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IDENT SYSTEM USERS' GUIDE

The Identsystem is a subsystem of TNLS. Its prompt character is  
>. The command to call it up is:

1

```
*[G]oto [I]dentification submode CA
>
```

In this submode one can enter new individuals, who are then  
recognized as users by the system, new Network organizations, new  
Network groups; check an existing entry for an individual,  
organization, or group; or change or modify such entries.

2

The question mark command (?) at this point will echo the  
following commands:

3

```
Enter identification for
Modify record for
Status for
Quit
```

Entering an individual at an organization known to the Identfile.

4

```
>[E]nter Identification for an Individual? [Y]es
Last name: [Kidston] CA
There are currently no Kidston's defined in the Identification
system
```

```
First name (or initial): [Carol] CA
Middle initial (or middle name): [A.] CA
Affiliation (which organization, university, etc.):
[bbn-tenex] CA
Assigning tentative Ident; Please wait.
```

```
Ident: CAK
Name: Kidston, Carol A.
Affiliation: BBN-TENEX
Mailing Address: BBN-TENEX
Unverified
```

Do you wish to modify any of the above? [Y]es

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Use CD to abort; use Quit or Update to terminate modifications  
type '?' for list of modification commands)

A question mark (?) at this point will list the following  
commands:

Access  
Affiliation  
Coordinator  
Capabilities  
Delivery  
Expand normal references  
Function  
Group membership  
Host  
Imp  
ID (Privileged Command)  
Mailing address  
Miscellaneous comments  
Name  
Phone  
Quit  
Secondary affiliation  
Status  
Subcollection(s):  
Update  
User

>>[P]hone  
Old: None  
New (just type CA if no change desired): [(617) 491-1850 ext  
375] CA  
>>[D]elivery  
Old: None  
New (just type CA if no change desired): [O]nline  
>>[Us]er  
Old: None  
New (just type CA if no change desired): [bbn-tenex] CA  
>>[Q]uit CA

Ident: CAK  
Name: Kidston, Carol A.  
Affiliation: BBN-TENEX  
Mailing Address: BBN-TENEX

Phone: (617) 491-1850 ext 375  
Delivery: Online  
User: BBN-TENEX CA

Is the above correct? [Y]es  
Update Master Ident-File now? [N]o  
Your changes will be added to the Master Ident-File the next  
time someone updates it.  
Completed.  
>

The system searches the file for individuals with the same  
last name before requesting the first name.

The Affiliation must be an existing ident. (Entering  
individuals at new affiliations is covered in a separate  
example.)

Temporary ident -- the default ident is the person's initials  
(first, middle, last) plus the numbers 2 to 6, if necessary,  
to make the ident unique. The default can be overridden by  
someone who knows the correct password.

After the temporary ident is assigned, the system echoes  
everything it knows about Carol and asks if you have any  
changes. The first change should be insertion of a phone  
number. NIC requests anyone putting in a new individual also  
include the phone number in the following form:

(area code) [in parenthesis] Space Prefix-line number Space  
ext (lower case, no period) space number

In the modify mode the prompt is >>.

Carol is at a site that has access to the NIC's PDP-10. The  
Online refers to delivery of NIC [ARC] Journal documents. The  
User field of an individual who has Online delivery specified  
must be the TENEX directory name of his site (not always the  
ident of the site.) The default method of delivery is  
hardcopy via the U.S. Mail -- except for people at SRI-ARC  
where the default for Journal delivery is Online. The delivery  
field does not have to be filled in, but if online delivery is  
specified, the user field must be completed, too, so the  
Journal system will know where to deliver message. Another  
exception here, people at SRI-ARC who have their own TENEX  
directories, do not need to have the user field specified.  
The Identfile assumes their user field (and directory) is  
their last name.

The Quit command causes the system to echo once again all it  
knows about Carol. You can abort the entry by saying No when  
it asks "Is the above correct?" You do not have to update the



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Identfile after each entry (there is a delay since the file is so large), but do an Update before logging out for the day. Also, you must do an Update after putting a new person in the Identfile who is also going to be a member of a Network group. The system will not recognize the Ident until the file is updated.

All new entries are collected in a group called NEWIDS, which is maintained by the NIC. The group is checked periodically for new members' ids. The entries for these ids are then checked and verified and the id is deleted from NEWIDS. If you have any trouble putting someone in the Identfile, don't hesitate to call the NIC.

The mailing address is assumed to be the same as the organization address. This can be changed in the Modify Mode:

```
>>[Ma]iling Address
Old: BBN-TENEX
New (just type CA if no change is desired): [50 Moulton
Street 1V CR
Cambridge, Massachusetts 02139] CA
```

Occasionally, an individual's initial file may reside in a directory name other than his last name or his site's directory name. This has occurred infrequently in the past, especially with individual's at RADC. See the following example.

```
>[E]nter Identification for an Individual? [Y]es
Last name: [Calicchia]
```

There are currently no Calicchia's defined in the Identification system

```
First name (or initial): [Richard] CA
```

```
Middle initial (or middle name): CA
```

```
Affiliation (which organization, university, etc)* [RADC]
```

Assigning tentative Ident: Please wait.

```
Ident: RC2
Name: Calicchia, Richard
Affiliation: RADC
Mailing Address: RADC
Unverified
```

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Do you wish to modify any of the above? [Y]es  
Use CD to abort; use Quit or Update to terminate modifications  
type '?' for list of modification commands)

>>[V]erify CA Password: [type the password here]

>>[P]hone

Old: None

New (just type CA if no change desired): [(315) 330-2672] CA

>>[D]elivery

Old: None

New (just type CA if no change desired): [O]nline CA

>>[Us]er

Old: None

New (just type CA if no change desired): [LaMonica] CA

>>[Su]bcollection(s):

Old: None

New (just type CA if no change desired): [RADC] CA

>>[Q]uit CA

Ident: RC2

Name: Calicchia, Richard

Affiliation: RADC

Mailing Address: RADC

Phone: (315) 330-2672

Sub-Collection: RADC

Delivery: Online

User: LaMonica

Is the above correct? [Y]es

Update Master Ident-File now? [N]o

Your changes will be added to the Master Ident-File the next  
time someone updates it.

