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Volume 1, Number 1

Computer Services Magazine

Fall/Winter 1992

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Computer Services Newsletter gets facelift

*By Michael J. Braudaway
Editor, @UAH.EDU*

Welcome to the first edition of Computer Services new semi-annual magazine, @UAH.EDU. This publication will be replacing Computer Words, the former quarterly newsletter.

The new magazine will concentrate on informing the campus computer user of the computer and information resources available to them. Included in each issue will be articles concerning computer hardware, software, networks, and other information that campus users might find useful, such as help with daily computing tasks or notice of important events. Each issue will also contain the necessary information to obtain accounts on the UNISYS 2200 mainframe, the Cray on the Alabama Supercomputer Network, or how to get IP addresses on the campus network. A User Request Form is also included for modifications to administrative or academic software applications.

We (at Computer Services) hope that you find the new magazine useful and we gladly accept comments about the format or contents of this publication. Please send all correspondence to:

Computer Services
RI Annex B
Huntsville, AL 35899
Attn: @UAH.EDU Editor

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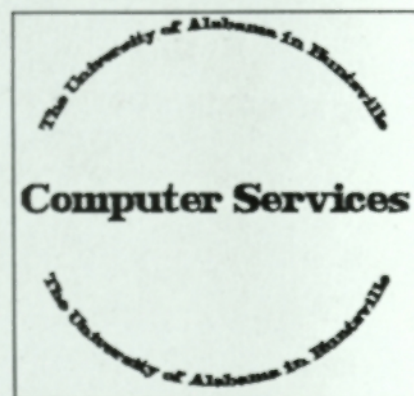
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Editor:

Michael J. Braudaway

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Computer Services Center

Mission

*By Mike Meyer, Director
Computer Services*

The Computer Services Center provides the enabling computational technology and personnel to all operating units of the University with systems and services that are necessary for their efficient operation in the most effective and economical way. The Computer Services Center has as a primary goal the needs of faculty, students, staff, departments, and external/commercial users.

"The Computer Services Center
has as a primary goal
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faculty, students, staff,
departments, and
external/commercial users. "

Currently this mission is being carried out on a Unisys mainframe and to a lesser extent VAX equipment. UAH upgraded its existing UNISYS mainframe in 1990 with newer hardware by using a three year lease. This upgrade was an economic move and did not enhance the availability of third party software. To mainstream software applications at UAH we will look to the technology leaders in the market (that is IBM or DEC), for a new computing platform. UAH also wants its own Management Information System to be current in order to efficiently manage the University. A new

mainframe would also afford compatibility with the other System universities and would maximize the leverage of all three universities in the acquisition of both software and hardware.

Going into a third year of proration makes the acquisition of a new mainframe a remote possibility at best. The Computer Center has however continued to evolve a network that can and will serve any computing technology in the future. New attachments to the network will all be TCP/IP and Ethernet ready and the older Unisys proprietary synchronous network will be retrofitted over time.

The Computer Center is located in Research Institute as is the management, technical support, and programming staff.

The Computer Services Center is part of the Finance and Administration Division; the Director of Computer Services reports to the Vice President for Finance and Administration. Guidance and recommendations are provided to the Computer Center by the Computer Services Advisory Committee which has representation from each of the Colleges or Departments. ■

ACCESS BBS Undergoes Upgrade

By Jim McCullars

The ACCESS System, a community service computer bulletin board system (BBS) operated by Computer Services, has recently undergone a major hardware and software upgrade. Hardware wise, we have upgraded to a 386/25 PC, installed a 200 megabyte hard drive, and added a second, 14,400 bps node. Software wise, we are now running the popular PCBoard BBS software.

What is a BBS?

A computer bulletin board system, or BBS, is a PC that has software allowing users to dial in and exchange messages and files. There are provisions to exchange ideas about selected topics (called conferences) in public areas, as well as leave non-public messages to other users of the board. Most bulletin boards also maintain a sizeable library of public domain and "shareware" software, providing users an alternative to expensive commercial software.

About ACCESS

In late 1984, when UAH and Sperry Corporation were entering into an agreement called Project ACCESS, a PC was donated by the project for the purposes of setting up a publicly accessible BBS. Although Project ACCESS is now ancient history, Computer Services still maintains a BBS in support of personal computing in the community. We currently have approximately 100 megabytes of IBM/MS-DOS software available for download. The software is grouped into categories, such as Music, Disk Utilities, MS-DOS Utilities, Games, etc. All software uploaded to ACCESS is scanned for viruses using the latest available version of ViruScan by McAfee Associates.

Additionally, ACCESS is a member of the Fidonet network, giving us availability to over 500 conferences, some of which are echoed internationally. Currently, we carry

the Alabama, Windows, Desqview, Scouter, FCC, and Broadcast conferences, and will be adding more in the future.

Accessing ACCESS.

To log into The ACCESS System, you need a telephone line, an asynchronous modem, and a PC with terminal emulation software (such as Qmodem or ProComm). You can dial into either of two nodes: Node 1 supports 2400/1200/300 bps connections and is at 895-6152. It is generally available 24 hours, except that a short housekeeping run starts daily at 4:00 a.m. Node 2 supports 14,400 (V.32bis) down to 1200 bps connections and can be reached at 895-6992. Node 2 is available 23 hours per day, in that it will not accept BBS callers during Fidonet National Mail Hour, which begins at 4:00 a.m. CDT.

After you get connected, you will be asked for your name, and if the system cannot find your name (i.e., you've never called before), you will be asked to verify that you are indeed a new user. From there, just follow the directions on-screen. PCBoard has extensive help capabilities, so the H (help) command can be used in most places where a command should be entered.

Once you're in, you should bring up the Script menu (the "S" command), and complete Script 1. This is necessary for using most functions of the board, including leaving messages. You should be upgraded within a few days of completing the script.

Once you're upgraded.

After you've been upgraded, you will have full run of the board. This includes access to all files areas, 60 minutes of login time per day, and the ability to leave messages to other users.

While many users are interested only in the files areas, I hope you will take advantage of the many special interest message

conferences that we now (or will soon) carry. ACCESS is here to serve you, the UAH and Huntsville computing community. ■

Who Are You and Why Are You Calling Me?

By Helga Schmedlapp

Have you called Computer Services recently? Have you **tried** calling Computer Services recently? Are you tired by the time you listen to the whole answering message? Welcome to our new phone system. We are here to help you.

One of the real problems with our phones in the past was not as much a problem with the phones as with us. We never stay at our desks. PC Repair is out repairing, Network Services is out pulling cable, Administrative Applications people are at meetings everywhere, and the usual coke machine, restroom, coffee room visits keep us from our desks and our personal phones. Thus, the poor secretary was obliged to holler for us over a speaker system created preKorea. Most of us spent many hours of the month mumbling, "who'd she say?" And the poor secretary took messages which we weren't too good about picking up. Hey, when you have been away from the phone for 1.3 minutes, you don't expect a message. Silly you. And after we had been away for more than an hour, most of us had to retrain in message retrieval. By the way, the secretary under this scenario is never allowed away from the phone. Get real! We send her away twenty times a day. Our secretary is our nerve center and we all act as though we are on Novocaine.

