

Visit to RADC --User Development Support

Jim Bair (User Development at SRI/ARC) will be visiting RADC/IS on the 14th and 15th of March (Thurs and Fri) to assist in the AKW project by providing DNLS, TNLS, and DEX Courses and help/refresher support to those who request it. Let Duane Stone know if you have any specific requests before Thurs.

1

Visit to RADC --User Development Support

(J22364) 9-MAR-74 14:58; Title: Author(s): James H. Bair/JHB;  
Distribution: /RADC JCN(fyi) DCE(fyi); Sub-Collections: SRI-ARC RADC;  
Clerk: JHB;

Userguides directory

Does anyone out there ever have occasion to create or write on files in Userguides directory? If so, please read (JJOURNAL, 22363, 1:w) first.

JMB 9-MAR-74 17:12 22365

Userguides directory

(J22365) 9-MAR-74 17:12; Title: Author(s): Jeanne M. Beck/JMB ;  
Distribution: /SRI-ARC NDM (please ignore this message) KIRK (please  
ignore this message) DVN (please ignore this message) ; Sub-Collections:  
SRI-ARC; Clerk: JMB ;

UDEF Final

I am a little confused by your note to me. I agree my comments would have better been addressed to UDEF and was hesitant about sending them to the whole group, but I honestly thought you wanted to widen the opportunity for feedback when you submitted your draft to USING. (I had asked several USING members for input earlier, but they were too busy with the other reports.)

1

I was not that dissatisfied with the report at all and really apologize if I gave you that impression. In fact I thought the meat of it presented a pretty good picture of Arpanet users from several points of view.

2

My position now is the same as Wayne's, and I certainly don't want to redo the report. You had asked for comments from all in an open forum, and I sent suggestions to that forum that in my view I thought would improve or clarify the report. Feel free to do with them what you will, including filing in the trashcan or whatever...no problem.

3

If you want to publish your draft as the USING Note that is fine with me. We agree on most of it, and could spend our time to better advantage now on the more detailed plan for future work you outlined.

4

UDEF Final

(J22366) 11-MAR-74 11:44; Title: Author(s): Elizabeth J. (Jake)  
Feinler/JAKE; Distribution: /NJN; Sub-Collections: SRI-ARC; Clerk: JAKE;  
Origin: <FEINLER>NEIGUS.NLS;2, 11-MAR-74 11:20 JAKE ;

New NLS for Here and Office-1; New Output Processor

11-MAR-74 1155-PDT LEHTMAN: New NLS for Here and Office One; New Output Processor

cc: hopper, white, irby, wallace  
Received 11-MAR-74 11:55:48

1

I would like to bring up a new NLS and a new Output processor both here and at Office-1 tonight. I have checked out as much of the changes I put in as I could and they seem to work.

1a

Control-U followed by a number is no longer used to get multiple spaces: rather literal spaces are put out by both Output Quickprint and Output Processor. This is needed because most TENEXs do not support that feature-- and neither does Office-1

1b

Also included in the new system are the Control-O bug fixes which Smokey and I found. They are reasonably important for other subsystems and processors, too, and also speed up the Output Processor call mechanism while permitting SIGNALS to work.

1c

If any of you know of a reason for not bringing the system up, please let me know. I'll bring them up here and Dave can get them over to Office-1 at his leisure.

1d

Restored directories of <XPORGEN> and <PORGEN> (which includes the OP files as of last December with my bug fixes, but not the changes Smokey and Elizabeth have been working on) are present. I have a list of the files which should be considered valid. Please consult this list to make sure the correct versions are present before changing the OP. We had some trouble last week because some files had been archived and the wrong versions brought back. Everything in the <XPORGEN> and <PORGEN> directories as of last Friday appears to be valid. When making any changes, please set the DON'T ARCHIVE bits.

1e

Thanks, HGL

1f

HGL 11-MAR-74 12:38 22367

New NLS for Here and Office-1; New Output Processor

(J22367) 11-MAR-74 12:38; Title: Author(s): Harvey G. Lehtman/HGL;  
Distribution: /JDH JEW EKM CHI; Sub-Collections: SRI-ARC; Clerk: HGL;



Netbagripes and Netcomments

I wasn't aware that such idents existed. Did you send out a memo?  
If so I missed it. Or are you asking me why we haven't set them up  
yet? Not sure what your comment means, Dave. Fill me in. Jake

1

JAKE 11-MAR-74 13:47 22368

Netbagripes and Netcomments

(J22368) 11-MAR-74 13:47; Title: Author(s): Elizabeth J. (Jake)  
Feinler/JAKE; Distribution: /DHC; Sub-Collections: SRI-ARC; Clerk: JAKE;

hostaddr master sequential file

Jake ... could you tell me whether (or when) the HOSTADDR-MASTER file will be ready data wise to be run through Diane's program and made available at OFFICE-1 as a sequential ASCII text file? Is there a program change required to ignore the hosts for which we have no address ? ... Mike

1

MDK 11-MAR-74 14:04 22369

hostaddr master sequential file

(J22369) 11-MAR-74 14:04; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /JAKE; Sub-Collections: SRI-ARC; Clerk: MDK;

Information for New ARPA Users of Office-1  
 (from <ncrton>note-arpa.txt at Office-1)

11-MAR-74 18:30 (3 pages)

Welcome to OFFICE-1. Your new directory has been established at this facility at the request of Dr. Licklider of the ARPA IPT Office in order to provide system backup for online text-preparation and message-sending activities.

For backup purposes for ARPA users of other TENEX's, the following subsystems are available at OFFICE-1:

SNDMSG  
 READMAIL  
 TECC  
 RD

This system may be accessed by ARPA users by NET connection through the TYMSHARE-TIP (host 43 from TIP's, 53 through Telnet).

OFFICE-1 provides users with computer access to the PDP-10 TENEX system operated by Tymshare, Inc., Cupertino, California, (for SRI-ARC) 16 hours a day, 8am to 12 midnight EST, Monday through Saturday. The system may be available at other times, but without operator coverage.

For operator assistance, link to OPER or MARTINEZ at OFFICE-1 or telephone (408) 996-2770.

For less-urgent comments on service problems, bugs, suggestions, or positive reactions (if you can't resist),

use SNDMSG to user: FEEDBACK (at Office-1).

In order to assure appropriate login access to users from subscribing organizations, we are running under a "GROUP ALLOCATION SYSTEM".

This system guarantees users login access according to the proportion of overall funding their organizations have provided. The ARPA allocation group (other than NIC-user, ENERGY and SEISMIC groups) is guaranteed 4 logged-in jobs all 16 hours each day.

When other groups are not using their full allocations, additional ARPA users (and other users) may login as "off-quota". If users from the other groups subsequently login to fill their own allocations, the most recently logged in off-quota users will be logged off by the system (one-by-one) after a 5-minute warning message to each.

Information for New ARPA Users of Office-1  
 (from <ncrton>note-arpa.txt at Office-1)

In addition, up to 2 users may at all times "elog" in for periods up to 7 minutes for quick message reading and sending sessions. This is accomplished by typing "elog username password account CR".

5c

Users may type a CR in place of their account number. The system will use a default number in that case. The default account number for ARPA users is: 80

5d

If you wish to see who from your ARPA allocation group is logged in, use the GROUPSTAT command at the TENEX exec level.

5e

Another system feature you should be aware of is "autologout". Jobs that have no terminal input or system output in a 10 minute period will be notified "you will be logged out in 5 minutes if you continue to do nothing." If you then type something before the 5 minutes pass, your job will not be logged off until further 10 minutes of inactivity. This arrangement has worked well to ensure that only active jobs are logged in, resulting in better utilization of the allocated job slots.

5f

The following directories are in the ARPA allocation group - allocated 4 slots 16 hours:

6

ARPA-PM	DUBOIS	JOAN	O'SULLIVAN	RYOUNG
BANGERT	EDWARDS	KAHN	PAM	STICKLEY
BEARD	FAVOR	KIBLER	PARISI	STO
BLACK	FIELDS	KRESA	PAULA	TACH
BLUE	FLO	GLAWRENCE	PCLARK	TAO
CARLSTROM	FRYKLUND	LICKLIDER	PERRY	TTO
CHAPMAN	GOERING	LUKASIK	RMOORE	VANREUTH
CROCKER	HARTSELL	MCLINDON	ROWENA	YEE
DORIS	HELGA	NIEDENFUHR	RUBY	

6a

The following directories are in the SEISMIC allocation group:

7

DCLEMENTS	HILDA	LACOSS	ORSINI	ROMNEY	RUSSELL
WILLIS					

7a

-----  
 --

8

This facility was added to the ARPANET on January 18, 1974, by the Augmentation Research Center (ARC) of Stanford Research Institute primarily for the purpose of introducing our online system "NLS" to a broader community of subscribing users. ARPA is a major initial subscriber for the services we are offering and has been our primary

Information for New ARPA Users of Office-1  
 (from <ncrton>note-arpa.txt at Office-1)

sponsor in the development of NLS and the methodology related to its use. 9

Organizations initially subscribing to our services (and people you probably will see on the system) are: 10

ARPA, for use by special groups of ARPA's selection 10a

One such group is the set of NIC users who have previously been served through the SRI-ARC machine. Their on-line NIC service is now being provided from OFFICE-1, (over 50 directories, many with several users each). 10a1

Another user group is the set of ARPA users who rely primarily on USC-ISI and BBN-TENEX for message service (SNDMSG, READMAIL, TECO, and RD). Over 50 directories have been established at OFFICE-1 for backup purposes and also as a step toward the gradual introduction of ARPA offices to NLS, the SRI-ARC online system. 10a2

Other ARPA-related activities starting to use this facility are: 10a3

the ARPA/SRI Defense ENERGY Information System (DEIS) design effort and 10a3a

the SEISMIC Data Management System Development (SDMS) effort. 10a3b

Rome Air Development Center (RADC) 10b

Over 25 users concentrating on management system use and document production with the goal of matching the capabilities of NLS and its related methodologies to Air Force "knowledge-worker" needs. 10b1

Bell Canada 10c

About 10 users concentrating on online communications and document production with the goal of gaining first-hand experience with these new techniques and assessing the possibilities for and impacts on communications services that may be provided in the future. 10c1

Several other organizations, mostly U.S. Government, are now seriously considering subscribing to the service. 11

JCN 12-MAR-74 17:58 22370

Information for New ARPA Users of Office-1  
(from <norton>note-arpa.txt at Office-1)

(J22370) 12-MAR-74 17:58; Title: Author(s): James C. Norton/JCN ;  
Distribution: /jsp ckm dce rww jcn pr jhb wrf jcp jdh mdk ;  
Sub-Collections: SRI-ARC; Clerk: JCN ;  
Origin: <NORTON>ARPANOTE.NLS;1, 11-MAR-74 18:56 JCN ;



New ARPA Directories at OFFICE-1  
 Based on (30181,) and C. McLindon's Request of 3/7/74

In response to John Perry's request (30181,1:whny) for directories at Office-1 for backup for ARPA-office users of USC-ISI and BBN-TENEX, we have set up 51 new directories. 1

Connie McLindon will notify the new users of their directories and initial password settings. They may then, with her help, change their passwords as they wish using the Change Password command. 1a

The following details were discussed with John Perry and Connie McLindon as the new directories were set up. They are entered here for record purposes. 2

As new ARPA users login to Office-1, they will receive a sndmsg of welcome, pointing to <norton>note-arpa.txt at Office-1 for further information. For record purposes, that file is Journal item: (22370,1:whyn) 2a

Jeff Peters has set up the following directories today at OFFICE-1 in the ARPA allocation group - allocated 4 slots 16 hours each day - as indicated below: 3

DIRECTORY	ident	pages
<NIEDENFUHR>	fwn	
<DORIS>	dps	
<GOERING>	mmg	
<PARISI> ?		

[already existing:

<LUKASIK>	sjl2	
<TACH>	ajt	no changes needed]

<BEARD>	rwb	
<EDWARDS>	fie	300
<BANGERT>	wab	
<HELGA>	? hly ?	
<FAVOR>	bjf	
<ARPA-PM>		
<YEE>	rky	

[already existing:

<MCLINDON>	ckm	no changes needed]
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<KIBLER>	ak	
<GLAWRENCE>	gl	

New ARPA Directories at OFFICE-1  
 Based on (30181,) and C. McLindon's Request of 3/7/74

<O'SULLIVAN>	to		
<RYOUNG>	ray2		7
<LICKLIDER>	jcrl	300	
<BLUE>	agb	300	
<CROCKER>	sdc2	300	
<KAHN>	rek2	300	
<PERRY>	jsp	300	
<FIELDS>	cf	300	
<CARLSTROM>	dlc2	300	
<ROWENA>	rem4	300	
<PAM>	pjk	300	
<PAULA>	pk2	300	8
<DUBOIS>	rd2		9
<STICKLEY>	cms		
<VANREUTH>	ecv		
<RUBY>	sr5		
<JOAN>	jls		10
<HARTSELL>	cwh		
<STO>			
<FLO>			
<PCLARK>	pc		11
<KRESA>	kk2		
<CHAPMAN>	rmc		
<TTO>			
<RMOORE>	ram3		12
<FRYKLUND>	vcf		
<BLACK>	rab4		
<TAO>			13

The following new directories are in the new SEISMIC allocation group - allocated 1 slot 16 hours: 14

DIRECTORY	ident	pages	
<WILLIS>	ehw		14a
<ROMNEY>	cfr		
<RUSSELL>	dcr2	300	
<HILDA>	hcb	300	
<ORSINI>	nao		
<DCLEMENTS>	dhc2		14b

New ARPA Directories at OFFICE-1

Based on (30181,) and C. McLindon's Request of 3/7/74

<LACOSS>

rtl

(he is with LL-ANTS)

14c

New ARPA Directories at OFFICE-1  
Based on (30181,) and C. McLindon's Request of 3/7/74

Parameters used:

15

We set default file protection codes for all new ARPA-user directories to: 770000.