Completed.

>

In the usual case, when an individual logs into the NIC's  
PDP-10, he is asked for his Ident and an initial file is  
created for him. (An initial file looks like the following:  
ident.nls;#, where ident is the two to four letter/number  
combination assigned him by the Ident system, nls is the  
extension, and # is the current version number. See TENEX  
Users Guide for a better explanation). In order to insure  
that there will be an initial file in the correct directory  
before the next Journal delivery is made (the directory must

have the same name as the User field), you must create the initial file.

First, connect to the correct directory (in EXEC) and get back into NLS. Then create a null file with the correct ident. (\*[n]ull file [ident] CA).

The Status for command requires either an ident or a period and a person's last name.

5

>[S]tatus for [.Neumann] CA  
The following individuals with last name Neumann are already defined  
Neumann, Steve, Affiliated with: UCSB-MOD75, Ident = SN

Is this the correct Neumann? [Y]es  
Ident SN accepted

Ident: SN  
Name: Neumann, Steve  
Affiliation: UCSB-MOD75  
Mailing Address: UCSB-MOD75

Phone: (805) 961-2274

If you knew the ident of the person you could type that in, in either upper or lower case; i.e., <[S]tatus for [sn]/[SN] CA.

Entering an individual at a new affiliation.

6

>[E]nter Identification for an Individual? [Y]es  
Last name: [Hirano] CA

There are currently no Hirano's defined in the Identification system

First name (or initial): [Chikafusa] CA  
Middle initial (or middle name): CA  
Affiliation (which organization, university, etc.): [/][new]  
Affiliation's name: [Hitachi, Ltd.] CA  
Affiliation's Address: [Central Research Laboratory] V CR

Nokubunji, Tokyo 185 ↑V CR  
JAPAN] CA

Assingning (sic) a tentative Ident. Please waite. (sic)

Tentative Ident is AFF-13

Updating Master Ident-File. Please waite. Ident for  
affiliation: AFF-13 has been accepted.

Ident: CH2

Name: Hirano, Chikafusa

Affiliation: AFF-13

Mailing Address: AFF-13

Unverified

Mr. Hirano has no middle initial; this is indicated by  
hitting CA after the system requests a middle initial or  
middle name.

The new affiliation is indicated by typing a slash, the  
system echoes [new] and asks for the name and address.

The first temporary Ident is assigned to the affiliation.  
Note the file is automatically updated after the temporary  
organization ID is assigned. The temporary ID will be  
changed later by the NIC. When it is later changed, Mr.  
Hirano's affiliation and mailing address will automatically  
be changed to the new ID.

Do you wish to modify any of the above? No

Updating master Ident-File; Please wait

Completed.

>

Modifying the temporary affiliation ident.

7

>[M]odify record for [aff-12] CA Universite du Quebec

Proceed? [Y]es

>>[S]tatus

Ident: AFF-12

Name: Universite du Quebec

Unexpanded

Membership: JBR2 ;

Coordinator:

Mailing Address: Seige social

2875 boulevard Laurier

Sainte-Foy, Quebec 10, Quebec  
CANADA

>>[Co]ordinator  
Old: None  
New (just type CA if no change desired): [jbr2] CA  
>>[ID]  
Password: [type the password here]  
New Ident = [UQSS] CA  
Ident will be changed when you Update Master Ident-File.  
>>[Q]uit CA  
Ident: AFF-12  
Name: Universite du Quebec  
Unexpanded  
Membership: JBR2 ;  
Coordinator: JBR2  
Mailing Address: Siege social  
2875 boulevard Laurier  
Sainte-Foy, Quebec 10, Quebec  
CANADA

Is the above correct? [Y]es  
Update Master Ident-File now? [N]o  
Your changes will be added to the Master Ident-File the next  
time someone updates it.

Completed.

The Coordinator field must be filled in for each organization. Generally, the coordinator is the technical liaison at each site. The Membership field is automatically completed by the system as each person is identified.

The Quit command again here echoes everything the system knows about AFF-12. Note that AFF-12 is still listed as the ID of the organization; this will not be changed until the file is updated because the information is contained in the partial copy.

The password requested here (in the ID command) is not the individual's password, but a special one recognized by the Identfile.

After the Identfile is updated, Joe Reid's entry will look like the following example:

>[S]tatus for [jbr2] CA

Ident: JBR2  
Name: Reid, Joseph B.  
Affiliation: UQSS  
Mailing Address: UQSS  
  
Phone: (418) 657-2323

Network Groups are set up at the request of a coordinator, the person in charge of that group, and addition of new members or deletion of old members is also made at the coordinator's request. Essentially groups exist so that distribution of Journal documents can be made to a collection of people by typing just one ident -- the ident of the group -- rather than typing many individual identents.

