



Calhoun: The NPS Institutional Archive

Information Technology and Communication Services (ITACS)Computer Center Bulletin

1992-03-05

Computer and Information Services Bulletin / 1992-03-05

Monterey, California, Naval Postgraduate School

http://hdl.handle.net/10945/52569



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943

Computer and Information Services

Bulletin

Naval Postgraduate School

March 5, 1992

Monterey, California

Dean's Corner

Here is the direction we intend to go in some of the areas for which I am responsible. Future corners will devote more space to individual parts of this strategy, and will contain more implementation details.

Library

- · Integrate department and centralized collections
- Improve periodical collection mix and reduce impact of runaway subscription inflation
- Increase access to holdings data (networking (backbone & LAN), optical)

Academic Computing

- · Enhance high performance computing capability
- Identify and address changing customer needs
- Integrate campus instructional facilities
- Support customer computing (micro, mini, main, super, secure)

Administrative Computing

- Standardize software, forms, data definition and user applications
- Improve training for end-users on standard software tools

Expand department ownership of data & systems

Standardize and expand LAN support

Network Management

- · Form organization to manage campus network
- · Standardize on TCP/IP and move toward OSI
- · Extend net to entire campus; go to optical fiber
- Support Novell and Banyan LANs and move toward single (OSI) LAN
- Add WAN connectivity (Academy, Libraries, Research Facilities, Admin)

Security

- Add adequate secure/classified computing
- Make risk assessment regulation compliance easier for end-user

Life Cycle Management (LCM)

- Reduce # of AISs, keeping local flexibility (<\$1M)
- · Improve documentation for user/manager
- · Improve Info. Technology (IT) procurement

ADP Budget Planning and Execution

- · Link LCM, alloc., & IT budget
- Develop institutional model for decision support
- Retain local control over IT resources vs. DoD consolidation
- Coordinate IT issues committees
- Budget allocations: include maintenance of H/W, S/W purchases

INSIDE

Dean's Corne	r.											1
Computer Ce	nte	er										2
Mainframe												
Netwking &	C	0	m	ır	n	u	n	ic	a	ti	01	ns4
Miscellaneo	us											7
Management	Ini	fo		5	y	st	e	п	15	;		9
ADP Security												11
Library												

added and later, NFS (Network File System) access will be available from any system on the campus backbone network. In addition to its use as a network-attached remote mass storage system the ACS can be used for back-ups of the Amdahl and other systems.

Doug Williams, Director

Batch System Usage

The following is a summary of usage for selected MVS batch processor programs run in calendar year 1991. The MVS accounting package records each instance a program is called in a job step and the cpu time used.

Some MVS jobs such as SAS are single step jobs. Others such as VSF2CLG are multi-step jobs. VSF2CLG contains three steps. Each time it is called, the count and cpu totals would be increased for FORTVS2 (VS Fortran 2 compile step), IEWL (linkage editor step), and GO (execution step).

Total Usage

Total usage counts the number of job steps executed and the total time attributed to the steps. This total excludes cputime used for printing on the 3800 page printer.

	1991	1991	L.		
	Steps	CPU	Hours	1990	Steps
Total	1,206,732	5	,470	1,0	19,523

Program Execution

The following steps relate to the execution phase of many MVS jobs. The GO step executes the user's compiled code. The GO step is common to programs written in Fortran, PL/1, VS COBOL, DSL, Simscript, and others. The linkage editor (IEWL) runs during the LKED step. The LOADER functions like the GO step for procedures which do not require the linkage editor.

	1991	1991	
	Steps	CPU Hours	1990 Steps
IEWL	102,839	36.8	100,052
GO	97,240	3,035.0	93,343
LOADER	4,280	46.3	3,490

Language Compilers

Much of the PL/1 and VS COBOL use comes from administrative and tenant organizations. VS Fortran Release 2 replaced Release 1.

