powerful, flexible, versatile, easy to use and administer, and yet incredibly small.”

The system is intended for computing electronic mail, bulletin boards and information systems, Miller said.

The mail manager is an electronic mail system available to provide facilities for composing and editing messages, and sending and receiving messages to individuals and groups.

Students will be able to keep in touch with their advisors, professors and friends. They will be able to do group projects by sending the latest news they have about the project to others in their group.

“What a neat way to keep in touch,” Miller said. After sending a message, the person receiving it does not have to respond to it right away, said Sally Hritz, newsletter editor. She said it is like getting mail when you are ready to answer the message, it will still be in the computer to respond to any time.

One of the best parts of all is there is no charge for the services, Miller said.

Before last spring, the e-mail accounts were only available to graduates and professors. Now they are open to all students.

“Ohio State is one of the first Big-Ten schools to make it available to all students,” Miller said.

Another program in the system is the Usenet Series, which is also called the electronic bulletin boards.

There is a listing of over 750 bulletin boards with a variety of different subjects of all interests across the country, Hritz said. If someone sees a topic of interest on the bulletin board, then he or she can find out more about the topic by inserting the correct code.

Hritz said Ohio State’s system can get the same bulletin boards as all of the other systems in the world.

There is no way for the bulletin boards to be censored, but if there is a topic that is not being interacted with very much, then Ohio State can take it off of their system, Miller said.

Another great facility on the DECSystem is the access of various news services and job searches.

Students and faculty are able to connect into the LCS library system and get any information they want. It is possible to check out a book, find research on a topic or get information from the encyclopedia. For those looking for a job, there is also a listing of different job opportunities across the country.

Students and faculty have access to 36 public laboratories on campus. By just bringing a current OSU ID to Baker systems, room 508, one can sign up for an e-mail account right away.

Miller said he is finding that all large businesses and some small ones are using this similar system.

“I think it is going to be the communications medium of the future,” Miller said.
Ohio State's undergraduate students are a difficult group to reach. Faculty, especially, even though they hold regular office hours and classes, find it hard to communicate with their students. However, many faculty are discovering that electronic mail enables them to communicate with students whenever they need to.

Administrators find electronic communication saves money, too. For instance, using electronic mail saves the Master of Business Administration program $3,200 a year in duplicating costs, estimates Ken Keely, program director.

In addition, MBA students are better informed because they can read class notes and announcements, he says.

Students are using electronic mail more today than ever, especially since Academic Computing Services now offers e-mail accounts to undergraduates, says Rosa Gilman of ACS.

Electronic mail enables students and faculty to communicate easily and quickly. E-mail is an electronic postal system, allowing users to send and receive messages. It eliminates phone tag.

E-mail technology can be incorporated into faculty-student communications in other ways. A newsgroup created for a class enables teachers and students to discuss class issues and policies and to make general announcements. Students can access the information 24 hours a day, 365 days a year. Instructors can determine class participation by the amount of "posting" of messages.

A mailing list is similar to a newsgroup. Instead of sending e-mail to 50 students individually, the faculty member e-mails to one address. Everyone on the list can read and send e-mail.

Another way to communicate is the OASIS menuing system. This is an area where departments can post messages or announcements to the entire class. Students can read the information as often as they like, but cannot post replies.

The Department of Speech and Hearing Science adopted electronic communication methods two years ago, says Robert Fox, professor of speech and hearing science. In fact, the department requires new students to get e-mail accounts and use them proficiently.

The department has found electronic communication aids faculty and students who conduct joint research with individuals at several research facilities, including the University of Alabama, Birmingham; Wright-Patterson Air Force Base; University of Wisconsin, Madison; and Cambridge University, England. Without electronic communication, Fox says, research among facilities throughout the world would take considerably more time and effort.

To find out about e-mail accounts, call Customer Services, 292-4444.

Faculty can arrange for accounts for their students by contacting Linda DeBula, 445 Baker Systems Engineering Building, 292-4843. Or e-mail to custserv@magnus.acs.ohio-state.edu.

This story first appeared in the ACS Off Line.
Grade reports to be delivered through E-mail

By Timothy Kurz
Lantern staff writer

Autumn Quarter grades will be sent to students by electronic mail on Dec. 14, the same day grades are sent to the post office, the university registrar said.

This will be the first quarter Ohio State offers this service. If the university can someday send grades exclusively through e-mail accounts, postage costs may be eliminated, said University Registrar Gene Schuster II.

"Since we didn't receive any additional funding for mailing wait list notices, this (new service) is coming at a real important time," Schuster said. "It makes a lot of sense."

Last Spring, OSU Academic Technology Services assigned every student, faculty and staff member a unique user name as a first step in providing electronic services, said Chuck Morrow-Jones, director of university technology services.

About 25,000 of the nearly 69,000 students, faculty and staff have active e-mail accounts, Schuster said.