8

To enter a new group in the Identfile:

9

>[E]nter Identification for an Individual [N]o  
Enter identification for a(n) [G]roup CA

Name: [Network Associates Group] CA  
Group Coordinator: [SDC2] CA  
Membership list: [ts3 lp ra2 yl rhh mz dc2 mp lfd tl mom pk  
djf dt ajb del aks dda db ts rmv ema hl jcl rfh cds mpb rla]  
CA  
Assigning tentative Ident; Please wait.  
Identification is NAG ok? [y]es or [n]o

Ident: NAG  
Name: Network Associates Group  
Expand  
Membership: TS3 LP RA2 YL RHH MZ DC2 MP LFD TL MOM PK DJF DT  
AJB DEL AKS DDA DB TS RMV EMA HL JCL RFH CDS MPB RLA ;  
Coordinator: SDC2  
Mailing Address: SDC2

Is the above correct? [Y]es  
Update Master Ident-File now? [N]o  
Your changes will be added to the Master Ident-File the next  
time someone updates it.  
Completed.

As is the case for organizations, each group must have a  
coordinator. Steve Crocker (SDC2) is the coordinator of

the Network Associates Group. The ident system assigns Steve's address (the mailing address listed in Steve's id entry) as the mailing address for this group.

Group members may be added by typing .Lastname (if that person is already in the Ident-File) or each person's Ident, separated by spaces.

To change the membership of a group:

10

```
>Modify record for [nag] CA Network Associates Group
Proceed? [Y]es
>>[G]roup membership
```

```
Old: TS3 LP RA2 YL RHH MZ DC2 MP LFD TL MOM PK DJF DT AJB DEL
AKS DDA DB TS RMV EMA HL JCL RFH CDS MPB RLA ;
```

New (just type CA if no change desired):

```
>>>[A]dd [wtm] CA
```

```
>>> CA Quit
```

```
>>[Q]uit CA
```

Ident: NAG

Name: Network Associates Group

Expand

```
Membership: WTM TS3 LP RA2 YL RHH MZ DC2 MP LFD TL MOM PK DJF
DT AJB DEL AKS DDA DB TS RMV EMA HL JCL RFH CDS MPB RLA ;
```

Coordinator: SDC2

Mailing Address: SDC2

Is the above correct? [Y]es

Update Master Ident-File now? [N]o

Your changes will be added to the Master Ident-File the next time someone updates it.

Completed.

The new members may be typed in as an ident, or the last name preceded by a period can be typed in and the system will search for people with that last name and ask you to pick the correct one. If the person is new to the file, he must be entered in the Identfile before he is entered in as a member of the group.

The operation for deleting someone from a Network Group is much the same.

```
>[M]odify record for [ass] CA ARPANET Satellite System
```



Proceed? [Y]es  
>>[G]roup membership

Old: PE HF VGC RB SL JK DGF EC2 FD PK JFH DCW3 LGR PMK HPP  
NICSTA RMM DTM LK NA ;  
New (just type CA if no change desired):  
>>>[D]elete [jk] CA  
>>> CA [Quit]  
>>[Q]uit  
Ident: ASS  
Name: ARPANET Satellite System  
Expand  
Membership: PE HF VGC RB SL DGF EC2 FD PK JFH DCW3 LGR PMK HPP  
NICSTA RMM DTM LK NA ;  
Coordinator: DCW3  
Mailing Address: DCW3

Is the above correct? [Y]es  
Update Master Ident-File now? [N]o  
Your changes will be added to the Master Ident-File the next  
time someone updates it.  
Completed.

>

An Example of Someone Who Has Changed Affiliations on the Network

11

>[M]odify record for [DEL] CA Liddle, Dave E. OWENS  
Proceed? [Y]es/CA/SP  
>>[Af]iliation CA  
Old: OWENS  
New (just type CA if no change desired): [PARC-MAXC] CA  
>>[Ma]iling address  
Old: OWENS  
New (just type CA if no changed desired): [PARC-MAXC] CA  
>>[P]hone  
Old: (419) 242-6543  
New (just type CA if no change desired): [(415) 493-1600] CA  
>>[St]atus  
Ident: DEL  
Name: Liddle, Dave E.  
Affiliation: PARC-MAXC  
Mailing Address: PARC-MAXC  
  
Phone: (415) 493-1600



>>[Q]uit CA  
Ident: DEL  
Name: Liddle, Dave E.  
Affiliation: PARC-MAXC  
Mailing Address: PARC-MAXC

Phone: (415) 493-1600

Is the above correct? [Y]es/[y]es/SP/CA  
Update Master Ident-File now? [n]o/[N]o  
Your changes will be added to the Master Ident-File the next  
time someone updates it.  
Completed.

>

Note that if someone changes his affiliation (place of  
work) from one Network site to another, his address and  
phone number must also be changed. In cases where the  
'User' field and 'Online' delivery are specified, these  
would also have to be modified.

The second part of this change in an individual's location  
involves changing the membership list of his former affiliation.  
This is not done automatically by the Ident system.

12

>[M]odify record for [owens] CA Owens Illinois Inc.  
Proceed? [Y]es/[y]es/SP/CA  
>>[St]atus  
Ident: OWENS  
Name: Owens Illinois Inc.  
Unexpanded  
Membership: DEL;  
Coordinator: DEL  
Mailing Address: Lewis Development Park, Bldg. 30  
Perrysberg, Ohio 43551

Phone: (419) 242-6543  
Delivery: Hardcopy

>>[M]iscellaneous comments  
Old: None  
New (just type CA if no change desired): [SPECIAL] CA  
>>[Q]uit CA  
Ident: OWENS  
Name: Owens Illinois Inc.