	1991 Steps	1991 CPU Hours	1990 Steps
PL/1	76,366	70.2	66,948
VS Fortran-2	31,296	36.0	17,388
VS COBOL	1,953	0.6	1,225
Assembler	377	0.6	751
Pascal VS	0	0.0	11
VS Fortran-1	0	0.0	20,109

Statistical Packages

SAS and SPSSX are the well-known general purpose statistical packages. Both are also available on VM/CMS. In addition to academic use, SAS is heavily used by the Computer Center's accounting system and by tenant organizations. BMDP, the forerunner of comprehensive statistical packages, was removed from the mainframe due to declining use.

	1991	1991	
	Steps	CPU Hours	1990 Steps
SAS	92,410	883.0	78,118
SPSSX	1,791	82.0	664
BMDP	138	0.7	487

Simulation & Specialty Languages

	1991	1991	
	Steps	CPU Hours	1990 Steps
CSMP	508	1.9	0
DSL	1	0.0	123
Simscript	1	0.0	1

Utility Programs

SYNCSORT is a commercial sorting package. TAPE is a tape information program from Princeton University.

	1991	1991	1990
	Steps	CPU Hours	Steps
SYNCSORT	93,681	146.9	61,991
TAPE	1,942	1.5	1,536

The DDN SECURITY BULLETIN is distributed by the DDN SCC (Security Coordination Center) under DISA contract as a means of communicating information on network and host security exposures, fixes, and concerns to security and management personnel at DDN facilities....

For some time now, the SCC has produced daily reports on TAC activity and suspected TAC Security Incidents. It has only been recently, however, that the SCC has been tasked by the DDN Network Security Officer (NSO) to perform follow-up on these suspected TAC Security Incidents with the user's Host Administrator (HA).... The HA's are being asked to investigate these suspected security incidents and respond back to the SCC with the results of their inquiries. If a breach of DDN/TAC security has occurred, that user's TAC card will be deactivated. If the HA fails to respond, it will also cause that user's TAC card to be deactivated. The following acts are considered a breach of DDN/TAC security.

- Allowing your TAC access code to be used by anyone except yourself.
- Imbedding TAC access codes in software.
- Including TAC access codes in login files or scripts.
- · Logging into a TAC for someone else.

The TAC access codes are to be manually entered every time a user logs into the TAC. HA's can request TAC cards for anyone who has a genuine need to utilize the network. HA's can also request guest TAC cards for temporary users and for users who are waiting for their own TAC cards to arrive.... "

Caroline Miller

Internet Bulletin Boards

Making an Inter-Network Connection
The following article is from Jeff Marraccini, MichNet liaison, Oakland University,
<USERW02V at UMICHUM>

An increasingly popular phenomenon on the Internet is computer-based communication. Much of this communication is done over the many bulletin

board systems (BBSs) now available on the Internet. Use of a BBS fosters conversations and information sharing between users.

Traditional BBSs were systems run by individuals on home computers or perhaps on a work machine. Typically the BBS user would dial the telephone number of the BBS using a modem. Unfortunately, most BBS systems only had one incoming phone line with many users competing against busy signals to get through.

Now, some BBSs are mega-BBS systems, set up with many phone lines, or more recently, Internet connections to allow more people to connect simultaneously. Also, with many users connecting at the same time, applications such as real-time communications become feasible. Electronic mail, group discussions, and store houses of public domain software are other popular uses of these giant bulletin board systems.

Several hosts on the Internet have made public-access BBS systems available. Most are accessed using the *telnet* command available on Internet hosts. After connecting to the BBS host, most systems use a special public access account such as bbs, cosy, or new to allow new users to log onto the BBS. Most BBS systems create accounts for users immediately, but some systems require some form of authentication. The authentication may be a voice phone call or a written letter to the system operator of the BBS. A list of several well-known Internet BBS systems appears at the end of this article.

Internet BBS systems are primarily a way for Internet users to discuss recreational topics. However, they can be (and often are) used for serious work. For instance, a user who has a question about a computer application may be able to get the answer at any time of the day or night from someone logged into a BBS system. Also, most BBS systems make available collections of useful utilities, directories of public access hosts, and computer documentation.