Enter the new phone system. The sound of trumpets would not be inappropriate at this point. Now you can get anyone of us directly. Oh, there were a few moments when we set up the original system when

some of us were tempted to answer, "if you have reached this number, please hang up." But a modicum of sanity prevailed. Elsewhere in this fine publication you will find a phone list complete with extension numbers. Please use them. We are all a lot better about noticing that we have a message on our voice mail and responding to it. If I hear your voice asking me for some information, I will get that information to you. If your name is misspelled on a sticky note asking me to call, I may call later, **if** I see the note. So, please be patient with us, we are new at this hightech phone business, but we are catching on. ■

On-Line Budget Reporting

Before you can receive your on-line budget, you must do the following:

Call Charles Burns in Accounting, MDH 136, 895-6421. He will issue you a budget account, and he will send you a form to fill-in and return to him. This form must be filled out every time there is a change in who will be authorized to get the on-line budget as well as when the account is first issued. **No** budget accounts will be issued by Computer Services. When the form is returned to Mr. Burns, he will send detailed instructions on how to access the programs that will provide your on-line budget reports.

Wasn't that easy? If you have **any** problem accessing the mainframe or in following the instructions, please call Computer Services, 895-6347, ext. 240. ■

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Library Catalog Now Available Via Telnet

The UAH Library's online catalog (the PALS system) is now available via TCP/IP. Users on the Internet can now telnet to **LIBRARY.UAH.EDU** and begin entering PALS transactions.

Previously, the only non-Uniscope access to the catalog was via the dial-in facility. This allowed modem users to call the UAH modem pool, establish a reverse-LAT connection to the DCP/40, and then open to the transaction environment. While this method is still a viable alternative for the student or researcher wishing to access the online catalog from home, it was very cumbersome for those workstations on the campus network to get to PALS. Now, any workstation on the campus backbone (or anywhere on the Internet) can access PALS via Telnet.

This procedure does have some limitations. The Telnet server software on the 2200 mainframe is still very new, and while it appears to be stable, it is not yet feature-laden. There are currently no capabilities for full-screen operation. Our current configuration allows for a maximum of 15 simultaneous connections to the transaction environment. The 2200 will refuse to negotiate remote echo, meaning that your Telnet client must be capable of performing local echo. And finally, there is no transaction or command available on the 2200 to effect a dismount from the transaction environment and the telnet server, like an @@term works for demand. This means that you must terminate the telnet connection from your workstation when you are finished.

If you need more information on setting up your workstation for TCP/IP access, please call Larry Morphew at 895-6347, extension 239. If you have problems or questions about the Telnet software on the Unisys

2200, call Jim McCullars at 895-6347, extension 238. And for questions about PALS commands, call Elizabeth Pollard, UAH Systems Librarian, at 895-6313. ■

Format a Diskette?

Read Me First!!!

By Carey Hall

Formatting a diskette is easy, right? Wrong. I know it's no big deal for some of us but there are still a few of you that just do not understand. And I can understand why that is if you haven't been reading your DOS manuals. But why must it be so confusing? I'm going to tell you.

In the beginning there were computers with only one floppy drive. These drives only had one read head so all diskettes had only one side to write and read data to and from. These were known as **SINGLE SIDED DISKETTES**. They only held 180k of data which at that time was a bunch. Then there was the double sided drive with two heads, one on the top and one on the bottom. The diskettes were **DOUBLE SIDED DISKETTES** and held 360k of data because you could read and write on both sides. What some did was to take the double sided diskettes and cut a hole in the left side and use them on single sided drives. You had to flip them over to get to the other side but you had twice the storage on one diskette. Well, the double sided diskettes are still around, not so for the single sided. What is becoming common are **HIGH DENSITY DRIVES**. Now this is where we start having problems. With the high density drive there came high density diskettes. The diskettes held 1.2 meg of data. Three times more than the double sided diskettes. Great! Right? Maybe. The new HD drives would read and write both high density and double density diskettes. But the double sided drives would not read or write the high density diskettes. So I started getting calls about bad floppy

drives. I'd carry another drive along just to find out someone had bought high density diskettes and were trying to use them on double sided drives. This will not work. Don't try it. One of the problems is if you don't know what kind of drives you have you don't know what kind of diskettes to buy. Well don't feel alone because you're not. There is no way of knowing unless you know what was ordered with the computer and you can't always count on that. Anyway we are here to talk about diskettes, not disk drives.

DD, 2D, DOUBLE DENSITY, 48tpi, and maybe some more things like this mean one thing. You have a 360k diskette. That is unless it's a 3 1/2" diskette but we'll get to that in a minute.

HD, HIGH DENSITY, 96tpi all mean you have 1.2 meg diskettes. Both might say DOUBLE SIDED OR 2S. That's because they are not SINGLE SIDED or 1S. I can understand how this can be confusing to some. But it is something you need to know. If you have a double sided double density disk drive, use only double sided DOUBLE DENSITY diskettes. If you have a double sided, high density drive you can use both.

Now let's get to formatting these diskettes. If your drive, say it's A: drive, is a double density drive, then you can only use double density diskettes. Formatting them is easy. You just type, FORMAT A:, and you're off. If your drive is a high density drive and you buy high density diskettes you do the same.

If for some reason you need to use double density diskettes then you use what is known as a switch. The switch is a /4. This switch tells the drive to format your double density diskettes to 360k. It's as easy as this, FORMAT A:/4, and you're off again. But if your 360k diskette has been formatted on a double density drive before you got it, it may give you problems. If it was formatted before

you got it, it's better to format it on a double density drive again. But you are safe if you use new diskettes.

Now let's talk about 3 1/2" disk drives and diskettes a little. We've been going over 5 1/4" so far. All of the above holds pretty much true with the 3 1/2" except the switch. The switch for formatting a 3 1/2" double density diskette on a 3 1/2" high density drive is, FORMAT A: /N:9 /T:80. This will format double density 3 1/2" diskette to 720k. The high density diskettes in 3 1/2" are 1.4 meg. Funny how smaller keeps getting bigger ain't it?

Anyway, regardless to what size your drive is, you need to know what density it is. Remember if it's a double density you can only use double density diskettes and if it's a high density you can use both. ■

Free VAX Software From the CSLG By Chris Albright

UAH and Digital Equipment Corporation have entered into an agreement which gives VAX and Ultrix (UNIX) software to the university for an extremely low cost to Computer Services and no cost to the user. In addition to the free software, discounts of between 13% and 50% on all hardware is available.

All VAX software in the Computer Software License Grant (CSLG) is available for use. This includes all operating systems, language compilers, case tools, PC and Macintosh integration products (server only), management tools, etc. The list contains over 200 products.

Computer Services has manuals available for a subset of the products on a 48 hour checkout basis. We encourage users to purchase their own set of documents. The

program includes software telephone support and updates.

The entire program has a value of well over one million dollars and is a way for the VAX community to maintain current software levels. It is open to any VAX platform that is titled to UAH and is used in legitimate research or administrative functions. Machines purchased for government contracts which reside off campus are not eligible. For more information about the program and a complete listing of the products, contact Computer Services.

**UAH Campus
Local Area Network**
By Chris Albright

The network, a 10 megabit per second ethernet network, employs twisted pair

Research Institute
Engineering Building
Madison Hall
Alumni House
Science Building
Morton Hall
Computer Science Building
Administrative Science Building
Optics Building
Residence Hall
Material Science Building

*Table 1.
Networked buildings
on campus.*

wire, coaxial and fiber optic cable. The design is configured in a dual star by which optical cable radiates from two locations, the Library and Research Institute, to the listed buildings on campus (see Table 1). Remaining buildings will be connected as funds become available.

To reduce the possibility of damage to the fiber optics and to ease the connection of the other buildings, the cable has been installed in an under ground innerduct system. The system consists of buried conduit pipes with smaller innerduct pipes inside the larger tubes. The innerduct system is currently connected to all but a few buildings.

The network was designed to easily adapt to emerging networking standards. FDDI, or Fiber Distributed Data Interface, is a 100 megabit per second network. The topology of the installed network allows migration to this system. The 10 megabit fiber components can be replaced with 100 megabit fiber components when traffic loads dictate the larger bandwidth is required.