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Unexpanded  
Membership: DEL;  
Coordinator: DEL  
Mailing Address: Lewis Development Park, Bldg. 30  
Perrysberg, Ohio 43551

Phone: (415) 242-6543  
Delivery: Hardcopy  
Comments: SPECIAL

Is the above correct? [Y]es/[y]es  
Update Master Ident-File now? [Y]es  
Updating Master Ident-File; please wait.  
Completed.

The Miscellaneous Comments field was invented because once someone is entered in the Identfile, they're in for eternity (or until the Delete command is implemented). Marking an entry 'SPECIAL' ensures its omission from the Directory. If an individual entry is marked 'SPECIAL', that entry must be deleted from all groups in which it appears. Otherwise, that Ident will show up as a 'Bad ID in MembershipList' when the Directory is run.

The third part of this change in affiliations involves adding the individual's name to the Membership List of his new affiliation. This, also, is not done automatically by the Ident System.

13

>[M]odify record for [parc-maxc] CA Xerox PARC  
Proceed? [Y]es/CA  
>>[G]roup membership

Old: GWM RES WT DDC EHS WKE CJ EMM JIE AMP DIAN ERF DGB ACK  
JGM BWL LDP;  
New (Just type CA if no change desired):  
>>>[A]dd [del] CA  
>>>CA[Quit]  
>>[Up]date CA  
Ident: PARC-MAXC  
Name: Xerox PARC  
Unexpanded  
Membership: DEL GWM RES WT DDC EHS WKE CJ EMM JIE AMP DIAN ERF  
DGB ACK JGM BWL LPD ;  
Coordinator: LPD  
Mailing Address: Computer Systems Building

3180 Porter Drive  
Palo Alto, California 94304

Phone: (415) 493-1600

Updating the Master Ident-File; please wait.  
Completed.

>

The Host and Imp commands are used to identify the TENEX location number of each organization's Host and Imp. I have used these commands only with affiliations, and not very consistently because I don't know the correct numbers to put in. I imagine the original purpose was to have the Host and Imp numbers identified for each site to correspond to the Resource Notebook. Probably someone should check with Jake Feinler to get the correct numbers and insert them for each site.

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The Secondary Affiliation command is used occasionally when someone is working mainly at one site but connected in some way to another. For example, Bob Metcalfe (now at Xerox Palo Alto Research Center) at one time was working at MIT but completing his thesis through Harvard. As I said, this command is used very infrequently.

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The Function command refers to one of three Network roles -- that of Station Agent, Technical Liaison, or Principal Investigator. An individual may have more than one function; i.e., Station Agent and Liaison. Incidentally, the Technical Liaison is indicated as a 'Liaison' in the Identfile.

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>[S]tatus for [dce] Ident: DCE  
Name: Engelbart, Douglas C.  
Affiliation: SRI-ARC  
Mailing Address: Augmentation Research Center  
Stanford Research Institute  
Menlo Park, California 94025

Phone: (415) 326-6200 ext 2220  
Function: Principal Investigator

>[S]tatus for [.Pyke] CA

The following individuals with last name Pyke are already defined

Pyke, Thomas N., Affiliated with: NBS-CCST, Ident = TNP

Is this the correct Pyke? [Y]es

Ident TNP accepted

Ident: TNP

Name: Pyke, Thomas N.

Affiliation: NBS-CCST

Mailing Address: National Bureau of Standards  
Center for Computer Science and Technology  
Washington, D.C. 20234

Phone: (301) 921-2601

Function: Network Program Manager and Liaison

Delivery: Online Hardcopy

User: nbs-tip

Note that Tom Pyke's site ident and User field are not the same. The User field must be the same as the TENEX directory that individual is using.

The Subcollection subfield is an optional one. It is used to specify into which subcollection Journal documents authored by an individual or group or affiliation are placed. The Subcollection subfield must have the same name as an existing ident in order for it to work properly. There is also a Subcollection(s) command in the Journal System. Again, the Subcollection specified must be an existing Ident.

17

>[S]tatus for [jhb] CA

Ident: JHB

Name: Bair, James H.

Affiliation: RADC

Mailing Address: Rome Air Development Center  
Griffiss Air Force Base  
Rome, New York 13440

Phone: (315) 330-7834

Sub-Collection: RADC

Delivery: Online

User: BAIR

The default Sub-Collection for SRI-ARC people is SRI-ARC, and for Network people the default is NIC. Everyone at RADC requested their Sub-Collection field to be RADC, and so it is.

An example of someone who was put in the Identfile over the Net, apparently by someone using an uppercase only terminal.

18

```
>[M]odify record for [dc3] CA CANTOR, DON CCA
Proceed? [Y]es
>>[N]ame CANTOR, DON
Last name: [Cantor] CA
First name (or initial): [Don] CA
Middle initial (or middle name): CA
>>[St]atus
Ident: DC3
Name: Cantor, Don
Affiliation: CCA
Mailing Address: CCA
Unverified

>>[V]erify CA Password: [the password is typed here] CA
>>[P]hone
Old: None
New (just type CA if no change desired): [(617) 491-3670] CA
>>[Up]date CA
Ident: DC3
Name: Cantor, Don
Affiliation: CCA
Mailing Address: CCA

Phone: (617) 491-3670
```

Updating the Master Ident-File; please wait.  
Completed.