15a

All of the following directories belong to the ARPA allocation group--except Lukasik and Tachmindji, who remain in a special allocation group permitting them to login at any time. Future refinements to the group allocation system will make this a more equitable arrangement for other subscribing organizations, but it appears workable for now.

15b

The ARPA allocation group has an allocation of 4 slots all 16 hours each day.

15b1

There is also a new ALLOCATION group set up: SEISMIC with an allocation of 1 slot all 16 hours each day.

15c

We are not instituting special TENEX directory- or user- (as opposed to allocation-) groups for ARPA at this time.

15d

IDENTS for the new directories are as indicated after the directory name. Where ? is shown, we used: arpa and will correct later. Users will not be asked for idents at login.

15e

Each new directory has a disk page allocation of 200 unless otherwise noted next to ident.

15f

New ARPA Directories at OFFICE-1

Based on (30181,) and C. McLindon's Request of 3/7/74

(J22371) 12-MAR-74 18:02; Title: Author(s): James C. Norton/JCN ;  
Distribution: /jsp ckm dce rww jcn pr jhb wrf jcp jdj mdk ;  
Sub-Collections: SRI-ARC; Clerk: JCN ;  
Origin: <NCRTON>ARPASETUP.NLS;1, 12-MAR-74 18:01 JCN ;

Sndmsg Introduction for New ARPA Users of Office-1

This item contains the text of a sndmsg sent 3/12/74 to all new ARPA users of Office-1, entered here for the record

Sndmsg Introduction for New ARPA Users of Office-1

Welcome to OFFICE-1. Your new directory has been established at this facility in order to provide you with system backup for online text-preparation and message-sending activities. The following subsystems are available for this purpose at OFFICE-1:

SNDMSG READMAIL TECO RD

If you wish additional information about your status, some system features that are unique to OFFICE-1, and who this facility serves, use the "type" command at the exec level. You type (including the word "type"):

TYPE SP <NORTON>NOTE-ARPA.TXT CR

(For newer users: SP means type a space, CR means type a carriage return. To STOP the typing, if it seems too long, type a control-C -- the file is over 2 pages )

You should contact Connie McLindon at ARPA if you need further help getting started.

Good luck. Jim Norton, SRI-ARC for OFFICE-1

JCN 12-MAR-74 18:11 22372

Sndmsg Introduction for New ARPA Users of Office-1

(J22372) 12-MAR-74 18:11; Title: Author(s): James C. Norton/JCN ;  
Distribution: /jsp ckm jhb ; Sub-Collections: SRI-ARC; Clerk: JCN ;  
Origin: <NORTON>INTRO.NLS;1, 12-MAR-74 18:09 JCN ;



Feedback Meeting Postponed

The feedback meeting scheduled for tomorrow morning will be postponed again since not everyone who is involved will be able to attend. In the next day or two, the procedures for handling ARC feedback will be journalized for your information. Comments are welcome.

1

SRL 11-MAR-74 17:25 22373

Feedback Meeting Postponed

(J22373) 11-MAR-74 17:25; Title: Author(s): Susan R. Lee/SRL;  
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: SRL;

RADC trip

Paul, I contacted Duane Stone and it is all set for me to visit him next Monday, tuesday, and Wednesday (if necessary ). Will fly out Monday to Utica. What is the latest thinking re contacting, JEan Iseli, Deis people, Bell Tel., CNR? I am beginning to formulate various options in which an organization may use parts of NLS. Robert..

1

RLL 12-MAR-74 08:27 22375

RADC trip

(J22375) 12-MAR-74 08:27; Title: Author(s): Robert N.  
Lieberman/RLL; Distribution: /PR; Sub-Collections: SRI-ARC; Clerk: RLL;

hardcopy xdoc documents

is there a command to put info about hardcopy xdoc documents into the journal?

hardcopy xdoc documents

Charles/Dave ...

1

Kirk reminded me that there used to be an "XDOC" command in NLS that captured information about hardcopy xdoc documents.

1a

He also said he thought that Charles was upgrading that to be a "HARDCOPY" command. Could either of you tell me the specs for those commands?

1b

I'd like to get the information about hardcopy documents into the Journal system. Not the documents themselves, of course, just the pertinent data about them.

1c

(That makes so much sense, I don't know why it hasn't been done already, unless as Kirk says JBN was against it on her "philosophical" grounds.)

1d

... Mike

1e

MDK 12-MAR-74 08:47 22376

hardcopy xdoc documents

(J22376) 12-MAR-74 08:47; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /CHI JDH KIRK; Sub-Collections: SRI-ARC; Clerk: MDK;

Online (NLS) address for Luther

Tom,

Can you tell me what the correct online address for David Luther is??

I.e. to what directory should his online journal mail be delivered ?

Thank you.

Marcia



MLK 12-MAR-74 09:03 22377

Online (NLS) address for Luther

(J22377) 12-MAR-74 09:03; Title: Author(s): Marcia Lynn Keeney/MLK;  
Distribution: /TFL; Sub-Collections: SRI-ARC; Clerk: MLK;

## Possible site for the ARPANET

Gregory Marks on the Computer Policy Committee, Univ. of Michigan (address: Rm 3302 City Center Bldg., Box 1248, U. of Mich., Ann Arbor 48106) called about information on resources on the Arpanet. He is investigating whether U. Mich (which has several ARPA contracts) should be on the Network. I sent him an Arpanet directory, Nic 11681, Nic 12324 (general net papers) and two of Doug's papers. I also referred him to Dr. Pelz from U. Mich who was here a week ago (and is located a few doors away from Marks ) and to you for further discussion.

1

JAKE 12-MAR-74 11:00 22378

Possible site for the ARPANET

(J22378) 12-MAR-74 11:00; Title: Author(s): Elizabeth J. (Jake)  
Feinler/JAKE; Distribution: /JI DCE(for your information) JCN(for your  
information); Sub-Collections: SRI-ARC; Clerk: JAKE;

hostaddr stuff

Jake ...

The program to make the sequential text file of hostnames has been modified to exclude those hosts for which the host-addr field is not numeric.

The program has also been modified so that you can type in the names of the input and output files if you want either input or output to be different from the defaults.

If you type CA when asked for OUTPUT file, default is <NETINFO>HOSTS; similarly, the INPUT default is <FEINLER>HOSTADDR-MASTER.

The program is in <KUDLICK>HOSTS

Good luck. ... Mike

MDK 13-MAR-74 08:59 22380

hostaddr stuff

(J22380) 13-MAR-74 08:59; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /JAKE; Sub-Collections: SRI-ARC; Clerk: MDK;

## TEST OF FORMAT

Network users may send mail to individuals and to groups, input as messages or entire files, through the Network Journal, using SNDMSG or their site's mail system. The mail is converted at NIC into NLS files, journalized, and sent to specified recipients. Short messages may be received as messages, longer ones as citations to files which may be retrieved immediately, and also at any later date, by using FTP. Mail sent to NIC with a "/" in the user-name field invokes the NIC Journal.

## SENDING THE MESSAGE OR FILE BY SNDMSG

Construct user field with slash and NIC idents:

[Users:] sender ident/addressee ident(s)@NIC

e.g. JEW/DHC MAP@NIC. To send to a group, use group ident, e.g. JEW/NLG@NIC. To combine Journal SNDMSG with SNDMSG to others, add others' Network addresses after commas, e.g. JEW/DHC@NIC, PRATT@ISI. See ARPANET Directory for NIC idents and Network addresses.

[@] SNDMSG <CR>

[Type ? for help]

[Users:] JEW/NGG DHC@NIC, PRATT@ISI <CR>

[Subject:] Title of Message <CR>

[Message (? for help):] Text of message ...

Note: ↑B allows insertion of a sequential file as the message or at any point in the text of the message:

↑B [(Insert file:)] <directory>file <ALT> [ext ...EOF]

<↑Z>

[jew/ngg dhc@nic -- ok]

[pratt@isi -- ok]

When using SNDMSG through TELNET, change TELNET escape character, to ↑Q for example, allowing ↑Z to be used for end-of-message.

## TEST OF FORMAT

## RETRIEVING THE FILE FROM NETWORK JOURNAL

Substitute the citation received, for example <GJOURNAL>21695, for "<journal>number" and supply a "file" name in the following:

```
[@] FTP <CR>
[HOST FTP User process x.xx.x]
[*] CONN <SP> NIC <CR>
[ Connection opened]
[*< OFFICE-1 FTP Server x.xx.x - at DAY DATE TIME]
[*] LOG <SP> ANONYMOUS <SP> NIC <CR>
[*] GET <SP> <journal>number.NLS;xnls <CR>
[ to local file] <dir>file <CR> [New file] <CR>
[< IMAGE retrieve of <journal>number.NLS; started]
[< transfer completed]
[*] DISC <CR>
[*] QUIT <CR>

[@] COP <ALT> [<File list>] file <ALT> [<TO>] LPT: <CR> [OK] <CR>
```

## TEST OF FORMAT

## SENDING BY TELNET, FTP, OR OTHER MAIL SYSTEM

It is not possible to give a generalized scenario for use with all local mail systems.

The general procedure, to be applied to the local mail system is to supply:

"NIC" as the host name, and

Sender's NIC ident / Addressee's NIC ident as user name

## TELNET Example:

[ @ ] TELNET <CR>

[ User Telnet x.x DATE .... ]

[ # ] NIC <SP> FTP <CR> [ is complete.# ]

MAIL <SP> JEW/RWW DHC <CR> (pause)

[ 350 Type mail, ended by a line with only a "." ]

Re: Title of Message <CR>

First line of message <CR>

second line of message <CR> ...etc.

. <CR> (pause)

[ 256 Mail completed successfully ]

<↑Z>

[ # ] DISC <CR>

[ # ] QUIT <CR>

## FTP Example :



## TEST OF FORMAT

[@] FTP <CR>  
[HOST FTP User process x.xx.x]  
[\*] CONN <SP> NIC <CR>  
[ Connection opened]  
[\*< SRI-ARC FTP Server x.xx.x - at DAY DATE TIME]  
[\*] QUO <ALT> MAIL <SP> JEW/DHC RWW <CR>  
[\*] (pause) [Type mail, ended by a line with only a "."]  
[\*] QUO <ALT> Re: Title of Message <CR>  
[\*] QUO <ALT> First line of message <CR>  
[\*] QUO <ALT> second line of message <CR> ...etc.  
[\*] QUO <ALT> . <CR> (pause)  
[\*< Mail completed successfully]  
[\*] DISC <CR>  
[\*] QUIT <CR>

See RFC 543, NIC 17777, for more detail on Network Journal.

TEST OF FORMAT

(J22381) 13-MAR-74 09:02; Title: Author(s): Jeanne B. North/JBN;  
Distribution: /JBN; Sub-Collections: SRI-ARC; Clerk: JBN;  
Origin: <NIC-WORK>NETJLSCENS3.NLS;1, 1-MAR-74 08:42 JBN ; H1="TEST OF  
FORMAT  
Jeanne North  
Network Information Center";

a couple of questions ...

Jim ... a few things:

1) where are you at with respect to making RFC's submittable via the Network, and with respect to making the network journal citation pathnames contain the "correct" hostname (the host the mail originated from) ?

1

1a

2) how does the journal handle documents submitted as "hardcopy"? Especially, what info is kept after delivery is made? (I've got some wishes about this.)

1b

... Mike

1c

MDK 13-MAR-74 09:25 22382

a couple of questions ...

(J22382) 13-MAR-74 09:25; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /JEW; Sub-Collections: SRI-ARC; Clerk: MDK;

SCENARIO FOR USING THE NETWORK JOURNAL  
Jeanne North  
Network Information Center

p.1

(J22383) 27-MAR-74 09:51; Title: Author(s): Jeanne B. North/JBN;  
Distribution: /RFC SRI-ARC; Sub-Collections: NIC SRIARC RFC SRI-ARC;  
Clerk: JBN;  
Origin: <NIC-WORK>NETJLSCEN3.NLS;9, 27-MAR-74 09:13 JBN ;

## SCENARIO FOR USING THE NETWORK JOURNAL

Jeanne North

Network Information Center

p.2

Network users may send mail to individuals and to groups, input as messages or entire files, through the Network Journal, using SNDMSG or their site's mail system. The mail is converted at NIC into NLS files, Journalized, and sent to specified recipients. Short messages may be received as messages, longer ones as citations to files which may be retrieved immediately, and also later, by using FTP. Mail sent to NIC with a "/" in the user-name field invokes the Net Journal.

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Construct user field with slash and NIC idents:

[Users:] sender ident/addressee ident(s)@NIC

e.g. "JEW/DHC MAP@NIC". To send to a group, use group ident, e.g. "JEW/NLG@NIC". To combine Journal SNDMSG with SNDMSG to others, add others' Network addresses after commas, e.g. "JEW/DHC@NIC, PRATT@ISI".

See ARPANET Directory for NIC idents and Network addresses.