User access to the network is gained by connection either to the existing premise distribution system or direct connection to the network. Refer to the Computer Services Network Policies for connection guidelines. Premise distribution systems, or built in network wiring, are in all new buildings and in some older buildings on campus.

User access is also available via a dial in modem pool. 16 error correcting modems supporting speeds up to 2400 baud are available for general use. Services include access to the PALS library system as well as all nodes connected to the campus network. Specific machine access must be obtained from the respective system administrator before attempting to use services available on the machine. Violators will be prosecuted!

If anyone has any questions regarding the network, or would like the five cent tour, please contact Network Services at 895-6347. We are proud of our network here and we will be glad to toot our horn for you. The network is a utility just like the electrical outlet and the telephone; use it. ■

Mother Says
By Helga Schmedlapp

Mother has been very excited by the prospect of a new format for our old, beloved Computer Words. In fact, Mother has been pretty excited this year and all the changes the year has wrought to Computer Services. Well, actually, Computer Services has wrought to Computer Services. Most importantly for you, the end user, we have a new phone system. You will just LOVE it. Admissions and Records has not been able to penetrate the periphery yet, but we put an extra round of instructions for their calls. For the rest of you, the procedure is pretty standard phone stuff. Call us at our 6347 number and wait for instructions. Somewhere in this publication is a list of all our extensions. Please use them. They will save you many minutes.

While we were discussing the new magazine, several ideas were rejected. Mother found many of them worthy though others found them unsuitable. Well, Mother, being a tad unsuitable herself, wishes to share some of the suggestions which were not incorporated into the final draft of the magazine. When the troops were asked to make suggestions with regard to a cover design, one wag suggested a U-Haul truck taking away the Unisys. Someone else wanted to know if the drawing should include a forklift. Sorry, the Unisys is not ready for dumping just yet--too many of you readers have gotten addicted to that paycheck. Mother certainly has. A rather fine idea was put forward concerning the inclusion of classified ads for personal computer sales/swaps/whatever. Unfortunately, we don't know how to guarantee that it isn't UAH property being offered up. How about a problem solving column?

Mother wants to know:

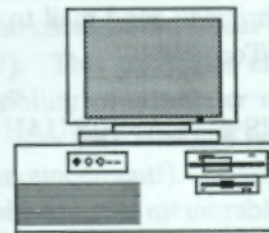
Why no one ever talks about computer fungus? Viruses get all the publicity while entire systems are made inoperative by a single strain of fungus. Why aren't we informed on this?

Why is the cutting edge of technology so often the bleeding edge?

Yale has cut its sociology staff by 40%. Yale is a private institution. How can we survive in these hard fiscal times if Yale is suffering? Three cheers to the team that is keeping us afloat!!!

Why did the mother robin abandon the nest outside of Mother's window?

Mother overheard a bit of truth the other day, "It is not the results that count, but rather, the perception of progress." May you be perceived as progressing. Happy School Days. ☐



Internet/Decnet Mailer Gateway

By Chris Albright

Previously, users of DECNET, Digital Equipment Corporation's communication system, have not been able to send electronic mail to Internet(TCP/IP) users because of incompatibilities between the two mail systems. Computer Services has available a VMS Mail to Internet mail gateway. Users of Internet will be able to send mail to colleagues on DECNET only nodes and vice versa. The syntax is:

Internet to VMS Mail:

```
user%decnet_node.DECNET@UAHIS1.UA  
H.EDU
```

For example, suppose user FRANK, on node UAHCS2.CS.UAH.EDU, in the Computer Science Department wants to send mail to user CHRIS on node UAHIS4, but the machine UAHIS4 does not have TCP/IP only DECNET. Frank can send mail by entering in the To: field of the mail utility

```
CHRIS%UAHIS4.DECNET@UAHIS1.UA  
H.EDU.
```

Conversely, Chris can send mail to Frank by entering in the To: field

```
UAHIS1::WINS%"FRANK@UAHCS2.CS.  
UAH.EDU
```

This is only a temporary solution. A product in the CSLG (see article entitled Free VAX Software in the publication) will allow Internet mail to be transferred without the need for the gateway.

Computer Ethics Institutes' Ten Commandments

- I. Thou shalt not use a computer to harm other people.
- II. Thou shalt not interfere with other people's computer work.
- III. Thou shalt not snoop around in other people's computer files.
- IV. Thou shalt not use a computer to steal.
- V. Thou shalt not use a computer to bear false witness.
- VI. Thou shalt not copy or use proprietary software for which you have not paid.
- VII. Thou shalt not use other people's computer resources without authorization or proper compensation.
- VIII. Thou shalt not appropriate other people's intellectual output.
- IX. Thou shalt think about the social consequences of the program you are writing or the system you are designing.
- X. Thou shalt always use a computer in ways that ensure consideration.

Reprinted from - *The Huntsville Times*, August 2, 1992.

THIS LAN IS YOUR LAN

By Frank Gossett

UAH improved its international network identity this summer. The following article attempts to describe what happened and why. We begin by displaying the login announcement that appeared on campus computers in June.

***** UAH Campus Network Address Changes

The UAH Campus Network is upgrading, from an Internet sub domain to an independent Internet Domain, between June 14 and June 21, 1992. Old IP numbers will be replaced by new IP numbers. If your computer uses TCP/IP for any reason (e.g. telnet, ftp, electronic mail, etc.) you MUST obtain your new IP number from your system administrator or UAH Data Communications.

Network sessions you normally conduct (telnet, mail, etc.) may be disrupted until the conversion process is complete. We appreciate your patience with this temporary inconvenience, however, the benefits of an independent network identity will improve local and remote network efficiency.

IMPORTANT!! After June 21, your old IP address (129.66.xx.xx) will not work!

If you have questions, contact your system administrator or UAH Data Communications at 895-6347 Option 1 (voice mail menu option).

What's makes this announcement more special than the others that weren't read or didn't appear to affect you? ...Maybe nothing, if it didn't affect you. Or maybe the changes did affect you and you just aren't aware of it (better check those computations again!). This particular change in the UAH computing environment introduces the increasing responsibility of computer users to stay informed about computing environment structure changes that alter relationships between them and their beloved machines (Hmph...if I'd only read that login announcement!). Changes affecting the network are guaranteed to be some of the most visible, significant and memorable changes in your information world.

Perhaps a paraphrase of the above announcement is in order to better describe the events. I've taken the perspective of my two friends, Bubba and Dick, for translation purposes. Each of them has a different understanding of network reconfigurations.

Login Announcement Title, Bubba's Translation

We've moved. Our new address is...

This is equivalent to a whole city moving. Since you are a UAH citizen, you've moved too! Surprise!

Bubba's Translation (Cont'd)

I'm really too old to be living at home with my parents (or foster parents in this case). My folks would enjoy the privacy, I could change the air conditioning thermostat without freezing them and I could choose different wallpaper for the kitchen. If I want to become a productive element of society and eventually raise children to be the same, I'll relocate between June 14 and June 21, 1992. Let's see...this means I'll need to notify family, friends, creditors, and Publisher's Clearinghouse of my address change. Since my family, friends and creditors communicate with me using the U.S. Postal Service, I must obtain my house address in a new subdivision from the Post Master.

During the move, I may have trouble communicating with the world, friends and family. (The cable company never arrives when they say they will, there is still no phone service, and I'll probably forget to buy house numbers at the hardware store for mail delivery.) It will be frustrating missing calls and leaving my new home to pick up my mail; however, having my own house means my parents won't be bothered when my friends call (late at night) and I won't be bothered when their friends call (early in the morning).