>

Mr. Cantor's name had to be altered because someone on the NET apparently didn't know how to indicate upper and lowercase letters. Jeanne gets very upset (perhaps rightfully so) if someone appears in the Directory in all uppercase letters. Such an entry does stick out like a sore thumb. To change it, you have to modify the name as in the example above.

Then the Ident is verified by a wheel and the phone number

is added. This may necessitate calling the site to check extensions or whatever. The file is either updated at this point or before quitting for the end of the day.

Examples of maintaining the NEWIDS group.

19

The group NEWIDS is the place in the Identfile where all new entries to the file appear as members of that group. NIC maintains the NEWIDS group. This involves someone (an Ident wheel) checking the group periodically, by using the modify and status commands as shown below, for new members. Each new Ident will appear followed in parenthesis by the ident of the person who has put the new Ident in the file. Each Ident is then individually checked for all the appropriate fields and proper appearance.

```
>[M]odify record for [newids] CA Newids
Proceed? [Y]es
>>[St]atus
Ident: NEWIDS
Name: Newids
Unexpanded
Membership: JHC (ARPA) CMG (RES) DC3 (ARCG) EAE (SA) TJB (CHI)
SA (BER) DGR (SJL) SJL (ARPA) DES (LMM);
Coordinator: New Idents
Mailing Address: BER
BER
```

Comments: SPECIAL

>>[G]roup membership

```
Old: JHC (ARPA) CMG (RES) DC3 (ARCG) EAE (SA) TJB (CHI) SA
(BER) DGR (SJL) SJL (ARPA) DES (LMM);
New (just type CA if no change desired):
>>>[D]elete [jhc cmg dc3 eae tjb dgr sjl des sa] CA
>>> CA [Quit]
>>[Up]date CA
Ident: NEWIDS
Name: Newids
Unexpanded
Membership: ;
Coordinator: New Idents
Mailing Address: BER
BER
Comments: SPECIAL
```

Updating the Master Ident-File; please wait.

Completed.

>

Apparently, in this example I had previously checked each Ident that I did not enter myself. As a general rule, I do not delete an Ident from the membership list of Newids until it is checked. It's just too easy to forget where you are and what you're doing if you delete the Ident first, and once it's deleted, it's virtually lost to you. Of course, since all new entries are added to the beginning of each of the four branches in the IDENTS.MASTER file (Used IDs, Individuals, Groups, and Affiliations), you could find them that way, but that's hardly augmented, is it?

I have a few examples of bugs. In the old days (after Mimi left and before Charles Irby took over the programming maintenance of the Identfile) it used to be very difficult to get anyone to do anything about system errors and bugs. I have included in this section an example of what to do when the system crashes when the IDENTS.MASTER file has a partial copy lying around.

20

>[E]nter Identification for an Individual? [Y]es  
Last name: [Kinnison] CA  
There are currently no Kinnison's defined in the  
Identification system  
First name (or initial): [G.] CA  
Middle initial (or middle name): CA  
Affiliation (which organization, university, etc): [/] '[new]'  
Affiliation's name: [Naval Undersea Research and Development  
Center] CA  
Affiliation's Address: [Department of the Navy 1V CR  
Undersea Surveillance Division  
San Diego, California 92132] CA  
Assigning a tentative Ident. Please Tentative Ident is AFF-1  
Updating Master Ident-File. Please wait. Ident for  
affiliation: AFF-1 has been accepted.  
Assigning tentative Ident; Please wait.

Ident: GK  
Name: Kinnison, G.  
Affiliation: AFF-1  
Mailing Address: AFF-1  
Unverified

Do you wish to modify any of the above? [Y]es  
Use CD to abort; use Quit or Update to terminate modifications  
type '?' for list of modification commands)



>>[V]erify CA Password: [type password here]  
>>[N]ame Kinnison, G.  
Last name: [Kinnison] CA  
First name (or initial): [Gerald] CA  
Middle initial (or middle name): [L.] CA  
Checking for Ident Change. Please waite.

New tentative Ident is GLK.

>>[P]hone  
Old: None  
New (just type CA if no change desired): [(714) 225-6461] CA  
>>[Up]date CA  
Ident: GLK  
Name: AFF-1  
Affiliation: AFF-1Kinnison, Gerald L..

Phone: (714) 225-6461

Updating the Master Ident-File; please wait.  
Completed.

>

This is a bug that occurred because the Name field in the second case was longer than in the first case. Charles promised to fix it. I almost fixed it in the Modify mode, but didn't notice that in correcting the Affiliation field the Address field got deleted. It was inserted later (after Charles pointed this out to me).

Again, the password requested here is not the individual's Ident but a special password recognized by the Identfile.

#### WHAT TO DO WHEN THE SYSTEM CRASHES IN THE MIDDLE OF AN UPDATE

21

First, delete the partial copy of the <IDENTFILE>IDENTS.MASTER file. (This can be done after connecting to the IDENTFILE directory, password is ARC). Then copy the highest numbered version of the file to next highest numbered version (using ALTMODE, the system will do this for you).

UNDER NO CIRCUMSTANCES do any modifications or an Update



BER 25-JAN-73 8:26 13599  
SRI-ARC 26 JAN 73 9:53AM 13599

before deleting the partial copy. All sort of messes will result. See the example below of how not to handle this problem.