[@] SNDMSG <CR>

[Type ? for help]

[Users:] JEW/NGG <SP> DHC@NIC, PRATT@ISI <CR>

[Subject:] Title of Message <CR>

[Message (? for help):] Text of message ...

Note: ^B allows insertion of a sequential file as the message or at any point in the text of the message:

^B [(Insert file:)] <directory>file <ALT> [ext ...EOF]]

<^Z>

[jew/ngg dhc@nic -- ok] (or [ -- queued -- timed-out])

[pratt@isi -- ok]

When using SNDMSG through TELNET, change TELNET escape character, to ^Q for example, allowing ^Z to be used for end-of-message.

## RETRIEVING THE FILE FROM NETWORK JOURNAL

Substitute the citation received, for example "<GJOURNAL>21695", for "<journal>number" and supply a filename in the following:

[@] FTP <CR>

[HOST FTP User process x.xx.x]

[\*] CONN <SP> NIC <CR>

[ Connection opened]

[\*< OFFICE-1 FTP Server x.xx.x - at DAY DATE TIME]

[\*] LOG <SP> ANONYMOUS <SP> NIC <CR>

[\*] GET <SP> <journal>number.NLS;xnls <CR>

[ to local file] filename <CR> [New file] <CR>

[< IMAGE retrieve of <journal>number.NLS; started]

[< transfer completed]

[\*] DISC <CR>

[\*] QUIT <CR>

[@] COP <ALT> [<File list>] file <ALT> [<TO>] LPT: <CR> [OK] <CR>

SCENARIO FOR USING THE NETWORK JOURNAL  
 Jeanne North  
 Network Information Center

p.3

## SENDING A MESSAGE BY TELNET, FTP, OR OTHER MAIL SYSTEM

### TELNET by TENEX Users:

```
[@] TELNET <CR>
[User Telnet x,x DATE ....]
[#] NIC <SP> FTP <CR> [is complete.#]
[300 OFFICE-1 FTP Server x,xx,x - at DAY DATE TIME]
MAIL <SP> JEW/RWW <SP> DHC <CR> (pause)
[350 Type mail, ended by a line with only a "."]
Re: Title of Message <CR>
First line of message <CR>
second line of message <CR> ...etc.
. <CR> (pause)
[256 Mail completed successfully]
<*Z>
[#] DISC <CR>
[#] QUIT <CR>
```

### FTP by TENEX Users:

```
[@] FTP <CR>
[HOST FTP User process x,xx,x]
[*] CONN <SP> NIC <CR>
[ Connection opened]
[*< OFFICE-1 FTP Server x,xx,x - at DAY DATE TIME]
[*] QUO <ALT> MAIL <SP> JEW/DHC RWW <CR>
[*] (pause) [Type mail, ended by a line with only a "."]
[*] QUO <ALT> Re: Title of Message <CR>
[*] QUO <ALT> First line of message <CR>
[*] QUO <ALT> second line of message <CR> ...etc.
[*] QUO <ALT> . <CR> (pause)
[*< Mail completed successfully]
[*] DISC <CR>
[*] QUIT <CR>
```

### Using Other Mail Systems:

It is not possible to give a generalized scenario for use with all local mail systems.

The general procedure, to be applied to the local mail system, is to supply:

"NIC" as the host name, and

Sender's NIC ident / Addressee's NIC ident as user name

See RFC 543, NIC 17777, for more detail on Network Journal.

Phone Log: 12 Mar 74, Dr. Jeffrey Milstein, FEO

ESSENTIALS:

1

Dr. Jeffrey Milstein  
 Federal Energy Office,  
 Office of Policy Analysis, Room 4121,  
 Post Office Bldg, Ben Franklin Station,  
 12th and Pennsylvania NW 20461  
 (202) 961-6181

1a

He called to ask about our Knowledge Workshop service as available through the ARPANET, from our Workshop Utility. He was referred to us by Bill Paisley of Stanford, who visited us recently. Milstein got his PhD at Stanford, knew Jeff Rulifson then, and remembers JR telling him about NLS.

1b

Told him that he'd be contacted by our Applications people. Have since asked Jim Norton to contact him.

1c

GENERAL INFORMATION:

2

Milstein says that he is responsible for setting up some kind of information service for EO (or just OPA?) use. Mentioned an interest in being able to hold summary information derived from such as NASA, AEC, and NTIC retrieval systems, and to scan, extract, merge, etc. from these. Also apparently there are distributed offices that need intercommunication. Sounds like the basic Utility service would be directly useful.

2a

He seems interested in the idea of our basic service tying most heavily to an in-house "workshop architect," whom we train and support.

2b

He commented that FEO is big and growing rapidly: like 2000 people now, expect to be 3000 by end of June, operating over 10 regions. Says that his office may be asked to put out policy papers in very short time span, too little to allow them to incorporate much more information than they happen to have on hand.

2c



DCE 13-MAR-74 11:14 22384

Phone Log: 12 Mar 74, Dr. Jeffrey Milstein, FEO

(J22384) 13-MAR-74 11:14; Title: Author(s): Douglas C. Engelbart/DCE  
; Distribution: /jcn ; Sub-Collections: SRI-ARC; Clerk: DCE ;

DCE 13-MAR-74 11:30 22385

Sutherland doing some Navy ADP-application studies

ONR-project guys, note; useful contact.

Sutherland doing some Navy ADP-application studies

During a brief phone discussion on 7 Mar 74 with Bert Sutherland, I learned that he has been involved with a panel of people studying some Navy needs and practices in the computer-usage field. I mentioned our ONR AKW-applications study. He would welcome any contact by ARC people for relevant information.

1

Bert is manager of (at least) the BBN TENEX group, and is a long-time acquaintance of mine, as well as an old hand in the world of ARPA contractors, the ARPANET, etc. He is fairly knowledgeable about what we are doing, and would be an intelligent source of comments.

2

Phone no. at BBN: (617) 491-1850, ext 339

3

DCE 13-MAR-74 11:30 22385

Sutherland doing some Navy ADP-application studies

(J22385) 13-MAR-74 11:30; Title: Author(s): Douglas C. Engelbart/DCE  
; Distribution: /jcn rww pr rll ; Sub-Collections: SRI-ARC; Clerk:  
DCE ;

Visit Log: 27 Feb 74, Drs. Odell and Taylor, BRL, and Col. Luebbert,  
West Point

Names and addresses of visitors:

Dr. Flloyd Odell  
Associate Technical Director  
Ballistic Research Laboratory  
Aberdeen, Maryland  
(301) 278-2131

Dr. Stanley Taylor  
Assistant to the Director  
Ballistic Research Laboratory  
Aberdeen, Maryland  
(301) 278-4149

Col Willim Luebbert  
(Chairman?) Computer Science Department  
West Point, Maryland  
(914) 938-4744, or -4401

Taylor has visited before; this is the first visit for Odell and Luebbert. (Dave Brown and I paid a visit to Taylor at BRL last October) They arrived bout 4 p.m.; I showed, demonstrated, and described until about 7 pm, then went to dinner with Taylor and Odell.

BRL will be part of the Army Material Command's (AMC) subnetwork, part of the ARPANET. Einar Stefferud visited ARC several times, describing the AMC net, for which he has been a long-time consultant (his visit on 31 Oct 72 -- 12442,). BRL now have an ANTS 'almost' working at their site.

Taylor has been quite interested in NLS and the Utility; has been learning TNLS, and been trying to find the resouces to buy a slot for the BRL. A number of potential applications, including potentially developing a sort of "NIC" service for the AMC subnet. There would seem to be plenty of need and value there.

Consider possibility of their (BRL) acquiring a display and Line Processor so that demonstration could be made on site. Also, they'd be interested possibly in sending a contingent here to see.

There is a BRL group (3 people) working on retrieval techniques using "key phrases" (instead of 'key words'). BRL has a DDC terminal in its library.

They have project money in this area, in a collaborative mode with DDC (e.g., DDC sending a resident for a year to BRL to

Visit Log: 27 Feb 74, Drs. Odell and Taylor, BRL, and Col. Luebbert, West Point

work with them); this could perhaps be a way for BRL to get started experimenting with AKW techniques -- DDC, too.

3c1

I point out that NLS would seem to be a powerful "laboratory" in which to experiment with such a scheme. Could use NLS files, for instance the message/Journal items already catalogued and stored, as data base. User Programs could provide very easy development and testing, with considerable independence, of the special processes to work with key phrases.

3c2

Larry Puckett would direct this project. Keats Pullen is another person mentioned. They've done some in-house experimentation with BRL reports.

3c3

Col Luebbert had called me last week about participating in a AMC-sponsored presentation at West Point -- which would involve our providing film strips and other visual materials, and my dropping by West Point for a day to work with him in putting together a half-hour film. (see -- 21982,) We didn't get much talking about this; he'll get in touch soon.

4

I promised to send a copy of our ASIS69 film to Luebbert.

4a

He mentioned an "Air Force Base Information Transfer System" (AFBITS). Contractor is MITRE. It is (to be?) an intra-base type of system, using cable TV to provide whole text transmission; ridding the system of mail drops, etc. Some overlap with the TICCET system -- but AFBITS concentrates upon requirements of an Air Force base. Selecting Bedford base as a test bed.

4b

I mention to them the possibility of the Island of Oahu being supported in its message management by an ARPANET type of system, with next-stage beyond SNDMSG service. Called 'COTCO' I think. ARPA's IPT Office seems to be coordinating the study and the possible implementation.

4c

[NOTE: Luebbert is director of CADE (Computer Aided Design and Engineering) Executive-Level Seminar sponsored by AMC. This is a summer-session deal, held yearly at West Point (see -- 21982,).]

4d

Taylor visited ARC again for most of the following Friday. On topic that came up concerned Computer Aided Design. I mentioned the Purdue group and Dick Garrett. Stan said that he already knew Boardman, a Garrett-product from Purdue now at Michigan. Talk swung around to the potential for putting a CAD community onto a computer network so that they could share resources; and then the potential power to be gained by supporting them with AKW -- a la 12445,). Taylor indicated

Visit Log: 27 Feb 74, Drs. Odell and Taylor, BRL, and Col. Luebbert,  
West Point

that AMC is heavily into CAD work; he himself is active in the area,  
and seemed quite interested in these notions.

Gave Stan Taylor the following documents:

D. C. Engelbart, AUGMENTING HUMAN INTELLECT: A CONCEPTUAL  
FRAMEWORK, SRI Project AFOSR-3223, October 1962 (XDOC -- 3906,)

W. K. English, D. C. Engelbart and M. A. Berman,  
"Display-Selection Techniques for Text Manipulation", IEEE  
Transactions on Human Factors in Electronics, Vol HFE-8, Number 1,  
pp 5-15, March 1967 (XDOC -- 9694)

D. C. Engelbart, "Intellectual Implications of MULTI-ACCESS  
COMPUTER NETWORKS", A paper for the Proceedings of The  
Interdisciplinary Conference on Multi-Access Computer Networks in  
Austin, Texas, April 1970. (XDOC -- 5255.)

D. C. Engelbart, COORDINATED INFORMATION SERVICES for a  
DISCIPLINE- OR MISSION-ORIENTED COMMUNITY, paper presented at the  
Second Annual Computer Communications Conference, San Jose,  
California, 24 January 1973. (Journal, dated 12 Dec 72 -- 12445.)

Augmentation Research Center, "Output Processor Users' Guide," 23  
Aug 73, (Journal -- 12209,)

DCE 13-MAR-74 11:56 22386

Visit Log: 27 Feb 74, Drs. Odell and Taylor, BRL, and Col. Luebbert,  
West Point

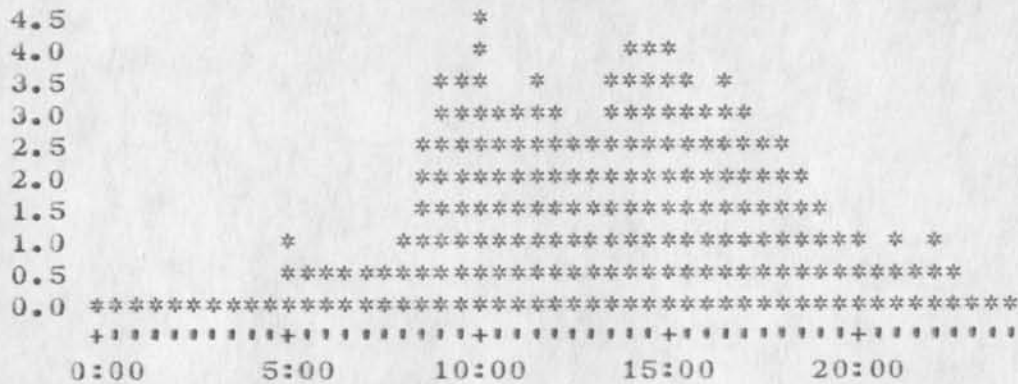
(J22386) 13-MAR-74 11:56; Title: Author(s): Douglas C. Engelbart/DCE  
; Distribution: /jcn rww smt ; Sub-Collections: SRI-ARC; Clerk: DCE  
;



Superwatch Average Graphs for Week of 3/3/74

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 3/3/74  
x axis labeled in units of hr:min, xunit = 30 minutes