If I want to make this transition as smooth as possible, then I should get my address from the Postmaster and remember to purchase and hang the corresponding house numbers obtained from the hardware store. Otherwise, I could get a bad credit rating from a late payment whose bill I never received.

Since I am a citizen in a city that has chosen to relocate, I'll direct all of my questions to the city officials in charge of this move. I hear they have a new telephone switchboard operator.

Dick's Translation

UAH has been provided international network services (Internet) free of direct charge since 1987. In the beginning, network services were easily administrated by the ASN because of the simplistic network structure at UAH (connecting existing university computers together or to other academic/government/commercial entity computers was not a priority). As the UAH network infrastructure grew and more network connections were realized, it became clear that local network growth and adjacent network coexistence (ASN, SPAN, etc...) would best benefit from UAH taking a more autonomous role in local area network (LAN) management. This growth led to a June 1992 network address conversion for all UAH computers and peripherals which communicated using the Defense Advanced Research Projects Agency (DARPA) funded computer communications protocol, Transmission Control Protocol/Internet Protocol (TCP/IP). These addresses were assigned to UAH Network Services by the network gods and Network Services in turn assigned them to campus system administrators and users, whose computers function inside the UAH network domain (campus). If a computer user needs network services, he/she will soon realize the importance of having the new network addresses.


Most network users at UAH typically recognize TCP/IP by its component protocols (telnet, ftp, smtp, etc...). Some of these component protocols appear to them as individual applications on their host computers, which allow them to do such tasks as remote logins (telnet), file transfer (FTP) and electronic mail (SMTP). These applications will be the most sensitive to service interruptions during a network address conversion.

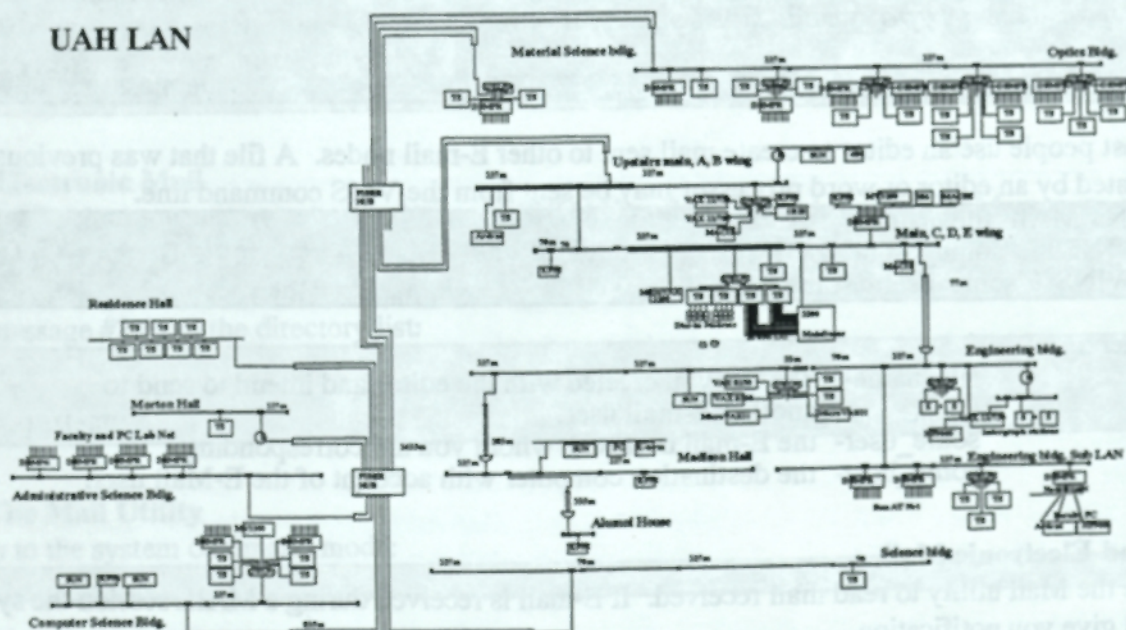
Dick's Translation (Cont'd)

A successful conversion involves changing and coordinating changes of Internet Protocol (IP) addresses and configurations to hundreds of devices that belong to international/national/regional communication providers (NSF and SURANet), adjacent and participating networks and UAH. There is a possibility that business will not be "as usual" during this conversion process. It is not likely that other networks that we send/receive information to/from will recognize us by our new names at the same time. The communication disturbances today will mean better service tomorrow.

Telnet, FTP, SMTP and other TCP/IP applications depend on address information to deliver the functions users require. Although the application commands do not change (**get**, **put**, **send**, **reply**, etc.), the addresses and methods for identifying what machine the function request is directed toward have changed (new identification scheme). The old method of network and node (computer) identification will no longer be used at UAH after June 21, 1992.

UAH Network Services will be glad to assist you with network problems or questions. Please feel free to call during the week.

So what's so great about this LAN being your LAN? Isn't there a farm mortgage? Of course there's a Piper to pay! There were costs when the LAN wasn't totally "our LAN" (UAH managed). UAH has always paid for the bulk of its network expense. We've only added the facilities to better manage what was already being financed. 



USING ELECTRONIC MAIL ON CAMPUS

Electronic mail (a.k.a. E-mail) systems send and receive files through links (usually phone) along "nodes" (member computers) that are inter-connected.

E-mail participants include universities, colleges and research facilities, corporations, individuals, and organizations of all types from around the world. Using E-mail utilities, faculty, staff, researchers and graduate students at the University of Alabama in Huntsville are able to communicate with colleagues residing at participating locations.

Currently, any system on the campus Ethernet can access E-mail; the connection is through VAX/VMS MAIL on the ASNUAH node. E-mail access is available to ASNUAH account holders.

Send Electronic Mail

E-mail may be sent via the VMS/MAIL Send command or by executing Mail from the VMS command line. An example of the VMS/MAIL Send command follows:

ASN> MAIL	<== Execute MAIL
MAIL> SEND	<== Execute Send
To: JNET%"user_name@some_host"	<== BITNET
WINS%"user_name@some_host"	<== Internet
Subj: Staff Meeting Friday	<== Typical Subject
Enter your message below. Press CTRL/Z when complete, or CTRL/C to quit.	
<i>(Type your message here.)</i>	
[Ctrl][Z]	<== Sends the message

Most people use an editor to create mail sent to other E-mail nodes. A file that was previously created by an editor or word processor may be sent from the VMS command line.

ASN> MAIL file_name	
To: JNET%"some_user@some_host"	<== BITNET
WINS%"some_user@some_host"	<== Internet

Where:

file_name- the file you created with the editor and intend to send to another E-mail user.
some_user- the E-mail user with whom you are corresponding.
some_host- the destination computer with account of the E-Mail user.

Read Electronic Mail

Use the Mail utility to read mail received. If E-mail is received during a MAIL session the system will give you notification.

ASN> MAIL	<== Execute MAIL
You have 1 new message.	

List a directory of all mail messages you have received since the last time you signed on:

MAIL> DIR

<== List MAIL Messages

NEWMAIL

From Date Subject

1 BITNET%"user@host 26-JUN-1990 typical E-mail subject
2 WINS%"user@host" 28-JUN-1990 NASA Proposal Review

Read message #1 from the directory list:

MAIL> READ 1

<== Read Message #1

#1 28-JUN-1990 17:05:50:11

NEWMAIL

From: BITNET%"UAHxxx01@UAHVAX1"
To: JNET%"UAHxxx01@uahvax1"
CC:
Subj: Typical BITNET Subject

Received: From UAHVAX1(UAHxxx01) by UAHVAX1 with Jnet id 7427 for
UAHxxx01@UAHVAX1; Wed, 28 Jun 90 17:05 CST
Date: Wed, 28 Jun 90 17:05 CST
From: <UAHxxx01@UAHVAX1>
Subj: Test Typical BITNET Session
To: uahxxx01@uahvax1
Original To: JNET%"uahxxx01@uahvax1"

Delete Electronic Mail

After reading a mail message it should be printed and/or deleted. A list of the mail messages and their corresponding message numbers are displayed when the MAIL directory command is used.