>[M]odify record for [aff-13] CA Brigham Young University  
Proceed? [Y]es  
>>[G]roup membership

Old: None

New (just type CA if no change desired):

>>>[I]nitialize [cvb] CA

>>> CA [Quit]

>>[Co]ordinator

Old: None

New (just type CA if no change desired): [cvb] CA

>>[St]atus

Ident: AFF-13

Name: Brigham Young University

Unexpanded

Membership: CVB ;

Coordinator: CVB

Mailing Address: Institute for Computer Uses in Education

W166 West Stadium

Provo, Utah 84601

>>[Up]date CA

Ident: AFF-13

Name: Brigham Young University

Unexpanded

Membership: CVB ;

Coordinator: CVB

Mailing Address: Institute for Computer Uses in Education

W116 West Stadium

Provo, Utah 84601

Updating the Master Ident-File; please wait.

TENEX RESTARTING, WAIT...

TENEX IN OPERATION

After logging in I checked the IDENTFILE directory

@dir <identfile>idents.master CR

<IDENTFILE> 19-DEC-72 8:51:44  
IDENTS.MASTER;322,321

In this case you will notice there was no partial copy in the IDENTFILE directory. The highest numbered version should have been deleted (version 322 in the example above). You will see what happened when it was not deleted.

>[S]tatus for [byu] CA ?

Please continue, Ident = [aff-13] CA

Ident: AFF-13

Name: Brigham Young University

Unexpanded

Membership:

Coordinator:

Mailing Address: Institute for Computer Uses in Education

W166 West Stadium

Provo, Utah 84601

Unverified

>[M]odify record for [aff-13] CA Brigham Young University

Proceed? [Y]es

>>[G]roup membership

Old: None

New (just type CA if no change desired):

>>>[I]nitialize [cvb] CA

>>> CA Quit

>>[C]oordinator

Old: None

New (just type CA if no change desired): [cvb] CA

>>[V]erify CA Password: [type password]

>>[St]atus

Ident: AFF-13

Name: Brigham Young University

Unexpanded

Membership: CVB ;

Coordinator: CVB

Mailing Address: Institute for Computer Uses in Education

W166 West Stadium

Provo, Utah 84601

>>[ID]

Password: [type password] CA

New Ident = [byu] CA

Ident already used

>>[Up]date CA CA

Ident: AFF-13

Name: Brigham Young University

Unexpanded

Membership: CVB ;  
Coordinator: CVB  
Mailing Address: Institute for Computer Uses in Education  
W166 West Stadium  
Provo, Utah 84601

Updating the Master Ident-File; please wait.  
Completed.

>

It should have been obvious when the system thought the Ident byu was already used but failed to recognize it on the status command that something was wrong with the file. But I went ahead and updated it which permanently set the errors in the file. As I said before, the highest numbered version of the Identfile should have been deleted as soon as I logged back in after the crash.

One can load the real Identfile and look at it like any other NLS file. There is, however, NO WAY to edit the Identfile other than using the subsystem as discussed in this document. Some examples of what entries look like in the real file follow:

22

An Individual's Entry:

( 'Meissner' ) LAST NAME

(PM) Meissner, Paul  
NES-CCST

Delivery: Online;  
Phone: (301) 921-2601;  
User: NBS-TIP;

Note that Paul's User field (and TENEX directory)  
does not have the same name as his site's Ident.

The entry for a Network Group:

(PRG) Expand Group  
REK2 NA FD HF LK RMM EBS;  
Packet Radio Group

REK2  
REK2

The 'Expand' in the first line refers to Journal delivery and means that a document sent to the Ident PRG will go to each person listed in the membership list; i.e., REK2, NA, FD, HF, LK, RMM, and EBS. PRG is the Ident for the group, Packet Radio Group is the group's name. REK2 is the coordinator and the 'mailing address'.

The entry for an affiliation

(SRI-ARC) Expand Affiliate  
CBH SRL EKM CFD ARCG JAKE HAND KIRK NDM KFB RP JEW JFV DSK  
PR MDK WRF LLL MFA WLB DCE BAH MEH JDH CHI MEJ HGL JBN JCN  
WHP JCP JR EKV DVN KEV DCW RWW DIA ;  
Stanford Research Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

(SRI-AI) Affiliate  
NJN2 WPR LBC MEL REF DEW BR BMW LSC ;  
Stanford Research Institute  
BMW  
Artificial Intelligence Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

IMP: 2;  
Host: 1;  
Delivery: Hardcopy;

You'll notice that the first entry is an Expand Affiliae which means that a document sent to SRI-ARC goes to every person in the membership list. In the second example, a document sent to SRI-AI would go only to the Liaison, Mike Wilbur. Also, the second example has the IMP and Host numbers listed. This should be done for all sites eventually.

The last thing I have to tell about is how to sort the Identfile. Since it is such a large file it's best to log in as Catalog or NIC-Work to make sure you have enough room to store the partial copy is created. Then in EXEC copy the <IDENTFILE>IDENTS.MASTER;

(highest version -- use altmode) to the appropriate directory.  
Then go into NLS and load the file IDENT.S.MASTER

23

The second, third and fourth branches of the Identfile contain  
the entries for Individuals, Groups, and Affiliates. Those are  
the branches that will be sorted. The command is:

24

\*[G]oto [S]ort [B]ranch at [.2] / [.3] / [.4] CA.