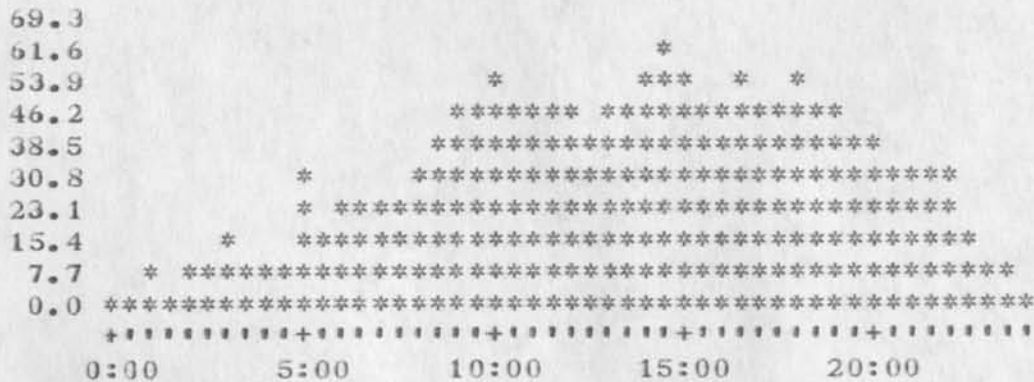
1



1a

TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS  
FOR WEEK OF 3/3/74  
x axis labeled in units of hr:min, xunit = 30 minutes

2

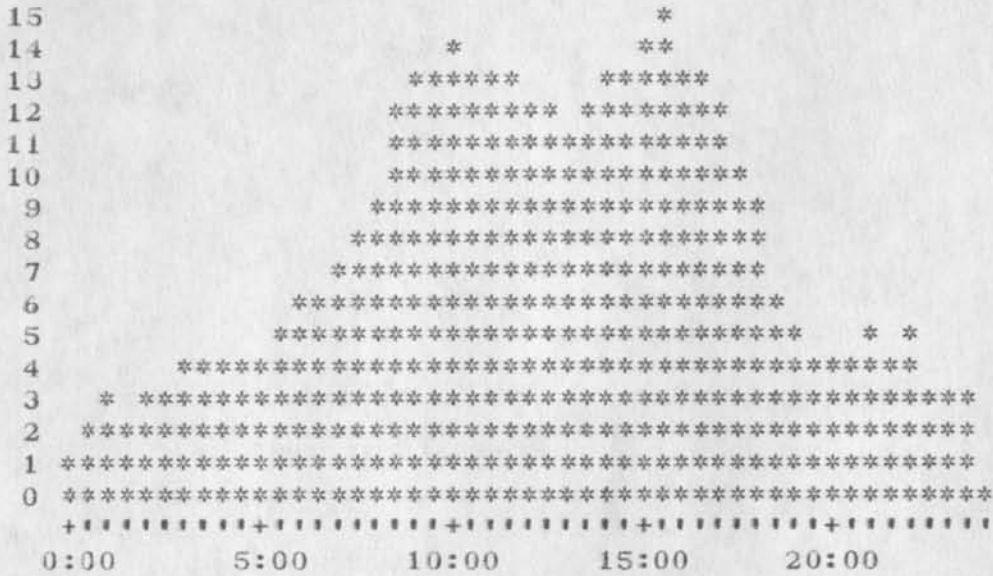


2a

Superwatch Average Graphs for Week of 3/3/74

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 3/3/74  
x axis labeled in units of hr:min, xunit = 30 minutes

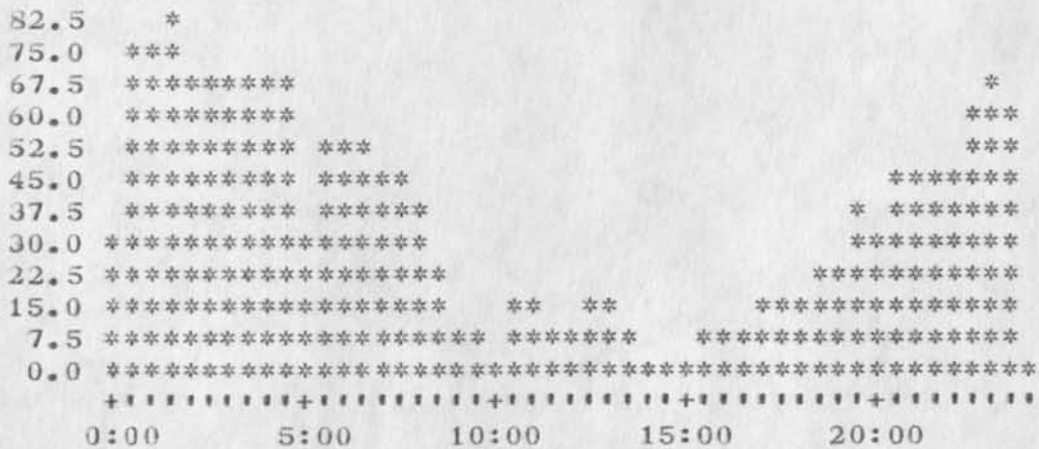
3



3a

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 3/3/74  
x axis labeled in units of hr:min, xunit = 30 minutes

4

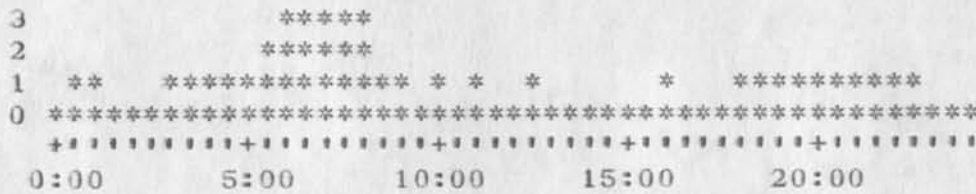


4a

Superwatch Average Graphs for Week of 3/3/74

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 3/3/74  
x axis labeled in units of hr:min, xunit = 30 minutes

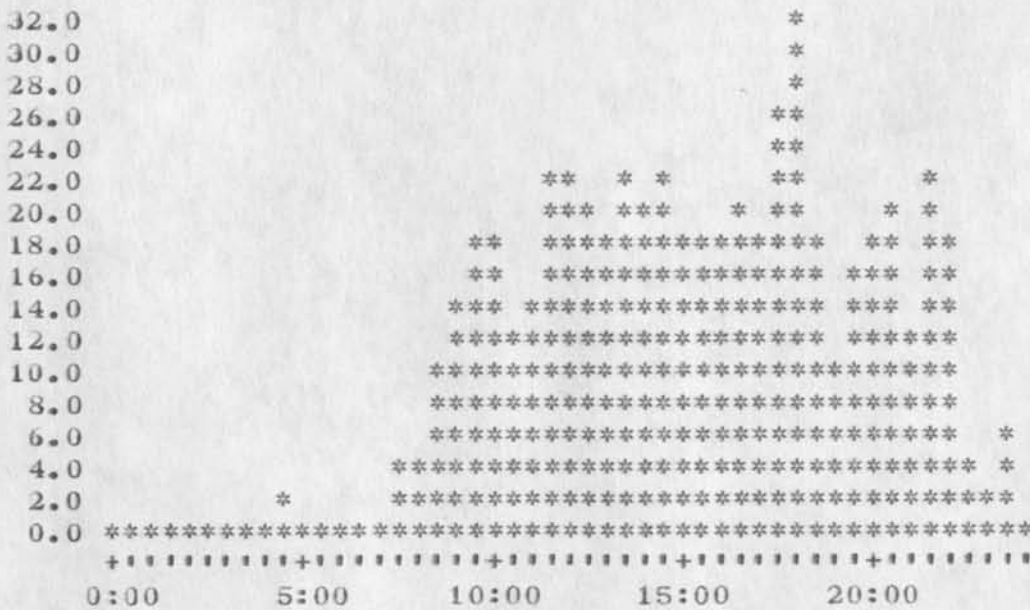
5



5a

TIME PLOT OF AVERAGE PER CENT OF SYSTEM USED IN DNLS FOR WEEK OF 3/3/74  
x axis labeled in units of hr:min, xunit = 30 minutes

6



6a

SRL 13-MAR-74 11:56 22387

Superwatch Average Graphs for Week of 3/3/74

(J22387) 13-MAR-74 11:56; Title: Author(s): Susan R. Lee/SRL;  
Distribution: /JCN RWW DCE PR JCP DVN JAKE DLS BAH; Sub-Collections:  
SRI-ARC; Clerk: SRL;  
Origin: <LEE>WEEK3/3GRAPHS.NLS;1, 13-MAR-74 11:53 SRL ;

SRI-ARC and OFFICE-1 Journal Race Condition and Directory  
Inconsistency

Dave-- I've modified <NIC-NLS>JNLDEL so that the citation generated for Network delivery always specifies the DELIVERING host, be it SRI-ARC or OFFICE-1, rather than using the canned string 'SRI-ARC'. 1

This fix eliminates the race condition that could cause an addressee's attempt to retrieve the file from SRI-ARC via FTP to fail, when the citation was delivered from OFFICE-1 but the file hadn't yet reached SRI-ARC. 2

The fix also eliminates the possibility of the retrieval attempt failing because the delivered citation gave the OFFICE-1 Journal directory but pointed the user at SRI-ARC, where the document might be assigned to a different directory. 3

We are left, however, with the inconsistency that when a user cites a previous document by link (specifying a Journal directory) in a document, the link will in general be wrong for those addressees who reside on the other NLS machine. The LOAD FILE attempt, of course, will succeed (because NLS will ignore the directory, once it tries it and fails). Perhaps this problem is best left for solution to the new NLS, where links include a host name. 4

SRI-ARC and OFFICE-1 Journal Race Condition and Directory  
Inconsistency

(J22388) 13-MAR-74 12:38; Title: Author(s): James E. (Jim)  
White/JEW; Distribution: /JDH JCN RWW; Sub-Collections: SRI-ARC; Clerk:  
JEW;

## Coordinating Host Name Changes in the Monitor and the Ident File

We need to be aware of the necessity of appropriately coordinating standard host name changes (and the resultant change to the monitor tables) with the required changes to the Ident File. The change -- 'MIT-DMCG' to 'MIT-DMS' --, for example, is not adequately handled by the trick of creating a new group MIT-DMS whose membership is MIT-DMCG. In particular, a number of users in the Ident file currently have Network mailing addresses like 'AKB@MIT-DMCG' which no longer work, and whose Network Journal mail is, therefore, being dropped on the floor.

1

JEW 13-MAR-74 12:53 22389

Coordinating Host Name Changes in the Monitor and the Ident File

(J22389) 13-MAR-74 12:53; Title: Author(s): James E. (Jim)  
White/JEW; Distribution: /MLK JAKE WRF MDK; Sub-Collections: SRI-ARC;  
Clerk: JEW;



Navy group headed by Gleissner might be one referred in (22385,)

Mr. Gleissner of NSRDC is the chairman of a group which is studying the computer needs of a certain segment of the Navy (not sure what segment). Perhaps this group is the one DCE has referred to in his talk with Bert Sutherland see (journal, 22385,). If it is I know only a few facts ; apparently there is a push to reduce the number of computers in the Navy and this group is trying to come up with a reasonable criterion on what constitutes acceptable service, necessary thresholds for new service, etc. My old division at NSRDC contributed to some of the more technical aspects. I do know that Gleissner knows Sutherland. Robert.

1

RLL 13-MAR-74 14:36 22393

Navy group headed by Gleissner might be one referred in (22385,)

(J22393) 13-MAR-74 14:36; Title: Author(s): Robert N.  
Lieberman/RLL; Distribution: /DCE RWW PR JCN; Sub-Collections: SRI-ARC;  
Clerk: RLL;

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

## INTRODUCTION

1

Hal Murray of the CCA Datacomputer project visited at ARC the week of 15 February. While here he discussed the possibilities of the NLS interface to the Datacomputer and the several DC/NLS projects we have been considering. Taking part in the discussions were the following ARC members: Charles Irby, Jim White, Ken Victor, Elizabeth Michael, and Harvey Lehtman.

1a

After general demonstrations of some of the present capabilities of our system we discussed our goals and the current limitations of both the DC hardware and the Datalanguage and also discussed the possibility of shifts in DC implementation priorities to lift some of the limitations. The following discussion is based on my personal recollections and is therefore subject to correction by any of the others who were present.

1b

## POTENTIAL DC / NLS PROJECTS

2

## 1. Use of DC as tertiary store for the archive system.

2a

We have committed ourselves to demonstrate the use of DC as a tertiary store for use with the archive system by the end of the current fiscal year. This task may be accomplished in two ways:

2a1

Use DC as a "bit bucket". No attempt would be made to store any NLS structure with the files. This is an easily accomplished task in the current Datalanguage. Of interest would be the creation of NLS modules to connect to the DC and send across properly formed Datalanguage requests. Modifications may be required in the NLS archive system which is made up of the BSYS program which maintains the system and the ARCHIVE and INTERROGATE executive commands. The only current limitations have to do with hardware storage limitations on the DC.

2a1a

Another method would involve coding some description of NLS file structure in the Datalanguage when the file is archived. This would be a more difficult task because of limitations discussed below, but is related to the problem of putting general NLS file structure into the Datacomputer; thus it would be of more technical interest to the programmers than the above approach. The additional value, however, in being able to retrieve parts of an archived NLS file is questionable for using the DC as a tertiary store.

2a1b

What would be stored in this system? The current Archive

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

system throws files onto tapes when they haven't been accessed over a period of time whether or not the user consciously wishes to ever see them again. Given the current size of the Archive (100 tapes or 500,000 pages) and the currently available space on the data computer (two 3330 disks or 80,000 pages), placing the entire ARC Archive on the DC would be impossible and perhaps of little value.