Delete message #1 from the directory list:

MAIL> DELETE 1

<== Delete Message #1

Print Electronic Mail

All E-mail print requests are submitted to the ASNUAH node (Research Institute). Messages queued to the ASNUAH node printer are released after exiting MAIL. You may print a message while it is being read or after it has been read.

Print message #2 from the directory list:

MAIL> 2

MAIL> PRINT

<== Print Message #2

Exit The Mail Utility

Return to the system command mode:

MAIL> EXIT

<== Exit MAIL

THE ALABAMA SUPERCOMPUTER NETWORK

The Alabama Supercomputer Network (ASN) provides access to supercomputing capabilities for researchers in the state of Alabama and enhances the industrial development attractiveness of the state. The network was developed and is managed by Boeing Computer Services in Huntsville under a contract with the State of Alabama. The Alabama Supercomputer Authority oversees the project. The central site for the network is located in Cummings Research Park West in Huntsville. Ten nodes are strategically located near major university and government sites across the state. The network became fully operational in early 1988 with 24-hours per day, 7-day per week access.

Facilities

The centerpieces of the ASN are the supercomputers - a CRAY X-MP/216 and an nCUBE 2 Model 10. The CRAY is a vector supercomputer, with 2 central processing units, 16 million words of main memory (64-bit words), a 32 million word solid state storage device and 19 Gbytes of disk. The nCUBE 2 is a massively parallel supercomputer with 128 processors, a total of 464 Megabytes of distributed memory and 11 Gbytes of disk; it is hosted by a Sun 4/470 front-end.

Both the supercomputers operate with the UNIX operating system - UNICOS for the CRAY and Sun O/S or VERTEX for the Sun and nCUBE. There is a wide variety of application software available on the CRAY including mathematics and statistics, chemistry, engineering and graphics. The nCUBE system, being much newer, does not yet have a great deal of application software. However, there are basic sets of mathematical libraries and parallel processing utilities.

The network component of the ASN consists of high speed links to each of the six research universities in Alabama. Lower speed links connect the ASN to the teaching universities and some commercial customers and high schools. The network provides remote login, file transfer and electronic mail facilities. It also gives access to external computer networks, notably SURANet, Internet, BITNET and SPAN.

Each of the six research universities is connected to the ASN through a nodal mini-computer; at UAH the node computer is a DEC VAX 8250. This computer provides local terminal access, local printing and magnetic tape handling capabilities and a network connection to the major national networks (BITNET and Internet).

During most of 1992, the ASN facilities will be undergoing changes and upgrades (the CRAY memory has already been upgraded to 16 million words as you read this). A common mass storage system will be added. A central site visualization system will be installed and the central network components will be upgraded.

Usage

The Alabama Supercomputer Network (ASN) facilities are available to educators, researchers and commercial organizations throughout Alabama. In order to use the supercomputers or network, each user must obtain a computer account - consisting of a User ID and a password. The account is then assigned to that user for his/her own use and remains active until deleted.

There is no charge for using the facilities of the ASN for academic research or teaching purposes. Sponsored research and all commercial usage are charged at rates set periodically by the Alabama Supercomputer Authority. However, supercomputer time is

allocated to each university in order that each can have a fair chance to use the computers. Each user will then be allocated an initial quota of supercomputer hours by his/her university account authority. Usage in excess of those allocations is generally not permitted. Accounts that are not used will be deleted for the following allocation period.

At UAH, the authority for approving requests for accounts on the ASN computers rests with the office of the Vice President for Research, Dr. Kenneth E. Harwell. Dr. Harwell has delegated the day-to-day administration of the account and time allocation to the Mr. Michael V. Meyer, Director of UAH Computer Services. All requests for supercomputer time allocations must also be approved by the head of the relevant department.

The ASN nodal computer (ASNUAH VAX 8250 at UAH) is intended for local file editing, printing, job preparation, etc., in conjunction with using the supercomputers. This computer is NOT a general-purpose campus resource since it cannot possibly handle the load of hundreds of faculty and students. Electronic mail facilities are available on ASNUAH for faculty and staff who need access to BITNET; students are generally not permitted to use the machine for e-mail.

Obtaining an ASN Account

There is only one form to complete - the ASN Account Activity Request Form. It is used to apply for a new ASN account, change the allocated supercomputer time or request that an account be deleted. The form is generally available from departmental offices at UAH; it may also be obtained from UAH Computer Services, Room M-30 in the Research Institute. A copy of the ASN

Account Activity Request Form is attached; it may be photocopied freely.

The top two sections of the form should be completed giving all the information requested; the *university* contact address and telephone number should be given (*not* your home address). Requests for accounts on the ASN nCUBE massively parallel supercomputer should also be accompanied by a short abstract describing the intended use of the computer. Students should discuss all ASN account requests with his/her supervisor so that an appropriate time allocation request can be made. Once completed, the form should be returned to UAH Computer Services, Research Institute Room M-1 for approval. Your account will be created and you will be notified, by campus mail, of the User ID and initial password within a few days.

Faculty intending to use the ASN facilities for teaching purposes should contact UAH Computer Services well in advance of the class start. There are class accounts already set up for teaching use; these accounts are usually valid only for a limited time period.

More Information

For more information on the facilities, features or procedures of the ASN, contact the UAH Computer Services department in the UAH Research Institute (call 895-6347) or call the ASN Help Desk (971-7412). There are a variety of printed materials available, including an ASN User Guide. UAH Computer Services has a complete set of CRAY, nCUBE and VAX manuals available for perusal during office hours. Manuals for most of the application packages and programs are also available. ■

New Level of UNICOS Operating System on the Cray

The ASN installed a new version of the operating system on the ASN CRAY X-MP in June. This version is a major upgrade of UNICOS from the current version 5.1 to the new version 6.1. There will be a number of changes affecting all users. Some of the changes are summarized below but users are *strongly* encouraged to read *both* the UNICOS 6.0 and UNICOS 6.1 Release Notes (on-line in the asninfo information system or available through your local site Applications Analyst).

The most important changes affecting ASN users will probably be:

- cf77 version 5.0 will be the default FORTRAN compiler.
- scc version 3.0 will be the default 'C' compiler (cc command).
- libsci will now use multitasked routines by default.
- X-Windows updated to X11 R4.
- Korn shell added.
- New versions of CDBX debugger and performance monitoring tools.
- New make default rules; nmake program added.
- GNU emacs text editor available..
- FORTRAN IOSTAT, EOF and IEOF functions changed.
- FORTRAN auxiliary arrays (in SSD) supported.
- NQS queue structures and limits will change.

There will be other changes, enhancements and incompatibilities. Please read the brief comments below and the UNICOS Release Notes.