Then Update the file, and do an Output Quickprint with y  
viewspecs, go back into the EXEC, connect to the IDENTFILE  
directory and copy the file you've just created into the  
IDENT.S.MASTER file.

25

Deutsch, L. Peter  
Xerox PARC  
3180 Porter Drive  
Palo Alto, California 94304

To:

Meir, Jaacov  
Center for Advanced Computation  
University of Illinois  
120 Center for Advanced Computation Building  
Urbana, Illinois 61801

14068

BER 25-JAN-73 8:26 13599  
SRI-ARC 26 JAN 73 9:53AM 13599

(J13599) 25-JAN-73 8:26; Title: Author(s): Row, Barbara E./BER;  
Distribution: For expanded distribution of this item, see master copy.;  
Sub-Collections: SRI-ARC NIC; Clerk: BER;  
Origin: <ROW>IDFILE.NLS;28, 22-JAN-73 8:58 BER ;  
.PxFont<1>=10p,6,0;.PxFont<2>=10p,0,Light; .YBL=2p

Bob and Peter, Im working on getting the pm schedule on-line.  
Here is a first pass

## IMP/TIP Preventive Maintenance Schedule

1

Preventive Maintenance is scheduled on a monthly basis, and a given machine is normally scheduled at the same time each month. However, it is sometimes necessary to reschedule PM's because of network connectivity considerations or for other reasons; therefore this schedule is only an approximation to the actual schedule for a given month. All times are shown in Eastern Time.

1a

## First Monday

1a1

BBN IMP [0830-1130]

1a1a

## First Tuesday

1a2

BBN TIP [0830-1130]

1a2a

UCSB [1130-1430]

1a2b

## First Wednesday

1a3

CARNEGIE [0830-1130]

1a3a

SRI [1130-1430]

1a3b

XEROX [1500-1800]

1a3c

## First Thursday

1a4

SAAC [0830-1130]

1a4a

UTAH [1030-1330]

1a4b

## Second Monday

1a5

MIT [0830-1130]

1a5a

NOAA [1030-1330]

1a5b

## Second Tuesday

1a6

MITRE [0830-1130]

1a6a

USC [1130-1430]

1a6b

## Second Wednesday

1a7

Bob and Peter, Im working on getting the pm schedule on-line.  
Here is a first pass

STANFORD [1130-1430]	1a7a
RADC [1430-1730]	1a7b
Second Thursday	1a8
BELVOIR [0830-1130]	1a8a
UCSD [1130-1430]	1a8b
TINKER [0930-1230]	1a8c
Third Monday	1a9
HARVARD [0830-1130]	1a9a
UCLA [1000-1300]	1a9b
Third Tuesday	1a10
CCA [0830-1130]	1a10a
RAND [1130-1430]	1a10b
SDC [1530-1830]	1a10c
Third Wednesday	1a11
ILLINOIS [0930-1230]	1a11a
ARPA [0830-1130]	1a11b
AMES IMP [1130-1430]	1a11c
Third Thursday	1a12
ETAC [0830-1130]	1a12a
FNWC [1130-1430]	1a12b
Fourth Monday	1a13
CASE [0830-1130]	1a13a
HAWAII [0830-1130]	1a13b
Fourth Tuesday	1a14



AAM 2-JAN-73 11:48 13600

Bob and Peter, Im working on getting the pm schedule on-line.  
Here is a first pass

NBS [0830-1130]	1a14a
LBL [1130-1430]	1a14b
Fourth Wednesday	1a15
LINCOLN [0830-1130]	1a15a
AMES TIP [1130-1430]	1a15b
Fourth Thursday	1a16
GWC [0930-1230]	1a16a
ISI [1300-1600]	1a16b
ABERDEEN [0830-1130]	1a16c

AAM 2-JAN-73 11:48 13600

Bob and Peter, Im working on getting the pm schedule on-line.  
Here is a first pass

(J13600) 2-JAN-73 11:48; Title: Author(s): McKenzie, Alex A./AAM;  
Distribution: Metcalfe, Robert M. (Bob), Deutsch, L. Peter/RMM LPD;  
Sub-Collections: NIC; Clerk: AAM;

CHI 31-DEC-72 15:22 13601

Response to (13511,), STENEX JSYS Definitions

Don, with regard to STENEX jsys symbols being EXTERNAL: Is the symbol equal to the full word value of the jsys or just the jsys number? I thought it was the former, in which case I see no difficulty. -- Charles.

1

CHI 31-DEC-72 15:22 13601

Response to (13511, ), STENEX JSYS Definitions

(J13601) 31-DEC-72 15:22; Title: Author(s): Irby, Charles H./CHI;  
Distribution: Andrews, Don I./DIA; Sub-Collections: SRI-ARC; Clerk: CHI;

Response to (Mjournal, 13509,1), Jsies for reading monitor core

Don, your suggested jsies for reading monitor core sound good. Have you suggested them to BBN yet? They could also be used by one fork to read data in another -- This might be a nice way to couple the output processor and compilers to NLS. -- Charles.

1

CHI 31-DEC-72 15:42 13602

Response to (Mjournal, 13509,1), Jsies for reading monitor core

(J13602) 31-DEC-72 15:42; Title: Author(s): Irby, Charles H./CHI;  
Distribution: Andrews, Don I./DIA; Sub-Collections: SRI-ARC; Clerk: CHI;

CHI 31-DEC-72 15:54 13603

Ident Verify Command

Ident Verify Command

Dave and Barbara, please see (Journal, 13575, 1k) for an explanation of the new Ident Verify command. This is now in the running system. -- Charles.