"We see e-mail as a first step in changing the way we offer many of the services at Ohio State," Morrow-Jones said. "The way business is conducted across campus is changing. E-mail makes campus, even the world, a smaller place."

To activate e-mail accounts, students should take a blank disk to any on-line computer lab and ask the site assistant for the information.
Chain letters can lead to jail time

By Steve Seepersaud
Lantern staff writer

A seemingly innocent act performed while surfing the Internet could result in losing e-mail privileges or being thrown in jail.

Sending or forwarding any chain letters over Ohio State's e-mail system is against university policy and could cause the user's e-mail account to be taken away. Sending chain messages that solicit money is in violation of Ohio law.

If University Technology Services finds someone sending e-mail chain letters, they first ask the person to stop, said Bill Miller, coordinator of web services for UTS. If he or she refuses, the account is disabled.

Capt. John Hartsock of University Police said chain mail is illegal if there is financial gain involved.

Such letters often list a number of people, tell the recipient to send money to them and put their own name on the list, he said.

Chain letters that solicit money are considered a pyramid scheme, Hartsock said. The Ohio Revised Code says "no person shall propose, plan, prepare or operate a pyramid sales plan or program."

The scheme works when one person gets people to pay him money to be involved in the pyramid. Those people, in turn, find others to buy into the pyramid business.

The first person gets a percentage of the profits from the new investors and the second tier of
investors get a percentage of the profits from
the third tier of investors. The pyramid keeps
building until the number of investors run out.

People at the top of the pyramid make the
most money and profit from those who are
below them, Hartsock said.

If the amount of money involved is less than
$300, the offense is a first-degree misdemeanor
punishable by up to six months in jail and a fine
of $1,000, Hartsock said. For any amount more
than $300, the offense is considered a fourth-
degree felony which could result in a prison
term between six and 18 months and a maxi-
mum fine of $5,000.

"A second offense is a
felony four regardless of
the amount," Hartsock
said.

Miller said chain messages can impair the e-
mail system.

The potentially large number of responses
could slow the system and take up mail storage
space, causing people to lose e-mail, he said.

Hartsock said chain e-mail messages are not
very difficult to trace. He needs the entire chain
e-mail message in order to trace it.

"The header information tells me where it
comes from," he said. "The computer system
maintains extensive log files. We can tell you
exactly where it came from."

Miller said many people who send chain
messages don't really know the consequences of
what they are doing.

"If a student doesn't realize that their actions
may be against the law (or) OSU
regulations...they don't worry about getting
cought since they don't perceive they are doing
anything wrong," he said.

Anyone who wants to complain about receiv-
ing chain e-mail can contact UTS or the Univer-
sity Police.

Hartsock said chain e-mail messages are not
often reported to University Police.

"I can count on one hand the amount (of
chain messages) referred to us in the last five
years," Hartsock said.
Welcome to the new central e-mail system.

With the upcoming start of the new academic year, OIT is now implementing an improved central e-mail system. This new system features increased reliability and allows OIT to offer you new and enhanced e-mail services. One early example of the new services will be the planned introduction of OSU web mail this Autumn.

As of this mailing, your OSU e-mail account has been moved to the new system, and migration of your old e-mail is in progress.

The process: All your new osu.edu e-mail is being directed to the new system. You do not need to change any of the settings in your e-mail programs such as Eudora, Entourage or Outlook Express. The last step in your migration process is moving your e-mail from its old location to make it available to you here. It is not anticipated that this process will take more than 3-4 hours, but this means you may receive newer e-mail messages before you receive some messages that were sent before the migration of your service began. The time it takes to complete the migration of each user will vary based on the amount of e-mail moved for you and for others migrated at the same time as you.

If your e-mail client was set to leave mail on the server, you will receive a ONE TIME repeat of all the e-mail remaining on the old central system (some of which you may already have read). We apologize for the inconvenience but unfortunately this one-time occurrence is unavoidable.

One change you may notice on the new system is that there are limits to the amount of e-mail each individual may store on this shared system. The limit on the amount of e-mail faculty and staff can store on the central system (quota) is 30 mb. The limit on the amount of e-mail students can store on the central system (quota) is 15 mb. Establishing these limits is necessary so that the central e-mail system is available to all.

You will receive a warning when you have reached 80% of your storage limit. If your account is at 100% of your limit, all new e-mail will not be delivered to your account, but will be returned (bounced) to the sender stating that your account is over quota.

Additional information about quotas (e-mail storage space allocation) is available at http://8help.ohio-state.edu/926.html

If you have questions about your e-mail account, view the FAQ at http://8help.ohio-state.edu/724.html or contact the OIT Technology Support Center at 688-HELP (Hearing impaired TDD: 688-8743), or send e-mail to 8help@osu.edu.
Help Desk
Technology Support Center

How To Reduce Your Stored OSU E-mail

When you check your OSU e-mail, the mail client downloads a copy of your mail to disk clients have the option of leaving a copy of the mail on OSU mail server or removing it. on the mail server can allow you to check the same message from multiple clients or leaves messages are never removed from the server, however, this can create a problem as the mail you're storing on the central e-mail system can grow too large to be manageable a storage space allotted on our server.