Following is a sample of a typical BBS session, which shows some of the services and options

Some Popular Internet BBS

Name	Address	Login as
fncom1.cwru.edu	129.22.8.43	new
mars.ee.msstate.edu	130.18.64.3	bbs
quartz.rutgers.edu	128.6.4.8	bbs
samba.acs.unc.edu	128.109.157.30	bbs
uafcseg.uark.edu	130.184.64.202	bbs
For a complete list of	Internet Bulletin	Boards,

For a complete list of Internet Bulletin Boards send electronic mail to the author at

jeff at vela.acs.oakland.edu
This article courtesy of the articles database of
CCNEWS, the Electronic Forum for Campus Computing Newsletter Editors, a BITNET-based service of EDUCOM.

Caroline Miller

Mac Freeware Available

A free Macintosh full text retrieval program is available for anonymous ftp. Appropriately called FreeText, it is on the server ftp.apple.com in the alug directory. The name of the file is

FreeText1.02.hqx

It's a self-extracting compressed set of HyperCard stacks. The author is Mark Zimmermann,

science at oasys.dt.navy.mil

This information was distributed by Steve Cisler <sac@apple.com>, of the Apple Library, on the Public-Access Computer Systems Forum <PACS-L at UHUPVM1> on BITNET.

Information on the Internet Protocols

NPS mainframe users have access to the Internet via MILNET (Defense Data Network, or DDN) and BARRNet (an NSFNet regional), by issuing the command DDNLINK.

Selected RFCs (Request for Comments), the Internet standards, have been made available on the RFCS disk that is attached when you DDNLINK. You may be interested in RFC1206, the Internet overview, or RFC1118, the Hitchhikers Guide to the Internet. RFC1217, a humorous look at military requirements for ultra-reliable systems, is entitled "Memo from the Consortium for Slow Commotion Research (CSCR)". It proves that not all RFCs are

technical and tedious.

RFCINDEX TXT is an index to all RFCs available from the Network Information Center in Chantilly, VA. Those RFCs not available locally may be FTPed from NIC.DDN.MIL.

Also on the RFCS disk is a file named TCPINTRO LISTING, an introduction to the Internet networking protocols written by Charles L. Hedrick, of Rutgers University. Although the paper is somewhat dated (1988), it serves as a good introduction or review of the facilities available on the network.

If you are just getting started in network use, you will want to look at the various informational files available when you are logged onto the mainframe. You do not have to be in a networking or telecommunications class to find network services of interest.

Caroline Miller

Miscellaneous

Multi-tasking for your PC?

Peter Landstreet, of York University, Toronto, in response to a Bitnet discussion about multi-tasking, gave an excellent overview of what it is and what it's good for. He says:

It's important to distinguish multitasking (in general) from Windows (in particular). Windows happens to be the best-known multitasker, but it's a graphical one, with all the positives and negatives that implies (snazzy but slow and disk- and RAM-hungry, for example). DESQview is the next best known (and it's non-graphical, with all that implies, though it can handle graphics when wanted). There are others.

It's hard to appreciate the value of multitasking until you've done it. I certainly didn't, but now I always have a minimum of three different programs running simultaneously, and for special needs sometimes five or six. Some examples of the usefulness:

Have your communications program (e.g. Kermit) running and connected to the mainframe while using WP; a "background beep" announces

Hoffler have been developing, over the past several years, a refrigeration system working without freon, using sound waves to move heat. Sponsors like its great reliability for near-term applications in space, and have backed a Get Away Special, launched in January's space shuttle. The experiment has to be completely self-contained, and in an ECE class he's been taking, Jim wrote the firmware that tells everything what to do, and keeps the records.

Watching the launch was clearly quite an experience—he says you feel the sound, more than hear it. The subsonics are what carry to the observation area.

Larry Frazier

Management Information Systems

WELCOME ABOARD. Yvette Lewis has joined us as a network administrator. Yvette was previously with the Computer Center's Micro Lab and has been on loan to this department since October. She will be involved in expanding our network services to the Academic Quadrangle and introducing new users to the various service and products the network provides.

New Developments

Application Support

Lloyd Nolan has been putting together the analysis and design for an overhaul of the Admissions Office automated systems. This area has been untouched for a number of years and is seriously outdated. At the same time Kirin McInnis has been looking at the requirements for Curricular Offices. Our intention is to integrate these systems with

those of the Registrar's Office to produce a more efficient and productive Student and Academic Records System (STARS).