2a2

A modification to the Archive system could be made to force a user to consciously request a file to be archived on the DC. Also, given the space available until the arrival of the Ampex Terrabit Memory, it was felt that in any event, the immediate ARC goal should be for a demonstration project followed by an extension which would put the most recently archived part of the Journal onto the DC. (Currently about 50,000 pages of the archive are devoted to the Journal; about 1,000 pages are generated each month.)

2a3

2. Development of general information retrieval user front end.

2b

The DC is good for highly structured data bases with repeating instances of information divided into fields. For this reason, it is a natural choice for connection to the front end of a general information retrieval subsystem in NLS. One possibility for a data base which could be used in a prototypical system is the NIC Resource Notebook.

2b1

Application to resource notebook.

2b2

The current resource notebook contains information on 50 sites on the ARPA network. It presently is only partially structured to fit the requirements of the current Query system. Data in fields is free-form text and particular fields are not standard to all sites.

2b2a

A rewrite of the data into a new file is currently being undertaken which puts information into a more uniformly structured format with standard information fields for each site. This could easily fit into the DC and could provide a solution to several problems which would be difficult in the NLS context.

2b2b

For example, one could ask for information about an individual site as in the present NLS Query, but could also get cross site data such as a list of sites with a particular type of computer or resource. The Datalanguage easily provides this facility and a Boolean facility.

2b2b1

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

The development of an information retrieval facility for the resource notebook using the Datacomputer permits us to experiment with the use of NLS as a Front End to the DC system though the network. This mode of operation will be important in other contexts and will provide valuable experience in the division of effort between the two systems.

2b2c

User interaction will be handled locally with interpreted commands sent on to the DC.

2b2c1

We would develop an input facility for the system. A user would be prompted for information (as in the Form System?) which would be sent and incorporated into the DC Resource Notebook.

2b2c2

The system would serve as a model for a more general retrieval system.

2b2d

### 3. Form system.

2c

The Form System as described in (21808,) fits in very well with the current and immediately subsequent versions of the DC. Because of the fixed format of instances and templates, we do not run into the problems we would have in implementing general NLS files in the Datalanguage at the present time.

2c1

There is a good correspondence between the design of the system in NLS and the way some of its modules would be designed for use on the DC. Interesting questions requiring answers have to do with making the optimal separation between the amount of work done between transmittals to the DC: What sorts of responses can one expect over the network? What response time is tolerable for an interactive system?

2c2

We would benefit from the specialized retrieval functions of the DC operating over collections of instances for querying and report generation.

2c3

The costs and benefits of implementing the form system on the DC are similar to those involved in implementing a general retrieval system. The template file is an additional data structure which would be required, but which would fit into the DC because of its structure.

2c3a

We may run into trouble because of the fact that open ended structures are not currently permitted; we could probably code around this restriction.

2c3b

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

4. NLS file system in Datalanguage; mini-Datacomputers as basis for file system for the ARPA Management System Technology (MST) project

2d

ARPA is interested in the feasibility of implementing general NLS file structure in the Datalanguage.

2d1

The primary use of such an implementation would be in a system which made use of mini-Datacomputers for local file systems with large storage available at large DC's along the network. (The currently limited network bandwidth would probably negate any real value from implementing such a scheme for an interactive system making use of a remote DC for an NLS file structure at any time in the near future. The High Speed Modular IMP and Satellite Communications projects would remove some of these limitations.)

2d2

Certain limitations in the current Datalanguage and in implementations considered for at least the next year preclude any immediately efficient use of the DC for this purpose. Among the most important are the lack of a recursive data structure definition and the lack of optional or open ended fields. These limitations are discussed below. It may be possible, however, to code around some of these limitations to come up with a demonstration implementation (somewhat inefficiently for a running NLS system); it would be useful in determining and removing limitations in the language.

2d3

5. Catalog system in Datacomputer

2e

The four major tasks described above were under consideration before Hal's visit. When it became clear that the possibility of implementing any general, open ended NLS file within the DC in the near future was small, we considered those tasks which would provide a real value to us and which could benefit from the DC as it is or will be in the near future.

2e1

Considering the current DC bias toward highly structured, fixed format files, and its ability to easily create sets, we considered its use on the NLS catalog system.

2e2

Fielded data would exist on the DC. A truncated file would exist at ARC with links to actual documents and to permit full text content searches over titles (a capability not possible in the DC.)

2e3

Because there is no current sorting capability on the DC we

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

would create the sets there and bring them over to ARC for  
sorting and final formatting.

2e4

CURRENT LIMITATIONS OF DC HARDWARE AND DATA LANGUAGE REGARDING THE  
POTENTIAL PROJECTS

3

Hardware Limitations

3a

Available storage will be limited until the arrival of the  
Terrabit Memory or the Laser Store. Until that time, storage  
available to us on the 3330 disc will be between a few hundred  
and one thousand pages.

3a1

This restricts the use of the DC for our running Archive  
system, though it does not preclude the development of  
experimental systems.

3a1a

Network response time limitations

3a2

The bandwidth of the ARPA Network is currently 50 kB. This  
is probably too slow for applications which use the DC as the  
base for a file system on an interactive system such as NLS.  
It may also be too slow for certain implementations of  
interactive retrieval systems. There is, however, clearly a  
trade-off between the disadvantages of a slow network and  
the disadvantages of a local system which is not designed to  
deal with large databases, in the case of retrieval systems,  
or fast restoration, in the case of an archival system.

3a2a

The entire package, regardless of whether it is an archival  
system or a retrieval system, must have the optimal mix  
between local and remote resource dependence.

3a2b

Thus it is desirable to consider, for example, the design  
of a retrieval system which does some of its work here  
(on smaller databases, on sets which had been brought over  
from the DC, etc.)

3a2b1

Use of the DC as the base for an NLS file system would be  
more feasible with the planned increase in the Network  
bandwidth in the next few years due to the development of  
the High Speed Modular IMP (.5 MB) and in satellite  
communications (about 3 MB). These developments are  
anticipated three to five years from now.

3a2c

Also, mini-based local DCs may remove this restriction.  
Under such a scheme, local small DCs would handle all but

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

- the largest Databases; the system would go through the network for data not locally available. 3a2d
- Response time of the Datacomputer 3a3
- It is currently not clear how many "simultaneous" requests of various types can be handled by the DC. More core may help to provide better response, but there may be a CPU limitation on a PDP-10. 3a3a
- Current Datalanguage Limitations-- While the specifications for the fully implemented Datalanguage deal with most of the following limitations, the current implementation schedule is uncertain. Some of the problems will be solved in version 10. Others will not be dealt with in the near future. 3b
- No recursive data structures within files 3b1
- This is a problem in providing the optimal description of an NLS file in Datalanguage. It is not a serious problem for a retrieval system or the form system. 3b1a
- No open ended fields-- fixed length specified at file structure description time 3b2
- No optional fields-- all defined fields must be present for all records 3b3
- These restrictions could be overcome in the interim by declaring necessary fields to be very large and padding them with spaces if they are not completely used. This would result in a waste of space. 3b3a
- Data types restricted to ASCII text-- limits data typing 3b4
- Will be lifted in version 10. 3b4a
- No pointer data types 3b5
- Could hinder efficient description of NLS files. 3b5a
- No privacy restrictions beyond the file level (passwords)-- security down to field levels is needed in many applications 3b6
- Certain fields in forms may be accessed by a set of people; other fields in the same form may be accessed by a smaller set. 3b6a



Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

No free text searching-- retrieval (and inversions) are only over the complete contents of a field rather than permitting free text scanning 3b7

This could be a serious limitation for users accustomed to content analysis in NLS or retrieval systems such as DIALOG which provide powerful searching facilities. 3b7a

No Update facility 3b8

No replacement of field values; must rewrite entire record. 3b9

Append only or replacement of entire file 3b10

No count facility to get estimate of search cost time/cost 3b11

FILE PRIMITIVES IN NLS 4

The following list of the more common primitive operations currently performed on NLS files was requested by Hal Murray. See also (17069,) for a more extensive technical discussion of the current NLS file structure. 4a

Each node in an NLS random file has the following structure and miscellaneous information: 4b

Pointer to logical successor (Points to parent node if none.) 4b1

Pointer to first substatement. (Points to self if none.) 4b2

Head flag. TRUE if node is first substatement of its parent. 4b3

Tail flag. TRUE if node is last substatement of its parent. 4b4

Name flag. TRUE if node has a name. 4b5

Name hash. 4b6

A unique statement identifier. 4b7

Additionally, because structure information is contained separately from the data itself, there is a pointer to the data block containing the text. In the data block is the following information: 4c

Number of words in the data block for this node. 4c1

Number of characters in this node. 4c2

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

Left name delimiter; right name delimiter.	4c3
Pointer to the structure element for this node.	4c4
Character after the right name delimiter.	4c5
Date and time of creation of this node data block.	4c6
Initials of the user who created this block.	4c7
The following procedures move around in the structure by returning identifiers for nodes which may be used to get to the structure and data elements of the nodes within the files:	4d
Copy data block.	4d1
Get initials of user who created a data block.	4d2
Get time of creation of the data block.	4d3
Get pointer to the successor of this node.	4d4
Get pointer to the first substatement of this node.	4d5
Also procedures to get other data contained in the structure or data elements of a node.	4d6
Other functions are made up of the more primitive operations:	4e
Get pointer to the parent node.	4e1
Get pointer to the preceding node.	4e2
Get pointer to the head (first statement on the same level).	4e3
Get pointer to the tail (last statement on the same level).	4e4
Get pointer to the end of this node.	4e5
Get pointer to the back statement. (Preceding statement regardless of level.)	4e6
Get pointer to the next statement regardless of level.	4e7

Structures may be copied, deleted, inserted, moved, replaced, or  
transposed. (Structures are statements as well as branches, a  
statement with all its substructure, groups, all statements and  
their substatements bounded by and including two statements at the

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

same level, and plexes, all statements and their substructure at the same level.) More complicated operations are also possible including operations across files. Similar operations may be performed on data within a node-- on characters, words, visibles, invisibles, text, etc.

4f

NLS also has procedures for creating new data and structure elements, replacing the contents of data blocks, manipulating structural elements, garbage collecting, updating, etc.

4g

HGL 13-MAR-74 15:20 22394

Notes on Visit of Hal Murray of CCA to ARC: Possible  
Interconnections between NLS and the Datacomputer

(J22394) 13-MAR-74 15:20; Title: Author(s): Harvey G. Lehtman/HGL;  
Distribution: /SRI-ARC CF HGM DHS; Sub-Collections: SRI-ARC; Clerk: HGL;  
Origin: <LEHTMAN>DCINTER.NLS;4, 13-MAR-74 15:13 HGL ;

"NLS Display Error"

I split the screen, did some work, then moved the boundry away to the right. From then on the system repeatedl said"NLS Display Erro" in my TTY window, although my work was otherwise unimpeded.

1

"NLS Display Error"

(J22395) 13-MAR-74 14:46; Title: Author(s): Dirk H. Van  
Nouhays/DVN; Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS;  
Clerk: DVN;

Five-Speed Bike

We don't want it, W has here heart set on a girls bike, and kids are not ready for it, but the law commun might. W will find that out tomorrow.

DVN 13-MAR-74 14:54 22396

Five-Speed Bike

(J22396) 13-MAR-74 14:54; Title: Author(s): Dirk H. Van  
Nouhays/DVN; Distribution: /MAB2; Sub-Collections: SRI-ARC; Clerk: DVN;



Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
between NLS and the Datacomputer

INTRODUCTION

1

Hal Murray of the CCA Datacomputer project visited at ARC the week of 15 February. While here he discussed the possibilities of the NLS interface to the Datacomputer and the several DC/NLS projects we have been considering. Taking part in the discussions were the following ARC members: Charles Irby, Jim White, Ken Victor, Elizabeth Michael, and Harvey Lehtman.

1a

After general demonstrations of some of the present capabilities of our system we discussed our goals and the current limitations of both the DC hardware and the Datalanguage and also discussed the possibility of shifts in DC implementation priorities to lift some of the limitations. The following discussion is based on my personal recollections and is therefore subject to correction by any of the others who were present.

1b

POTENTIAL DC / NLS PROJECTS

2

1. Use of DC as tertiary store for the archive system.

2a

We have committed ourselves to demonstrate the use of DC as a tertiary store for use with the archive system by the end of the current fiscal year. This task may be accomplished in two ways:

2a1

Use DC as a "bit bucket". No attempt would be made to store any NLS structure with the files. This is an easily accomplished task in the current Datalanguage. Of interest would be the creation of NLS modules to connect to the DC and send accross properly formed Datalanguage requests. Modifications may be required in the NLS archive system which is made up of the BSYS program which maintains the system and the ARCHIVE and INTERROGATE executive commands. The only current limitations have to do with hardware storage limitations on the DC.

2a1a

Another method would invlove coding some description of NLS file structure in the Datalanguage when the file is archived. This would be a more difficult task because of limitations discussed below, but is related to the problem of putting general NLS file structure into the Datacomputer; thus it would be of more technical interest to the programmers than the above approach. The additional value, however, in being able to retrieve parts of an archived NLS file is questionable for using the DC as a tertiary store.