NEW OR ENHANCED FEATURES:

Utilities:

UNICOS commands	Most brought up to Unix System Labs System V Release 3 or BSD 4.3.
Message system	New commands, libraries and files for run-time message reporting.
executable file compression	Binary executables may now be compressed to reduce disk required for their storage.
atchop, atexpert, atscope	New performance-monitoring tools for Autotasked programs.
bftp	Background ftp. Transfers files in an unattended, background mode.
cdbx	Debugger now enhanced with CRAY autotasking support and X-Windows.
docview	Utility to access on-line documentation.
explain	User interface to error message descriptions for utilities and libraries.
fdcp	Foreign data copy command.
flowtrace, flowview, hpm,	Enhanced old and new performance monitoring utilities; now include
prof, profview, perftrace,	X-Windows interface.

perfview, GMAT tools	
GNU emacs	CRAY-supported version 18.55 of the emacs full-screen text editor.
host	Utility to access the Internet domain name server.
ln	Enhanced; now supports symbolic links with the -s option.
nmake	Unix System Labs new make utility added.
pshell	Tool to reduce amount of memory required by programs calling ishell().
rpcgen	Remote procedure call protocol compiler.
segldr	Linker enhanced with executable compression option and other features.
watchword	Debugging tool to monitor program variables.

Libraries and System Calls:

libc	Enhanced; includes routines from libnet and libbsd.
libm	Enhanced; includes new DLOG and single precision routines.
libsci	Enhanced; runs in parallel automatically; includes new routines (incl. new FFT routines).
libu	Enhanced; includes routines from libCOS.a.
New System Calls	BSD signal handling, POSIX-compliant system calls, and others.
X-Windows	Upgraded to X11 R4.

File System:

Filenames	Longer files names, up to 255 characters. *** NOTE: WILL <u>NOT</u> BE IMPLEMENTED AT THE ASN!!
Restartable core files	New restartable core file; use cdbx or restart to restart.

Shells:

Job control	C shell and Korn shell job control supported (^Z, bg, and fg).
ksh	Korn shell added.

FORTTRAN:

cf77, cft77	New default FORTRAN compiler, cf77 version 5.0.
cft	Executable made with cft versions earlier than v 1.16 will not run. NOTE: the cft compiler will NOT be supported in UNICOS 7.
Buffer sizes	Buffers for unformatted sequential files increased from 8 to 48 512-word sectors.
Scratch files	Locations and names of scratch files changed.
assign	New features; easier to use.
Open Files	Number of named files that can be referenced simultaneously has increased from 20 to 60.
Auxiliary arrays	FORTTRAN arrays may be assigned to Secondary Data Storage in the SSD.

C Compilers:

scc The scc compiler (ANSI C) version 3.0 becomes the default; cc command gets scc. Old C compiler can be accessed with pcc.

Libraries New default C libraries (for scc).

INCOMPATIBILITIES AND DIFFERENCES:

Utilities:

chown Now requires superuser privileges.

cord, dda, drd, trlib, yab Removed.

flowtrace Output filename (flow.data) and format changed.

hpm and prof Output formats changed.

ld and segldr Size and layout of executables changed.

perftrace Output file name (perf.data) and format changed.

SunTools Output becomes garbled when SunTools is used and output contains tab characters.

Libraries and System Calls:

acidnam() Return value changed.

AQIO routines Asynchronous I/O routine return values and meanings changed.

Athena widgets Library changed significantly.

benchlib If used with libsci, requires version 2.1.

DLOG Routine New algorithm for double precision logarithm; may affect your results.

libCOS.a No longer available. Some routines moved to libu.a.

libsci Runs in parallel automatically. To disable, use setenv NCPUS 1.

RPC libraries Recompile all RPC applications.

TCP/IP libraries Recompile all TCP/IP applications.

X11 include files Directories restructured per X11 R4.

X-Windows libraries Upgraded from X11 R3 to X11 R4. Recompile all X-Windows applications.

getjtab Routine modified. Recompile routines using TREMAIN, IHPSTAT, CHECKTP and GETTP.

stat Routine modified. Recompile routines making this call.

utimes Renamed to cutimes.

File System:

Filenames No longer truncated to 14 characters.

Groups *** NOTE: AT ASN, STILL TRUNCATED!
Group ID of file is now same as group ID of parent directory.

FORTTRAN:

ABORT and ERREXIT Routines and macro changed.

assign Format and definition of assign environment file changed.

Direct access files No longer opened implicitly; must use OPEN statement.

Functions EOF and IEOF functions no longer available.

I/O conversion

Changes and corrections to the numeric input and output conversion routines and edit descriptors may cause differences in your program output.

IOSTAT

Return values changed.

make

Built-in rules for .f and .F files changed.

Scratch files

Default location of scratch files changed.

stdin, stdout, and stderr

No longer opened at program startup (still opened implicitly when first referenced). May affect use of INQUIRE on units 0, 5, 6, 100, 101, and 102.

C Programs:

errno

Definition and usage in <errno.h> changed.

<values.h>

Header file constants changed.

Multitasking:

Segmentation

Combined use of multitasking and segldr segmentation not recommended.

Shared text

The segldr -n option not allowed with multitasked programs.

NQS:

Larger binaries

Larger executables and libraries. May affect queue choice when submitting job to NQS.

Queue defaults

Will be modified later.

Cray Software

Languages and Compilers:

CC

Cray C Language compiler

SCC

Cray Standard C Language compiler

CAL

Cray Assembler

CFT

Cray FORTRAN compiler

CFT77

Cray FORTRAN-77 compiler

CF77

Cray FORTRAN-77 autotasking compiling system

FPP

Cray Autotasking preprocessor

FMP

Cray Autotasking preprocessor

PASCAL

Cray Pascal compiler

PROLOG

Cray Prolog compiler (unsupported)

Utilities:

ASCII

Prints information about the ASCII character set.

ASNINFO

On-line ASN documentation

ASNSTRIP

Removes trailing blanks and tabs from a file

BENCHLIB

Cray benchmarking utilities

COMPRESS

File compression utilities

COMPRESSDIR

UNCOMPRESS

UNCOMPRESSDIR	
ZCAT	
ZCMP	
ZDIFF	
ZMORE	
PACK	
UNPACK	
CRAYJOB	Remote job submission from node computers
CDBX	Cray Symbolic interactive debugger
DEBUG	Cray Symbolic debugger
F2C	FORTTRAN-to-C conversion utility
FLECS	FORTTRAN preprocessor (unsupported)
FSTRIP	Utility to remove trailing blanks from FORTRAN programs
HELPDESK	User command to send messages to ASN Help Desk
NCSA HDF	NCSA Hierarchical Data Format library and utilities
NODEPRT	Remote file printing to node computers
NONASCII	Removes non-ASCII characters from a file
SCM / SCCS	Cray Source Code Management facility
SEGLDR	Cray Segmented Overlay Loader
STAGE	Remote tape read/write to/from node computers
UPDATE	Cray Source Code Management utility

Editors:

ED	Cray line-mode text editor
(EMACS)	(GNU/Cray full-screen text editor)
EX	Cray line-mode text editor
VI	Cray full-screen text editor

Mathematical and Statistical:

BCSLIB	Boeing Computer Services mathematical library
GLIM	Generalised Linear Interactive Modelling System tools for statistical analysis, modelling and display
IMSL-MATH	International Mathematics and Statistics Library - Mathematical Library
IMSL-STAT	International Mathematics and Statistics Library - Statistical Library
IMSL-SFUN	International Mathematics and Statistics Library - Special Functions
ITPACKV	Library of routines for solving large sparse linear systems of equations using adaptive accelerated iterative algorithms
MINOS	Program for solving general linear and non-linear optimization problems
NSPCG	Library of routines for solving linear systems of equations using non-symmetric preconditioned conjugate gradient methods
REDUCE	Program for manipulating algebraic and symbolic equations
SCILIB	Cray Scientific library
SLATEC	General purpose mathematical library
SPSS-X	General purpose statistical package
VECTORPAK	Boeing Computer Services mathematical library; highly optimized for the Cray