Lloyd has also been working with Tracy Hammond, Dean Elster and Ted Calhoon on ways to improve the forecasting of student enrollments.

Kirin and Rhoda Lynch are providing data processing support for Prof. Bob Read, chairman of the Teacher of the Year committee (the Scheiflin Award).

<u>Judy Harr</u> and Rhoda have begun implementation of the local memorandum accounting system for reimbursable research accounts. When completed this system will provide the staff and faculty better and more timely reporting of expenses related to those accounts. Judy and Rhoda are also working on an automated system to inventory major plant property.

<u>Denise Hutton</u> is initiating a project to document the information system requirements of the School in addition to those mentioned above. She will investigate and document the "hidden" backlog of information requirements. Denise will be interviewing a number of managers over the next six weeks.

Administrative Network

Our project to expand the administrative network to the academic quadrangle is well underway. Our initial objective is to provide access to the network for all academic department chairmen and curricular officers (and their immediate support staff). Joe Lopiccolo and Brad Polk (on loan from the Learning Resource Center) have been working hard to provide the cable plant and connections to the campus backbone. Lucille Clark and all the administrators have been installing the necessary software and providing new users with an introduction to the network and its facilities.

Recent Additions: Many people in the following areas have been recently added to the Administrative Network (mail users can check the list of users for individual names):

Reps, by arrangement)

Ready Supply Catalog (any user, by arrangement)

Naval Message Formatting (any user, by arrangement)

NPS Electronic Phone Book (all users)

VERSA-FORM electronic form filler (all users)

Civilian Personnel - position descriptions and form 52's (in development)

Automated OPTAR reconciliation (in development)

Shared CD-ROM Reference material (in development)

Shared FAX facilities (in development)
Bulletin Board System (in development)

Call For New Users

If you presently have an MS-DOS (or Apple Mac-Intosh) microcomputer which is attached to a departmental Local Area Network and/or the campus backbone and wish to take advantage of any of the administrative network facilities we will be happy to provide the necessary software and installation assistance on a "time-available" basis. If you presently lack either a microcomputer or the necessary network connection devices we would like to hear from you for planning purposes. In either case, contact any of the Network Administrators at ext 2794/2195 or drop us a note (code 53, Herrmann Hall, East Wing, Rm. 202).

Michael P. Spencer

ADP Security

COMPUTER SECURITY ADVISORY

The School has received an alert from the Naval Electronics Security Center (NAVELEXSECCEN, Washington, D.C.) which reads as follows:

"The Naval Computer Incident Response Team

(NAVCIRT) has received numerous reports of a dangerous computer virus infecting Department of the Navy (DoN) computers and is advising all activities to take adequate precautions".

The virus program, called MICHELANGELO, will attack IBM-compatible PC hard-drives if booted and/or used on <u>6 March</u> (Michelangelo's birthday), with the potential for data loss. Reports also indicate that, once installed, the virus will infect any floppy disk the user accesses in the "A:" Drive. ADPSSOs and TASOs should take appropriate steps to protect their equipment from virus attacks, and are urged to install anti-viral software on systems under their cognizance. For further information contact the ADP Security Officer (ext. 2469).

Jeff Franklin

Virus Software

NPS now has a site license for the McAfee antivirus software for IBM-compatible micro-computers. This software is available at no cost to all departments at NPS. ADP System Security Officers (ADPSSOs) should contact the ADP Security Officer (Jeff Franklin) at ext. 2469 to arrange to be placed on distribution.

ADP Security Advisory

Unauthorized Product Substitution Advisory

On 8 January 1992, NPS received a report from the Naval Investigative Service (NIS) advising of suspected unauthorized product substitution concerning reel-to-reel magnetic tapes which have been sold to federal agencies by a number of commercial vendors. It has been determined that these tapes are in fact <u>used</u> media which have been refurbished and are being sold as new, 100% error free. At least one instance of serious disruption of operations caused by use of these tapes has been documented. The brand names of the tapes in question are as follows:

GUARDIAN GUARDIAN XL MAXIM RENAISSANCE