2a1b

What would be stored in this system? The current Archive

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections between NLS and the Datacomputer

system throws files onto tapes when they haven't been accessed over a period of time whether or not the user consciously wishes to ever see them again. Given the current size of the Archive (100 tapes or 500,000 pages) and the currently available space on the data computer (two 3330 disks or 80,000 pages), placing the entire ARC Archive on the DC would be impossible and perhaps of little value.

2a2

A modification to the Archive system could be made to force a user to consciously request a file to be archived on the DC. Also, given the space available until the arrival of the Ampex Terrabit Memory, it was felt that in any event, the immediate ARC goal should be for a demonstration project followed by an extension which would put the most recently archived part of the Journal onto the DC. (Currently about 50,000 pages of the archive are devoted to the Journal; about 1,000 pages are generated each month.)

2a3

2. Development of general information retrieval user front end.

2b

The DC is good for highly structured data bases with repeating instances of information divided into fields. For this reason, it is a natural choice for connection to the front end of a general information retrieval subsystem in NLS. One possibility for a data base which could be used in a prototypical system is the NIC Resource Notebook.

2b1

Application to resource notebook.

2b2

The current resource notebook contains information on 50 sites on the ARPA network. It presently is only partially structured to fit the requirements of the current Query system. Data in fields is free-form text and particular fields are not standard to all sites.

2b2a

A rewrite of the data into a new file is currently being undertaken which puts information into a more uniformly structured format with standard information fields for each site. This could easily fit into the DC and could provide a solution to several problems which would be difficult in the NLS context.

2b2b

For example, one could ask for information about an individual site as in the present NLS Query, but could also get cross site data such as a list of sites with a particular type of computer or resource. The Datalanguage easily provides this facility and a Boolean facility.

2b2b1

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
between NLS and the Datacomputer

The development of an information retrieval facility for the resource notebook using the Datacomputer permits us to experiment with the use of NLS as a Front End to the DC system though the network. This mode of operation will be important in other contexts and will provide valuable experience in the division of effort between the two systems.

2b2c

User interaction will be handled locally with interpreted commands sent on to the DC.

2b2c1

We would develop an input facility for the system. A user would be prompted for information (as in the Form System?) which would be sent and incorporated into the DC Resource Notebook.

2b2c2

The system would serve as a model for a more general retrieval system.

2b2d

3. Form system.

2c

The Form System as described in (21808,) fits in very well with the current and immediately subsequent versions of the DC. Because of the fixed format of instances and templates, we do not run into the problems we would have in implementing general NLS files in the Datalanguage at the present time.

2c1

There is a good correspondence between the design of the system in NLS and the way some of its modules would be designed for use on the DC. Interesting questions requiring answers have to do with making the optimal separation between the amount of work done between transmittals to the DC: What sorts of responses can one expect over the network? What response time is tolerable for an interactive system?

2c2

We would benefit from the specialized retrieval functions of the DC operating over collections of instances for querying and report generation.

2c3

The costs and benefits of implementing the form system on the DC are similar to those involved in implementing a general retrieval system. The template file is an additional data structure which would be required, but which would fit into the DC because of its structure.

2c3a

We may run into trouble because of the fact that open ended structures are not currently permitted; we could probably code around this restriction.

2c3b

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
between NLS and the Datacomputer

4. NLS file system in Datalanguage; mini-Datacomputers as basis  
for file system for the ARPA Management System Technology (MST)  
project

2d

ARPA is interested in the feasibility of implementing general  
NLS file structure in the Datalanguage.

2d1

The primary use of such an implementation would be in a system  
which made use of mini-Datacomputers for local file systems  
with large storage available at large DC's along the network.  
(The currently limited network bandwidth would probably negate  
any real value from implementing such a scheme for an  
interactive system making use of a remote DC for an NLS file  
structure at any time in the near future. The High Speed  
Modular IMP and Satellite Communications projects would remove  
some of these limitations.)

2d2

Certain limitations in the current Datalanguage and in  
implementations considered for at least the next year preclude  
any immediately efficient use of the DC for this purpose.  
Among the most important are the lack of a recursive data  
structure definition and the lack of optional or open ended  
fields. These limitations are discussed below. It may be  
possible, however, to code around some of these limitations to  
come up with a demonstration implementation (somewhat  
inefficiently for a running NLS system); it would be useful in  
determining and removing limitations in the language.

2d3

5. Catalog system in Datacomputer

2e

The four major tasks described above were under consideration  
before Hal's visit. When it became clear that the possibility  
of implementing any general, open ended NLS file within the DC  
in the near future was small, we considered those tasks which  
would provide a real value to us and which could benefit from  
the DC as it is or will be in the near future.

2e1

Considering the current DC bias toward highly structured, fixed  
format files, and its ability to easily create sets, we  
considered its use on the NLS catalog system.

2e2

Fielded data would exist on the DC. A truncated file would  
exist at ARC with links to actual documents and to permit full  
text content searches over titles (a capability not possible in  
the DC.)

2e3

Because there is no current sorting capability on the DC we

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
between NLS and the Datacomputer

would create the sets there and bring them over to ARC for  
sorting and final formatting.

2e4

CURRENT LIMITATIONS OF DC HARDWARE AND DATALANGUAGE REGARDING THE  
POTENTIAL PROJECTS

3

Hardware Limitations

3a

Available storage will be limited until the arrival of the  
Terrabit Memory or the Laser Store. Until that time, storage  
available to us on the 3330 disc will be between a few hundred  
and one thousand pages.

3a1

This restricts the use of the DC for our running Archive  
system, though it does not preclude the development of  
experimental systems.

3a1a

Network response time limitations

3a2

The bandwidth of the ARPA Network is currently 50 kb. This  
is probably too slow for applications which use the DC as the  
base for a file system on an interactive system such as NLS.  
It may also be too slow for certain implementatns of  
interactive retrieval systems. There is, however, clearly a  
trade-off between the disadvantages of a slow network and  
the disadvantages of a local system which is not designed to  
deal with large databases, in the case of retrieval systems,  
or fast restoration, in the case of an archival system.

3a2a

The entire package, regardless of whether it is an archival  
system or a retrieval system, must have the optimal mix  
between local and remote resource dependence.

3a2b

Thus it is desirable to consider, for example, the design  
of a retrieval system which does some of its work here  
(on smaller databses, on sets which had been brought over  
form the DC, etc.)

3a2b1

Use of the DC as the base for an NLS file system would be  
more feasible with the planned increase in the Network  
bandwidth in the next few years due to the development of  
the High Speed Modular IMP (.5 MB) and in satellite  
communications (about 3 MB). These developments are  
anticipated three to five years from now.

3a2c

Also, mini-based local DCs may remove this restriction.  
Under such a scheme, local small DCs would handle all but

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
between NLS and the Datacomputer

the largest Databases; the system would go through the  
network for data not locally available. 3a2d

Response time of the Datacomputer 3a3

It is currently not clear how many "simultaneous" requests  
of various types can be handled by the DC. More core may  
help to provide better response, but there may be a CPU  
limitation on a PDP-10. 3a3a

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This is a problem in providing the optimal description of an  
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description time 3b2

No optional fields-- all defined fields must be present for all  
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Data types restricted to ASCII text-- limits data typing 3b4

Will be lifted in version 10. 3b4a

No pointer data types 3b5

Could hinder efficient description of NLS files. 3b5a

No privacy restrictions beyond the file level (passwords)--  
security down to field levels is needed in many applications 3b6

Certain fields in forms may be accessed by a set of people;  
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Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
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No free text searching-- retrieval (and inversions) are only over the complete contents of a field rather than permitting free text scanning 3b7

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No replacement of field values; must rewrite entire record. 3b9

Append only or replacement of entire file 3b10

No count facility to get estimate of search cost time/cost 3b11

FILE PRIMITIVES IN NLS 4

The following list of the more common primitive operations currently performed on NLS files was requested by Hal Murray. See also (17069,) for a more extensive technical discussion of the current NLS file structure. 4a

Each node in an NLS random file has the following structure and miscellaneous information: 4b

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Name flag. TRUE if node has a name. 4b5

Name hash. 4b6

A unique statement identifier. 4b7

Additionally, because structure information is contained separately from the data itself, there is a pointer to the data block containing the text. In the data block is the following information: 4c

Number of words in the data block for this node. 4c1

Number of characters in this node. 4c2

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
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Initials of the user who created this block.	4c7
The following procedures move around in the structure by returning identifiers for nodes which may be used to get to the structure and data elements of the nodes within the files:	4d
Copy data block.	4d1
Get initials of user who created a data block.	4d2
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Get pointer to the end of this node.	4e5
Get pointer to the back statement. (Preceding statement regardless of level.)	4e6
Get pointer to the next statement regardless of level.	4e7

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statement with all its substructure, groups, all statements and  
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Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
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4f

NLS also has procedures for creating new data and structure elements, replacing the contents of data blocks, manipulating structural elements, garbage collecting, updating, etc.

4g

HGL 13-MAR-74 19:49 22397

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
between NLS and the Datacomputer

(J22397) 13-MAR-74 19:49; Title: Author(s): Harvey G. Lehtman/HGL;  
Distribution: /EDEIS RAS OWW DRB; Sub-Collections: SRI-ARC DEIS; Clerk:  
DVN;

HGL 13-MAR-74 19:49 22397

Notes on Visit of Hal Murray of CCA to ARC: Possible Interconnections  
between NLS and the Datacomputer

Duplicates 22394 for inclusion in DEIS Subcollection

Privacy (File Access)in TENEX

Duplicates 10341 for Inclusion in DEIS Subcollection

## Privacy (File Access) in TENEX

Several people have shown interest in means to keep others from reading their files. TENEX has such means but it is clear that few people know about them. This memo is intended to redisseminate the file-locking procedures of TENEX which are available to us. It summarizes and explains information in the TENEX Executive Manual .

1

TENEX files actually have names considerably larger than those that normally appear in NLS commands. The next-to-last field of the full name locks or unlocks access to the file. You may change that field just as you change other fields.

2

If you print out the name of a TENEX file through its "Protection" command in the directory subcommand language, you will find it has the following form:

3

```
STRING. STRING;NUMBER;P/T NUMBER
```

3a

where the number following "P" or "T" controls access.

3b

For example, if I wanted to learn who could read or write on my initial file in the Directory NIC-WORK I could ask the system as follows:

4

```
@DIR SF <NIC-WORK>DVN ALT [.NLS;1], CR
```

4a

```
@@ P CR
```

4b

```
@@ CR
```

4c

```
@ CR
```

4d

```
<NIC-WORK> DVN.NLS;1;P 777752
```

4d1

All the numbers to the right of the second semicolon are set by default, but you can change them by hand. The number at the right-hand end, which is always a six-digit octal number, controls access to the files as follows:

4e

```
FILE      PROTECTION      FIELD
```

4f

```
B0      B1      B2      B3      B4      B5
```

4g

```
Bit Protection Aspect Controlled
```

4h

```
-----
```

4i

```
B0      Read contents of file
```

4j

## Privacy (File Access) in TENEX

B1	Write onto file	4k
B2	Execute program stored in file	4l
B3	Append to file	4m
B4	List file in directory listing	4n
B5	Not used	4o

Setting a bit 1 permits the action; setting to 0 denies the action. Read allows information to be extracted from a file; write permits new information to be written onto a file, replacing part or all of the original contents. Execute allows a file that has been read into core memory to be executed as a program. Append allows new information to be added to the end of a sequential (not NLS) file. List determines whether or not the file will appear when the directory containing it is printed.

5

Taking these six bits as a two-digit octal number, some common values are: 77, which permits full access; 52, which protects a file from modification, but permits other functions; and 00 which denies everything, keeping even the file's existence a secret.

6

As mentioned above, a full, six-digit file protection number contains three of these protection fields, arranged as follows:

7

self	group	others
------	-------	--------

7a

For the present state of Group membership within ARC see  
---journal,8066,)

8

Octal counting is a little confusing for non-octal thinkers.

9

Let me spell out two typical cases :

10

For full access for the user, access to read, execute, and list the file for members of the User's Group, and access to list the file only for the rest of the world the number would be:

11

77 52 02

11a

For full access for the User, and no access for anyone else, the number is:

12

77 00 00

12a

You may make any file secret to others by spelling out the full name in any command that changes the name of the file -- Null file,

## Privacy (File Access) in TENEX

Output, and Update in NLS and Rename in Exec. To hide the contents and existence of the file discussed above, I would type in NLS 13

U[ pdate ] <DOCUMENTATION>DVN.NLS;1;p770000 CA [ ] 13a

Of course the the protection number will return to the default value if you use any of those commands without spelling out the full name. To update without changing the protected number, update to the old version. 14

DVN 13-MAR-74 20:32 22398

Privacy (File Access)in TENEX

(J22398) 13-MAR-74 20:32; Title: Author(s): Dirk H. Van Nouhuys/DVN;  
Distribution: /EDEIS OWW PGK RAS NDM(please bring the existence of this  
information to Arlie's notice.); Sub-Collections: SRI-ARC DEIS; Clerk:  
DVN;



TEST OF FORMAT  
 Jeanne North Network Information Center

RFC xxx  
 p.2

Network users may send mail to individuals and to groups, input as messages or entire files, through the Network Journal, using SNDMSG or their site's mail system. The mail is converted at NIC into NLS files, journalized, and sent to specified recipients. Short messages may be received as messages, longer ones as citations to files which may be retrieved immediately, and also at any later date, by using FTP. Mail sent to NIC with a "/" in the user-name field invokes the NIC Journal.