Chemistry:

AMBER	Macromolecular simulation program for energy minimization, normal modes calculations, molecular dynamics and free energy perturbation calculations
AMPAC	General purpose, semi-empirical molecular orbital program for chemical reactions
AMPGAUSS	Data conversion and analysis program for Gaussian-88, AMPAC and MOPAC
CADPAC	Quantum chemistry package with a broad range of uses in chemical and pharmaceutical sciences
DENSITY	Electron density map generator for data produced from AMPAC and MOPAC
GAMESS	General Atomic and Molecular Electronic Structure System for ab initio quantum mechanical calculations
GAUSSIAN-88	Quantum chemistry package with a broad range of uses in chemical and pharmaceutical sciences
IDEAS	Integrated Databases and Extended Analysis System for nucleic acids and proteins
MM3	
MMX87	Performs molecular mechanics calculations
MOPAC	General purpose, semi-empirical molecular orbital program for chemical reactions
MOPACGEO	Calculates molecular geometries from MOPAC and AMPAC files
PATSEE	X-ray crystallographic analysis using integrated Patterson and direct methods
PSI77	Computes and plots molecular orbitals from Gaussian-86 files
SEQA	Routines to perform various search and comparison operations on DNA
SEQDP	and protein sequences
SEQF	
SEQFN	
SEQFP	
SEQFT	
SEQH	
SEQHP	
SEQL	
SHELX-76	Codes for refinement and solution of crystal structure from X-ray diffraction data
SHELX-86	
XPLOR	

Electronics and Electrical Engineering:

SPICE	General purpose circuit simulation program
NEC2	

Computational Fluid Dynamics:

ARC2D	Navier-Stokes and Euler flow solver for 2-dimensional fluid dynamics problems
ARC3D	Navier-Stokes and Euler flow solver for 3-dimensional fluid dynamics problems
INS3D	Fluid dynamics and aerodynamics program for 3-dimensional problems
FIDAP	General computational fluid dynamics program
FIPREP	Pre-processor for preparing FIDAP input files
FIPOST	Post-processor for displaying and transporting FIDAP output files

Grid Generation:

GRAPE2D	Generates computational grids for arbitrary 2-dimensional shapes
GRAPE3D	Generates computational grids for arbitrary 3-dimensional shapes

Graphics:

DISSPLA	Device independent FORTRAN graphics library
GNUPLOT	Interactive plotting program
NCAR GRAPHICS	General purpose graphics libraries and utilities
SKETCH	Generates perspective projections of 3-D objects with hidden lines removed
TGIF	Converts DISSPLA metafiles to/from Transportable Graphics InterfaceFiles
XIMAGE	Two-dimensional image display and manipulation program for X-windows
XDATASLICE	Two- and three-dimensional data and image display and manipulation program for X-windows

Engineering:

ABAQUS	General purpose, finite element program designed for linear and non-linear engineering analysis applications
ADINA	General purpose, finite element program for routine and advanced engineering analysis; particularly good for soil, rock and rubber composite structures
ANSYS	General purpose, finite element program for structural, electromagnetic and heat transfer calculations
BOPACE	Boeing plastics analysis capability for engines
MSC NASTRAN	General purpose, finite element program for structural, electromagnetic and heat transfer calculations
PATRAN	For use by UAB group only
(SINDA)	General purpose heat transfer program
(TRASYS)	General purpose heat transfer program

nCUBE Software

(APE)	(Animated Program Environment; graphics/animation program)
BCSLIB	(See Cray description)
EXPRESS	(Parallel operating environment and tools)
()	(an ab initio chemistry code)
IMSL	(See Cray description)
LOCAL SAMPLES	Local examples of parallel programs using the nCUBE
NCC	nCUBE FORTRAN-77, C compiler, assembler and loader
NDB	nCUBE Interactive Symbolic Parallel debugger
(TRANAIR)	(Computational fluid dynamics program)
XNC	nCUBE program loader
XTOOL	nCUBE Parallel Profiling Tools
ETool	
CTool	

Sun Software

ASNINFO	See Cray description
CRAYJOB	See Cray description
CRYPT	File encryption/decryption utility
F77	FORTRAN-77 language compiler
EMACS	GNU full-screen text editor
HELPDESK	See Cray description
NODEPRT	See Cray description

STAGE	See Cray description
X-WINDOWS	X11-R4 libraries for X-windows

VAX Software (on computers specified)

C	VAX C compiler (on ASCNEN and ASNGAT only)
CRAYJOB	See Cray description (on all VAX nodes)
ETHERNIM	Ethernet monitor (on all ASCNEN and ASNGAT only)
ETAPE	Tape handling utility (on ASNUAB only)
FORTTRAN	VAX FORTRAN-77 compiler (on all VAX nodes)
FTCOPY	Foreign tape copy/decode program (on all VAX nodes)
GMAIL	VMS mail gateway utility (on ASNUAB and ASNUAH only)
IDEAS	See Cray description (on ASNUSA only)
JNET	BITNET support/interface software (on ASNUAB and ASNUAH only)
KERMIT	Terminal emulation and file transfer software (on all VAX nodes)
LSE	VAX Language Sensitive Editor (on ASNUAH only)
NETMON	Network node monitor (on ASCNEN only)
NEWZMAT	Input routine for Gaussian and other codes (on ASNUAB only)
NODEPRT	See Cray description (on all VAX nodes)
PASCAL	VAX Pascal compiler (on ASNUAH only)
PATRAN	Pre-/post-processor for ANSYS and NASTRAN (on ASNUAB only)
STAGE	See Cray description (on all VAX nodes)
TAR	UNIX tape archive utility (on all VAX nodes)
WINTCP	Wollongong TCP/IP networking software for VAX (on all VAX nodes)
XMODEM	File transfer protocol for modem connections (on all VAX nodes)

IBM Software (on all IBM nodes unless otherwise specified)

C	C compiler (on ASNTSU only)
CRAYJOB	See Cray description
KERMIT	Terminal emulation and file transfer software
MUSIC	Multi User System for Interactive Computing (on ASNJSU only)
NODEPRT	See Cray description
PASCAL	Pascal language compiler and libraries (on ASNTSU only)
STAGE	See Cray description
TCP/IP	File transfer, remote login and mail facility (obsolete version)
VATM	SNA Communications software (on ASNTSU only)
VS/FORTTRAN	FORTTRAN language compiler and library
VTAM	SNA Communications software (on ASNJSU and ASNUNA only)

UNISYS 2200/402 COMPUTING FACILITIES

Major Hardware

- Two Instruction Processors (IP). Perform logical, arithmetic and instruction sequencing operations and is sometimes referred to as a central processing unit.
- Three Input/Output Processors (IOP) to control I/O operations between peripherals and the system.
- Two Main Storage Units (MSU) each consisting of and interface, control logic and 4 megawords of random access storage.
- One common I/O Processor (CIOP) to provide system initialization and microcode loading.

Peripheral Equipment

- Two M9270 disk subsystems with a total 14.61 gigabytes of storage.
- Two Uniservo 34 Tape Drives for 9-Track, 1600/6250 BPI.
- Four Uniservo 36 Tape Drives for 9-Track, 1600/6250 BPI.
- Two 9246 Printers (2000 links/min).
- One Distributed Communications Processor (DCP-40) with 32 Synchronous lines, two 9600 baud lines for graphics use plus 16 Asynchronous lines connected to a DEC Reverse LAT terminal server.
- One Bus-Tech Inc. Ethernet Control unit (HLC) for TCP/IP access.