More information about storage limits (quotas) on the central e-mail system can be found
Below are instructions for reducing the size of your mail spool by deleting messages fro dependent on the program you use to check e-mail:

Eudora

- Hold down shift key (option key on a Macintosh) while selecting "Check Mail" from the menu. It brings up a window with a number of options on how to check email. The should be "checked" are:
  - Delete messages marked for deletion
  - Delete all messages that have been retrieved
- Make sure "Using Options at right" is selected and your OSU Internet username is
- To permanently make this change on the Macintosh version of Eudora Pro, go to the menu, choose Settings and update the Mail Management section of the Checkin category.
- On the Windows version of Eudora Pro, go to Tools, choose Options and make the Incoming Mail category.

Microsoft Outlook

- Go to the Tools menu and select Options.
- On the Other tab, make sure the "Empty the Deleted Items folder upon exiting" is
- On the Auto Archive tab, make sure the "Auto Archive every xx days at startup" is higher than 3
- Also on the Auto Archive tab, make sure the "Delete expired items when Auto Archi checked.
- Click "OK" or "Apply" before closing

Outlook Express

- Go to the Tools menu and choose Accounts.
- Click on the "Mail" tab
- Double click the listing for your OSU account.
- Click on the "Advanced" tab and look for a check box that says "Leave a copy of server." Make sure that this is unchecked
- Click "OK" or "Apply" before closing

Netscape
• Go to the Edit menu and choose Preferences.
• Click the "+" next to "Mail and Newsgroups" to expand the options underneath that.
• Click on Mail Servers and on the right.
• Double click the server under "Incoming Mail Servers" (It may be named "pop" or "pop.service.ohio-state.edu."
• Click on the "POP" tab. There should be a checkbox for "Leave messages on server it is not checked.
• Click OK to close the window, and click OK again.
• The next time you check your mail, it should remove the messages from the server and downloading a copy to your computer.

Webbox

Webbox defaults to leaving mail on the remote server upon retrieval. To change this behavior, be in Advanced Operating Mode. Then, in the configuration screen for your server, look for a checkbox for this option near the bottom of the page.

• Click on 'Configuration' from the main tool bar of your Webbox near the top of your screen.
• Click on 'Update Display Settings'.
• From there, the item at the top of the list will be the toggle between Simple and Advanced Operating Modes.
• Click the Advanced radio button, and then click the Update button at the bottom.

Campus!

Hit the MailFolder icon on the left-hand side of the window and then click "Empty Mailbox" to the Trash mailbox. In order to ensure their OSU account does not exceed the 2G limit, "While clearing Trash also delete these messages on POP Server..." is

Current Record: 619
Need more help? Contact 8help@osu.edu.

Search For Keywords

- Search the Support Center
- Search all of OIT

Seek

Home
Date: Fri, 26 Sep 2003 15:13:43 -0400
From: Gary Cox <cox.134@osu.edu>
Subject: New OSU central e-mail system
Sender: owner-liball@lists.acs.ohio-state.edu
X-Sender: cox.134@pop.service.ohio-state.edu
To: liball@lists.acs.ohio-state.edu
Reply-to: cox.134@osu.edu
X-Mailer: QUALCOMM Windows Eudora Version 6.0.0.22
X-Original-To: liball@lists.acs.ohio-state.edu

Library Faculty Staff and Students -- (Excluding LAW and HEA)

Many of you may have already received and read the e-mail from OIT explaining the new and improved central e-mail system. There are a couple things I would like to address concerning this. The most important is that being a new system I would at least give it sometime to work out all the bugs before trusting it as the sole source of e-mail storage. I received an e-mail from OIT stating the following:

We are delaying the promotion of OSU Webmail to the university community. After checking with other institutions and consultants, we feel that it is prudent for us to move slowly and get an idea of system load to determine whether it will be necessary to add more machines to handle the task. When we are confident in the system’s ability to handle the load, we will start publicity, including notices in OSUToday and Buckeye Net News.

I have noticed that the interface provided for viewing and checking has the ability to create folders but not filters, for those who filter the huge amount of e-mail they receive this is a must.

Something to keep in mind is that this is not backed up by the libraries and if something should happen due to OIT’s hardware failing you would be losing all the e-mail that is only stored on their equipment, it is unclear what kind of backup they are doing.

Also this does not allow you to access any e-mail that has been pulled off of the e-mail system. This means all old e-mail you currently have and any further e-mail retrieved via eudora outside of the settings in eudora for leaving it on the server.

I do believe it is a good method of checking your e-mail when not at your desk and/or from home. The web address is https://webmail.osu.edu/.

If you have any questions about this new system please e-mail me. As stated below more information can be obtained at:
http://8help.ohio-state.edu/724.html

Thanks,
Gary

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Gary D. Cox - CNE