#### SENDING THE MESSAGE OR FILE BY SNDMSG

Construct user field with slash and NIC idents:

[Users:] sender ident/addressee ident(s)@NIC

e.g. JEW/DHC MAP@NIC. To send to a group, use group ident, e.g. JEW/NLG@NIC. To combine Journal SNDMSG with SNDMSG to others, add others' Network addresses after commas, e.g. JEW/DHC@NIC, PRATT@ISI. See ARPANET Directory for NIC idents and Network addresses.

```
[@] SNDMSG <CR>
[Type ? for help]
[Users:] JEW/NGG DHC@NIC, PRATT@ISI <CR>
[Subject:] Title of Message <CR>
[Message (? for help):] Text of message ...
  Note: ^B allows insertion of a sequential file as the message or
  at any point in the text of the message:
  ^B [(Insert file:)] <directory>file <ALT> [ext ...EOF]]
<^Z>
[jew/ngg dhc@nic -- ok]      (or [ -- queued -- timed-out])
[pratt@isi -- ok]
```

When using SNDMSG through TELNET, change TELNET escape character, to ^Q for example, allowing ^Z to be used for end-of-message.

#### RETRIEVING THE FILE FROM NETWORK JOURNAL

Substitute the citation received, for example <GJOURNAL>21695, for "<journal>number" and supply a "file" name in the following:

```
[@] FTP <CR>
[HOST FTP User process x.xx.x]
[*] CONN <SP> NIC <CR>
[ Connection opened]
[*< OFFICE-1 FTP Server x.xx.x - at DAY DATE TIME]
[*] LOG <SP> ANONYMOUS <SP> NIC <CR>
[*] GET <SP> <journal>number.NLS;xnls <CR>
[ to local file] <dir>file <CR> [New file] <CR>
[< IMAGE retrieve of <journal>number.NLS; started]
[< transfer completed]
[*] DISC <CR>
[*] QUIT <CR>
```

```
[@] COP <ALT> [<File list>] file <ALT> [<TO>] LPT: <CR> [OK] <CR>
```

TEST OF FORMAT  
 Jeanne North Network Information Center

SENDING BY TELNET, FTP, OR OTHER MAIL SYSTEM

It is not possible to give a generalized scenario for use with all local mail systems.

The general procedure, to be applied to the local mail system is to supply:

"NIC" as the host name, and

Sender's NIC ident / Addressee's NIC ident as user name

TELNET Example:

```
[@] TELNET <CR>
[User Telnet x.x DATE ....]
[#] NIC <SP> FTP <CR> [is complete.#]
MAIL <SP> JEW/RWW DHC <CR> (pause)
[350 Type mail, ended by a line with only a "."]
Re: Title of Message <CR>
First line of message <CR>
second line of message <CR> ...etc.
. <CR> (pause)
[256 Mail completed successfully]
<^Z>
[#] DISC <CR>
[#] QUIT <CR>
```

FTP Example :

```
[@] FTP <CR>
[HOST FTP User process x.xx.x]
[*] CONN <SP> NIC <CR>
[ Connection opened]
[*< SRI-ARC FTP Server x.xx.x - at DAY DATE TIME]
[*] QUO <ALT> MAIL <SP> JEW/DHC RWW <CR>
[*] (pause) [Type mail, ended by a line with only a "."]
[*] QUO <ALT> Re: Title of Message <CR>
[*] QUO <ALT> First line of message <CR>
[*] QUO <ALT> second line of message <CR> ...etc.
[*] QUO <ALT> . <CR> (pause)
[*< Mail completed successfully]
[*] DISC <CR>
[*] QUIT <CR>
```

See RFC 543, NIC 17777, for more detail on Network Journal.

JBN 14-MAR-74 09:39 22399

TEST OF FORMAT  
Jeanne North Network Information Center

RFC xxx

p.1

(J22399) 14-MAR-74 09:39; Title: Author(s): Jeanne B. North/JBN;  
Distribution: /JBN; Sub-Collections: SRI-ARC; Clerk: JBN;  
Origin: <NIC-WORK>NETJLSCEN3.NLS;3, 13-MAR-74 11:18 JBN ;

## Directive Works Without Terminator

I have a file in which I copied a series of Center directives into short toplevel statements. But I had failed to put the ';' at the end of the directive. The directive centered the lines correctly, but printed out!

1

Directive Works Without Terminator

(J22401) 14-MAR-74 11:33; Title: Author(s): Dirk H. Van  
Nouhuys/DVN; Distribution: /&DPCS NDM HGL EKM; Sub-Collections: SRI-ARC  
DPCS; Clerk: DVN;

18-DEC-73 0701-PST UK at USC-ISI: AVAILABILITY OF THE NIC AT TYMSHARE

cc: KAHN, KIRSTEIN  
Received 18-DEC-73 11:39:39

I AM VERY CONCERNED TO HEAR THAT THE NIC AT TYMSHARE WILL ONLY BE AVAILABLE 5AM TO 9PMPST. THIS PRECLUDES OUR USING IT IN OUR MORNINGS, WHICH IS THE BEST TIME ALLROUND, IN GENERAL, I AM RATHER CONCERNED WITH THE AMOUNT OF TIME HOSTS SEEM TO BE DOWN MIDNIGHT TO 5AM, AND MUST CHECK IF MY SUSPICIONS ARE TRUE THAT THIS IS A PARTICULARLY BAD TIME. IS THIS ONLY A TEMPORARY PHASE WITH THE TYMSHARE NIC, OR WILL IT LAST A LONG TIME THAT WAY? IF IT WILL BE THIS WAY A LONG TIME, CAN WE STAY AT SRI? KIRSTEIN

19-DEC-73 2052-PST ENGELBART: UK requests..

cc: norton, engelbart  
Received 19-DEC-73 20:52:03

Mike: Keep thinking about this. (I am, this evening) wondering what you want to do. How much is it going to get in your way if you do let them on? If you say o.k., for time being, until the basic questions of NIC resources and NIC service policies (currently under discussion with ARPA) are settled, but that things may change in the relatively near future -- i.e., they can have some space as soon as it is available to you, but that it might be withdrawn if the resource allocations happen to fall the wrong way -- how would that suit you? Also, there were two requests from Steve Wilbur, having to do with a) issues of how we've handled copyright matters, and b) other things about the British Library, and its service-interface possibilities to their "British NIC". I passed some of this material to you; I'd like that hashed about a bit tomorrow, too; their progress, purpose, and approach really could be most helpful, ... if only there could be a straightforward financing setup. See you... Doug

19-DEC-73 1931-PST ENGELBART: NIC/ACIS, Kirsteining/Kahn

cc: norton, engelbart  
Received 19-DEC-73 19:31:07

Mike: Am I right? -- Their request is really ACIS, not NIC; it requires special arrangements for use of non-NIC (extra from NIC) resources, that the requestor is responsible for finding the funds for, to give people the more-general services under ACIS that seems to be being asked for; the request for special services, from ARPA, must come from the person who administers ARPA's Utility buy and special-service ACIS buy; I need to verify that Perry is the one coordinator (will try to do so tomorrow); ... Looks as though, once I verify who is the NIC/ACIS guy at IPTO, and if he says that he is ready to make commitments in our new IPT-support

budget/contract, then it will be between you and the IPTO man. Be happy to talk with you tomorrow; review if you like the policy that you would like to employ. Cheers... Doug

3a

28-DEC-73 0958-PST PERRY at USC-ISI: NORSAR, ETC.  
cc: PERRY  
Received 28-DEC-73 09:59:01

4

MIKE: OVERSEAS USE OF ARPANET FACILITIES PRESENTS A LOT OF POLICY/ DIPLOMATIC/EXPORT-IMPORT/SECURITY/PROPRIETY QUESTIONS ABOUT WHICH THE MANAGEMENT HERE IS QUITE CONCERNED. THE FEELING HERE IS THAT USE OF THE BASIC NIC FILES IS QUITE ALL RIGHT, BUT THAT ANY FURTHER EXPLORATION OF ARPA-SPONSORED FACILITIES, INCLUDING NLS AND JOURNAL USE, SHOULD BE CLEARED THROUGH ARPA FIRST. THUS I THINK AN APPROPRIATE POSTURE FOR YOU WOULD BE A PASSIVE ONE WITH RESPECT TO NORWEGIAN AND UK USE OF THE SYSTEM. IF ASKED TO SUPPLY ASSISTANCE IN ACCESSING RESOURCES BEYOND THE NIC FILES, ADOPT A TEMPORIZING POSITION AND CONTACT US. MEANWHILE, IF YOU SEE ANY ACTIVITY BY THE NORSAR OR UK TYPES WHICH SUGGESTS THAT THEY ARE POKING AROUND IN AREAS BEYOND THE NIC, AGAIN LET US KNOW. A MAJOR MOTIVATION FOR THIS SENSITIVITY TO OVERSEAS EXPORT OF TECHNICAL INFORMATION IS THE US DESIRE FOR RECIPROCITY. THE US POSITION IS THAT WE WANT TO KNOW WHAT PEOPLE ARE GETTING FROM US, SO THAT WE CAN ENSURE THAT WE GET A FAIR SHARE OF WHAT THEY HAVE THEMSELVES. CALL IF YOU'D LIKE TO DISCUSS. REGARDS, JOHN

4a

21-JAN-74 0836-PDT KUDLICK: Overseas Use of ARPANET  
cc: PERRY at USC-ISI, ENGELBART, WATSON  
Received 21-JAN-74 08:36:18

5

John ... This is a belated response to your message to me of 28-December-73, on overseas use of ARPANET facilities. Sorry to be so late! Before receipt of your message, the understanding here was quite different from what you explained in your message, John. We assumed that in opening up a connection to the ARPANET through the UK and NORSAR TIP's, ARPA was trying to encourage experimentation and evaluation by overseas users of ALL the ARPA-developed facilities on the ARPANET. We now understand that this is not the case, and we understand the reasons for that. (But we are confused as to why TIP's were installed overseas if they can't be used to access the Network server facilities.) However, because of our prior assumptions, we have already extended an invitation to both UK and NORSAR to use NLS as much as they could (under prevailing log-in and resource availability constraints of course). This was done as part of the service we were generally extending to other Network users. In particular, Doug Engelbart helped them get started through training and other consultant advice during his visit to England this past Fall, and

he has continued giving encouragement toward trans-Atlantic collaboration. We also understand that UK has an account at BBN-TENEX. They may have other similar accounts, as well. We certainly want to comply with your request to respect the political and other reciprocity issues, by not extending other than NIC services and NIC files to the overseas users without prior approval by ARPA. But we haven't a clean solution at this time. Since mid-September it has been too late to "... adapt a temporizing attitude ...", so please consider this as "contacting" you about the issue, as you requested. The UK people in particular are very turned on about using NLS and experimenting in collaborating with us on NIC-type and other problems of mutual interest. [Two documents that indicate some aspects of

5a

their interest were journalized by Stephen R. Wilbur (SRW) of the University College London: (IJOURNAL,20592,) and (MJOURNAL,20923,).] In view of the actions we have already taken, it appears to us that it will be somewhat delicate (for us) to turn them off, having cranked them up in the first place. Perhaps a formal note from ARPA would help explain the situation, and make the transition easier for them to take. Perhaps also, we can the own transition to the Tymshare facility advantageously in this situation. The hours of availability of the Tymshare system will be 5 AM to 9 PM Pacific Time, which is not very useful to the UK/NORSAR time zones. We have agreed to temporarily let UK/NORSAR use the SRI-ARC facilities round the clock as they do at present, but that agreement is modifiable. Certainly, we should expect them to pay for services used. Perhaps this should be worked out as part of the ARPA/NIC contact discussions that will take place over the next several weeks. I look forward to hearing from you. ... Mike Kudlick

APPENDIX: Message from JSP to MDK on Overseas Use of Arpanet 28-DEC-73 0958-PST PERRY at USC-ISI: NORSAR, ETC. cc: PERRY Received 28-DEC-73 09:59:01

MIKE: OVERSEAS USE OF ARPANET FACILITIES PRESENTS A LOT OF POLICY/ DIPLOMATIC/EXPORT-IMPORT/SECURITY/PROPRIETY QUESTIONS ABOUT WHICH THE MANAGEMENT HERE IS QUITE CONCERNED. THE FEELING HERE IS THAT USE OF THE BASIC NIC FILES IS QUITE ALL RIGHT, BUT THAT ANY FURTHER EXPLORATION OF ARPA-SPONSORED FACILITIES, INCLUDING NLS AND JOURNAL USE, SHOULD BE CLEARED THROUGH ARPA FIRST. THUS I THINK AN APPROPRIATE POSTURE FOR YOU WOULD BE A PASSIVE ONE WITH RESPECT TO NORWEGIAN AND UK USE OF THE SYSTEM. IF ASKED TO SUPPLY ASSISTANCE IN ACCESSING RESOURCES BEYOND THE NIC FILES, ADOPT A TEMPORIZING POSITION AND CONTACT US. MEANWHILE, IF YOU SEE ANY ACTIVITY BY THE NORSAR OR UK

5b

TYPES WHICH SUGGESTS THAT THEY ARE POKING AROUND IN AREAS BEYOND THE NIC, AGAIN LET US KNOW. A MAJOR MOTIVATION FOR THIS SENSITIVITY TO OVERSEAS EXPORT OF TECHNICAL



INFORMATION IS THE US DESIRE FOR RECIPROCITY. THE US  
 POSITION IS THAT WE WANT TO KNOW WHAT PEOPLE ARE GETTING FROM  
 US, SO THAT WE CAN ENSURE THAT WE GET A FAIR SHARE OF WHAT  
 THEY HAVE THEMSELVES. CALL IF YOU'D LIKE TO DISCUSS.  
 REGARDS, JOHN

5c

21-JAN-74 0454-PDT kirstein at LONDON-TIP: IMLAC Terminals  
 Received 21-JAN-74 04:54:37

6

Mike, When I spoke to you in December, you gave me some  
 information on how to access documentation about loading IMLAC  
 terminals over the net. Unfortunately, I can't seem to find the  
 information, so could you tell me again. Please reply to  
 KIRSTEIN@ISI and put ATTN: AVS in the title. Many thanks,  
 Adrian V Stokes

6a

8-FEB-74 1734-PDT NORTON: norsar-tip,ukics move delay  
 cc: ferguson, norton  
 Received 8-FEB-74 17:34:25

7

Ferg. I agree with Mike Kudlick (finally): do NOT move norsar or  
 UKics to office-1 this weekend. Leave them open here. We'll be bca  
 on this next week. Jim Norton

7a

22-FEB-74 0907-PDT KUDLICK: overseas use of the NIC  
 cc: perry at USC-ISI, norton, engelbart  
 Received 22-FEB-74 09:07:18

8

John ... this is the journal item I sent <GJOURNAL>21998.  
 Sorry it didn't get to OFFICE-1; we're having som troubles  
 with Journal delivery that should be cleared up soon. When they  
 are  
 cleared up, all Journal items sent to you from ARC or from  
 OFFICE-1  
 will be available to you at OFFICE-1. #21998 follows:

8a

NOTE: I'd like your agreement to send this letter (or something  
 similar) to NORSAR and LONDON TIP people as soon as possible. It  
 is  
 written to go out over Doug's signature, but won't be sent till  
 Doug  
 and ARPA approve. The transfer of NORSAR and LONDON users to  
 OFFICE-1  
 could take place this weekend (Feb 23-24) or next if approved.