Software

The software system is based on an Executive known as the 1100 Operating System. The resident 1100 system includes:

COBOL	PASCAL	FURPUR	FORTRAN
BASIC	DOC	PALS	KERMIT
ED	QLP-1100	DPS-1100	ELT
FAS	SSG	CML	SYSLIB
FLIT	MetaAssembler	SORT/MERGE	PCIOS
PDP	PMD	DMS	

Other available libraries include:

- Statistical Package for the Social Sciences (SPSSX).
- Tektronix PLOT 10 Software, TCS, AG2, IGL, and Easygraph DISSPLA graphics.
- Unisys Mathematical Subroutines (Math Pack).
- Unisys Statistical Subroutines (Stat Pack).
- International Mathematical and Statistical Library (IMSL).
- Biomedical Statistical Library (BMDP).
- Ordinary Differential Equations System (ODEPACK).
- SYSTAT, SYSGRAPH, NCAR.
- Harvard Graphics.
- Campus Software Library Grant (DEC).

A User's Guide is available in machine-readable form. A GUIDE Processor is available to users for extracting and printing material from the Guide. The Computer Services staff is available to consult with the university community on problems associated with use of the Center.

COMPUTER SERVICES SOFTWARE SUPPORT POLICY REV 1.6

Recognizing the dynamic needs and complexity of large organizational support, it is this policy's intention to provide a framework for the best information systems' support possible with our current resources and strategic perspective.

The following UAH Computer Services' supported products represent a movement toward cooperating software with more consistent organization-wide user interfaces. This software standardization facilitates cost effective support and information exchange between elements of the university.

- UNISYS OS1100 operating system, utilities and applications.
- VMS operating system, utilities and application components of the DEC Campus Site License Grant program.
- The Unix operating system.
- NOVELL NETWARE 386
- Programming language compilers including Assembly, C, C++, COBOL, FORTRAN, and Pascal.
- NCAR graphics for CRAY and VAX systems.
- DISSPLA graphics for CRAY and UNISYS 1100 systems.
- SPSSX statistics for Cray and Unisys systems.
- SYSTAT/SYGRAPH statistics for DOS environments.
- Microsoft WORD, EXCEL and POWER POINT for the DOS Windows and Macintosh environments.

Note!! Given the variety of software available on the university's diverse hardware platforms, it is recommended that the computer user community consult UAH Computer Services prior to resource acquisition to determine the compatibility and level of support available.

Software support is provided by consultants located in The Research Institute rooms M-30 and M-21. Phone assistance may be obtained by calling 895-6347 option 4 . Normal consulting hours are 8:30 A.M. to 5:00 P.M. Monday through Friday.

The University of Alabama in Huntsville acknowledges the rights of computer software developers and prohibits the copying of licensed or copyrighted software without permission from the licensing authority. Consequently, technical support for illegally acquired software products will not be provided.

Uah Network Policy

Revision 1.0

May 27, 1992

Purpose

The UAH Campus Network is a resource which is owned by, and available to, all departments on the UAH campus. Due to the nature of electronic data networking, the potential for harm to the entire network by one errant component is significant. It is important for all to understand that the network will function only if everyone follows a set of basic guidelines for network access and use. Therefore, this document on Network Policy has been established.

Definition

The UAH Campus Network consists of 500 nodes and provides inter-departmental and off-campus data communications for academic, research, and administrative applications.

The network consists of primary and secondary networking equipment. Primary networking equipment is generally those pieces of equipment that are seen by the network as a "whole", including:

- Fiber optic and ethernet cabling.
- Patch panels and premise wiring.
- Transceiver taps and cables.
- Active elements such as bridges, repeaters, and gateways.

Secondary networking equipment includes equipment that is logically on the "user" end of a bridge or gateway, such as workstations and Local Area Networks (LANs).

Rules for Use

- Primary internal network is Ethernet and supported protocols are TCP/IP and Decnet.
- Attachments to the Ethernet backbone shall be made only by UAH Computer Services personnel using previously approved components.
- All primary networking equipment will be considered to be the management responsibility of Computer Services.
- Once primary networking equipment is installed, it becomes the responsibility of Computer Services and may not be relocated by the user department.
- Internet Protocol (IP) and DECNET addresses will be assigned only by Computer Services. Those wishing an address assignment must complete the UAH Address Request Form available from Computer Services.
- Any inter-department network applications must be coordinated with Computer Services.
- Failure to comply with this network policy will result in removal of the offending equipment from the network.

Network Address Request Form Completion Instructions

Refer to the Network Address Request Form for sections of the form described herein.

CONTACT INFORMATION:

Name: The name of the actual user of the workstation or the system administrator if the machine is a multi-user platform.

Department: Department to which the machine belongs. Be explicit as possible.

Mailing Address: The Campus mailing address of the user. Include room numbers.

E-Mail Address: The electronic mailing address of the primary user or system administrator.

Phone Number: Entire campus phone number including extension.

EQUIPMENT INFORMATION:

Type of Equipment: The manufacturer, make and model of the machine. Include any model numbers.

Equipment Location: The physical location of the machine. Include site, if off campus, building, room number, and section number if applicable.

Operating system: Type of operating system in use on the machine.

Comm. Hardware: Type of interface in use to connect to the network.

Comm. Software: Type of communications software used to access network.

CONNECTION INFORMATION:

Type of connection: Check appropriate selection. Give any additional information requested based on selection (i.e. give the ethernet address or serial connection scheme used to connect to the network).

NODE NAME INFORMATION:

Internet Node Name: The name by which the machine will be identified on the network. This name can be as long as desired. If any subdomain (i.e. CS.UAH.EDU) is desired, supply the information as part of the node name.

DECNET Nodename: The decnet node name desired (max of six characters).

The number will be assigned by Computer Services personnel and the user listed in the contact information section will be notified by phone or E-mail of the assignment.

UAH Network Services
Network Address Request Form

Date: _____

SEND TO: Chris Albright,
Computer Services
Research Institute

DECNET: ASNUAH::CHRIS
INTERNET: CHRIS@UAHIS1.UAH.EDU
VOICE: (205) 895-6347

CONTACT INFORMATION

Name: _____

Department: _____

Mailing Address: _____

E-Mail Address: _____

Phone Number: _____

EQUIPMENT INFORMATION

Type of Equipment: _____

Equipment location: _____

Operating System: _____

Comm. Hardware: _____

Comm. Software: _____

CONNECTION INFORMATION

Type of connection:

Ethernet: () Ethernet Address: _____
(e.g. 00-00-00-00-00-00)

Serial: () Connected To: _____

Other: () Connection Speed: _____

Describe: _____

NODE NAME INFORMATION

Internet Nodename: _____ (.UAH.EDU)

DECNET Nodename: _____
(If applicable, 6 characters)

PROCESSING INFORMATION TO BE COMPLETED BY NETWORK SERVICES

IP ADDRESS: _____ DECNET Address: _____

Date Completed: _____

User Request Form

TO: Computer Services
Administrative Applications Manager
RI C-3

Origin of Request

Office _____

Contact Person _____

Phone # _____ Computer Account _____

Date of Request _____ Deadline Date _____

Authorized By _____

Request: Report _____ Labels _____ Screen _____ Other _____

New Program (Y/N) _____ Name of Current Program _____

Explanation of New Program/Changes:

Received by Lead _____ Date _____

Received by Programmer _____ Date _____

Completion Date _____ User Notified _____

Mailing List Update Form

Please delete my name from the Newsletter mailing list:

☐

Please add my name to the Newsletter mailing list:

☐

Please change the following information:

☐

Name:

Address:

An Affirmative Action/Equal Opportunity Institution



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Computer Services
Huntsville, Alabama 35899

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Ms. Elizabeth Pollard
Library/Acquisitions
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