8b

Proposed text of letter to NORSAR-TIP and LONDON-TIP:

8c

With respect to use of the NIC and NLS facilities by NORSAR-TIP  
 and

LONDON-TIP users, we have decided to move those directories and files (and associated information) from SRI-ARC to the OFFICE-1 system during the weekend of Feb xx 1974.

8d

The move will commence at 8:00 PM Eastern time, Friday Feb xx. Files will be available at OFFICE-1 the following Monday at 8:00 AM Eastern Time. All relevant NLS files at SRI-ARC must be "updated" prior to the Friday night cut-off.

8e

The reason for the move is to be able to provide a uniform level of on-line computer services, from a single host, to all NIC users.

8f

We are sorry for any inconveniences you may encounter due to time-zone differences. We hope that in the future we will be able to extend the hours of operation at OFFICE-1, but we cannot promise that at this time.

8g

The contract with TYMSHARE stipulates that the OFFICE-1 system is to be operational 16 hours per day (8:00 AM to 12 Midnight, Eastern times), six days per week. This arrangement was agreed to before we were aware that there would be NIC users outside the U.S. time zones.

8h

The OFFICE-1 system may be available at other times also, but we cannot presently guarantee that. (This is similar to the current arrangement at SRI-ARC, in which there has been no guarantee that the SRI-ARC system would be available outside our working hours.)

8i

Despite this obvious problem, we hope that the arrangement at OFFICE-1 will be satisfactory.

8j

... Doug Engelbart

8k

22-FEB-74 1256-PDT ARPA: NORWEGIAN AND U.K. USERS  
Received 22-FEB-74 12:56:21

9

MIKE:

HIGH LEVELS AT ARPA ARE VERY CONCERNED ABOUT HAVING OVERSEAS CUSTOMERS ON THE SAME MACHINE -- OFFICE-1 -- USED FOR INTERNAL DOD INFORMATION SUCH AS THE DEFENSE ENERGY INFORMATION SYSTEM, ETC. THEREFORE, DR. LICKLIDER WOULD LIKE YOU TO DELAY TRANSFER OF THE NORWEGIANS AND BRITISH UNTIL FURTHER NOTICE.

JOHN PERRY

9a

28-FEB-74 0325-PDT NORSAR-TIP: From Yngvar Lundh.  
cc: engelbart  
Received 28-FEB-74 03:25:40

10

Doug and Mike:

2A

Just a little note to reflect that we are still alive here. In fact, things are now shaping up quite well, and activity is now more rapidly growing. I'd be glad to tell more about it.

2A1

From time to time I have contact with some of the people at SRI, who are always very helpful.

2A2

About the report I gave you last November, I have really not had much time to do much more about it yet, except that I have been trying to get a student from Oslo University to do a thesis in that area, I hope that will materialize. Do you have any opinion of the viability of setting up something around "Computer aided design of logic circuits", as a "community" of some kind, sharing programs, methods, thinking, etc.?

2A3

I understand from recent brief messages and transfers that you are taking special efforts to give us computer service. Let me say that we appreciate the services being made available to us very much, and the possibility of making use of sri-arc or office-1 I consider essential in this phase of motivating and early learning. One of my main concerns is to make ourselves

may better qualified to make use of the facilities, so that we  
become more interesting "m "members".

2A4 Please do not hesitate to contact me if you need information  
or feedback of any kind!

2A5 Incidentally, one of our people, Torstein Haugland, is  
presently at Atanford University, associated with Vint Cerf, on a one  
year fellowship basis. I have suggested to him, that he take  
contact with you at some time while he is there.

2A6

10a

Regards, Yngvar.

10b

(J22402) 14-MAR-74 16:17; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /MDK; Sub-Collections: SRI-ARC; Clerk: MDK;  
Origin: <KUDLICK>OSEAS.NLS;1, 14-MAR-74 16:00 MDK ;

more on RFC 606 and 608

28-JAN-74 1509-EDT CLEMENTS at BBN-TENEX: RFC'S 606 AND 608  
cc: DEUTSCH at PARC-MAXC, CLEMENTS, BURCHFIEL, TOMLINSON,  
BTHOMAS,  
Received 28-JAN-74 12:05:45

1

- - - - I BELIEVE THERE IS AN ERROR IN THE SUGGESTED ATTRIBUTE  
"ECHOING". THE TERMS "LOCAL" AND "REMOTE" ARE USUALLY MEANT WITH  
RESPECT TO THE TERMINAL. LOCAL ECHOING MEANS "HALF-DUPLEX  
TERMINAL" IN THE SLOPPY USE OF "HALF-DUPLEX" WHICH IS COMMON.  
"REMOTE" MEANS FULL DUPLEX, ECHO AT THE SERVER. THE REFERENCED  
RFC'S HAVE THESE TWO SWAPPED. /RCC

1a

28-JAN-74 1303 DEUTSCH at PARC-MAXC: ECHOING attribute  
cc: CLEMENTS at BBN  
Received 28-JAN-74 13:03:13

1b

Apologies. None of those attributes are "official" (?) yet  
anyway.

1b1

more on RFC 606 and 608

(J22403) 14-MAR-74 16:20; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /MDK; Sub-Collections: SRI-ARC; Clerk: MDK;

cca disks

8-FEB-74 1104-EDT DALE at CCA: PRICE OF DISK  
Received 8-FEB-74 11:16:54

1

MIKE,

1a

I CAN'T REMEMBER IF I ALREADY SENT YOU A MESSAGE OR NOT. THE  
ESTIMATE I HAVE IS \$25,000 FOR TWO 3330-TYPE SPINDLES.

1b

REGARDS,  
DALE

1c

1d



cca disks

(J22404) 14-MAR-74 16:21; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /MDK; Sub-Collections: SRI-ARC; Clerk: MDK;

17-JAN-74 1027-EDT GOULD at BBN-TENEX: new nls  
Received 17-JAN-74 07:40:34

1

thanks very much for your message which i received in honolulu. i've been using the new nls for several weeks already and have been able to complete the first two chapters of a primer describing the new language - these have been sent to jim bair. i wish i could report that the new language is easier to describe than the old, but the contrary seems to be the case. will send a set of comments soon to newnls. tried to read jrnl17,j21373 as you suggested, but the file always starts at j21150 and i haven't the patience to struggle with it. regards, laura.

1a

(J22405) 14-MAR-74 16:23; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /MDK; Sub-Collections: SRI-ARC; Clerk: MDK;

## Estimated Manpower Required to Implement the Multi-Host Journal System

Implementation of the Multi-Host Journal System would entail in essence a re-write of the Journal, Number, and Ident Systems in terms of the following modules:

RECORDER (a logical subfunction of the current Journal System) -- Records, controls access to, and dispenses the text of numbered documents to authorized users.

PUBLISHER (a logical subfunction of the current Journal System) -- Catalogs recorded documents -- number, location, and citation information -- in a master catalog and any number of remote "subscriber's" catalogs.

CATALOGER (a logical subfunction of the current Journal System) -- Maintains, controls access to, and dispenses to authorized users, location and citation information for published documents.

REGISTRAR (or Ident System) -- Maintains, controls access to, and dispenses to authorized users, information about users and groups of users in the System.

NUMBER VENDOR (or Number System) -- Dispenses and controls use of unique document numbers.

The System would consist of at least one (but in general, any number) of each of the above modules, distributed throughout the Network, and coherently interconnected. Each instance of a module (e.g., the RECORDER) would support the same set of primitive operations. Whenever one module required the services of another located on a different host, it would invoke the desired primitives through the Network; whenever the second module was local to the first, a more direct means of inter-process communication would be employed.

The Multi-Host Journal System would support fairly elaborate access controls.

Rough implementation effort estimates (probably optimistic) are as follows, assuming a two-host system distributed between SRI-ARC and OFFICE-1 as output, and reasonably responsive ones on which to work and (ultimately) run:

RECORDER	-- 2	man-months
PUBLISHER	-- 1/2	man-month
CATALOGER	-- 2	man-months
REGISTRAR	-- 4	man-months

(major portions of the Registrar may demand implementation in assembly language for efficiency, since this module

Estimated Manpower Required to Implement the Multi-Host Journal System

turns out to be the work horse of the System)

NUMBER VENDOR	-- 2	man-months	4a
INTERFACE	-- 1	man-months	
		(to hardcopy catalog, index, and directory production machinery)	
CONVERSION	-- 1	man-months	
		(of current on-line data bases)	
CHECKOUT	-- ?	man-months	4b

Estimated Manpower Required to Implement the Multi-Host Journal  
System

(J22406) 14-MAR-74 16:31; Title: Author(s): James E. (Jim)  
White/JEW; Distribution: /RWW NPG(Requested by RWW); Sub-Collections:  
SRI-ARC NPG; Clerk: JEW;  
Origin: <WHITE>RWWPAGE.NLS;9, 14-MAR-74 16:23 JEW ;

Reply to (30209,), FEEDBACK Identity Crisis

Jean:

In answer to your questions, the document you read is still a draft (soon to be finalized!). Many of the procedures described are not in existence but are proposed as what we would like to see happen.

(1) When we first thought of using the ident FEEDBACK we weren't aware that it was already in use. After seeing in the ident file that it was, we have tried to think of an alternative ident or idents to do the job. The relative merits of having one versus several idents and/or repository files are unclear and we will no doubt try several methods of collecting ARC feedback before settling on the best way for this group.

FEEDBACK was our first choice because it was mnemonic, had the connotations desired and we felt would be easy to remember (probably the same reason you chose it. It is a good word!) We also plan to set up a Feedback directory and this would allow the user to send a journal item and sndmsg to the same name.

As I was thinking more about this today I wondered if the Feedback Committee could use an ident like NETFEEDBACK. However, if you would rather not change idents, for whatever reason, just let me know and we'll pick an alternative. It isn't that big of a deal to us, so don't hesitate.

(2) The last we heard, you were going to use NETGRIPE and NETCOMMENTS for the two idents and that's why they're listed in that table. If NGRP and NCMT are the two to be used we'll change them before journalizing that document.

Dave Crocker sent a message to BUGS asking what had happened to NETBAGRIPE and NETCOMMENT. As far as I can find out, nobody here has received a request to set up these idents. I'm sending him a reply to that effect.

I hope this clarifies the "identity crisis" of a few idents. I find what you're doing to be very interesting and think it's quite a coincidence that all this interest in feedback was initiated at the same time.

I'll look forward to hearing your reply so we can resolve this ident thing once and for all!

Yours for an identified systematized world,  
Susan

Reply to (30209, ), FEEDBACK Identity Crisis

(J22407) 14-MAR-74 16:40; Title: Author(s): Susan R. Lee/SRL;  
Distribution: /JI; Sub-Collections: SRI-ARC; Clerk: SRL;  
Origin: <LEE>NOTE.NLS;1, 14-MAR-74 16:37 SRL ;



more on Hostnames file

Jon ... Sorry for this belated response to your note of 4-March on RFC 608. Was pleased that you agreed with the idea of using FTP. We've got the program ready to generate the hostnames file (as a sequential ASCII file) but have been waiting a week or so to see what feedback we'd get from our reply to Mark's suggestion re user process and binary format. Haven't got any feedback yet, and if none is received by March 18th we'll announce the file's existence via RFC.  
... Mike Kudlick

1

more on Hostnames file

(J22408) 14-MAR-74 16:42; Title: Author(s): Michael D. Kudlick/MDK;  
Distribution: /JBP JAKE(for your info); Sub-Collections: SRI-ARC; Clerk:  
MDK;