1



CHI 31-DEC-72 15:54 13603

Ident Verify Command

(J13603) 31-DEC-72 15:54; Title: Author(s): Irby, Charles H./CHI;  
Distribution: Row, Barbara E., Hopper, J. D./BER JDH(I have yet to add  
the user name verification, but will get to it soon); Sub-Collections:  
SRI-ARC; Clerk: CHI;

CHI 2-JAN-72 16:34 13604

Completion of Ident System Cleanup

I feel this wraps up my commitment to clean up the Ident System  
-- Any further changes to it should be considered Ident System  
Development

## Completion of Ident System Cleanup

(ident'cleanup)

1

I intend to finish the Ident system cleanup that I began shortly before the ICCC by making the following changes:

1a

Implement Ident wheels (jdh, chi, ber)

1a1

Ident wheels will have special capabilities and less verbose feedback from the system

1a1a

restrictions (we may need to add a new field -- may-be-modified-by identlist)

1a2

wheel can do everything and see everything, plus only wheels may

1a2a

verify entries

1a2a1

read or set capabilities

1a2a2

change idents

1a2a3

ordinator of group or affiliation can changethe following for the group or affilliation

1a2b

membership of group, name of group, expand/unexpand, address, affiliation, imp, host, phone, function, secondary affiliation, subcollection, delivery, group coordinator, misc comments, username

1a2b1

Individual can change the following for his own ident entry

1a2c

username, name, phone, mailing address, affiliation, imp, host, phone, function, secondary affiliation, subcollection, delivery, misc comments, etc

1a2c1

guest user's may not enter new idents or modify extant ident entries.

1a2d

status commands will not print capabilities unless user is a wheel

1a2e

I mistakenly removed the capability for ident specification while entering a new ident. I will re-implement this.

1a3

new capabilities

1a4

Completion of Ident System Cleanup

delete fields (by typing "NONE" for its contents), 1a4a

delete ident entries (ident will not be reused; use of  
the ident in distribution lists, etc, will be a no-op) 1a4b

Ident Query 1a5

add ident query capabilities (.LastName, ?BeginLastName,  
?[NameContentString]) to DNLS 1a5a

Allow SP's in the strings (this means they must be  
terminated by CA). 1a5b

Your reactions will be appreciated. 1b

CHI 2-JAN-72 16:34 13604

Completion of Ident System Cleanup

(J13604) 2-JAN-72 16:34; Title: Author(s): Irby, Charles H./CHI ;  
Distribution: Watson, Richard W., Norton, James C., Kudlick, Michael D.,  
Van Nouhuys, Dirk H., Row, Barbara E., Hopper, J. D., Auerbach, Marilyn  
F., North, Jeanne B., Feinler, Elizabeth J. (Jake)/rww jcn mdk dvn  
ber jdh mfa jbn jake ; Sub-Collections: SRI-ARC; Clerk: CHI ;

double reply

Dirk; thanks for the info on currently available seq>nls conversion. Depending on when the major work Dick mentioned gets done, relative to our switching to Net use, we may need them. (I think I said that right.).

oh yes. happy new year...how was the party...we wanted to come up, but the proverbial circumstances prevented.

tnx again. bye.

1

DHC 2-JAN-72 16:42 13605

double reply

(J13605) 2-JAN-72 16:42; Title: Author(s): Crocker, David H./DHC;  
Distribution: Van Nouhuys, Dirk H./DVN; Sub-Collections: NIC; Clerk:  
DHC;

DIA 1-JAN-73 21:40 13606

Here are some half-baked thoughts on NLS to MPS conversion:

Jump link on (andrews,nlsrecord,7:wy) and tell me what you think.

1



DIA 1-JAN-73 21:40 13606

Here are some half-baked thoughts on NLS to MPS conversion:

(J13606) 1-JAN-73 21:40; Title: Author(s): Andrews, Don I./DIA;  
Distribution: Irby, Charles H., Deutsch, L. Peter/CHI LPD;  
Sub-Collections: SRI-ARC; Clerk: DIA;

Information Flow at the NIC through TNLS Classes and Locator

I have a chance to watch information flow in and out of the NIC from two positions, one as teacher and/or planner of TNLS classes, the other as builder and maintainer of Locator.

1

Classes:

2

At TNLS classes I and the other people who teach offer a lot of information about TNLS, the TENEX systems that supports it, and local folklore.

2a

How much people absorb depends a great deal on their background and to some extent on how much they desire to learn.

2a1

For example, people with a lot of relevant systems programming experience come away with a pretty good notion of what's going on.

2a1a

People who are very ignorant and indifferent come away with almost no information.

2a1b

How much they retain depends a great deal upon what they go home and do.

2a2

Even people who learn quite a bit lose most of it rapidly if they do not go home and practice.

2a2a

People in the classes also talk to one another and to people at ARC who are not directly involved in the classes.

2b

Mosst of the informal exchange is at lunch and on breaks although on one occasion we had a formal seminar in Network operation separate from the TNLS class.

2b1

This informal information exchange is quite important I think.

2b2

Doug has been involved on a number of occasions.

2b2a

Like the formal classes, the usefulness of the informal information exchange depends a great deal on how much the student's brought with him.

2c

The informal information exchange tends to be about the operation of the Net as a whole or ARC's hardware and software connection to the Net rather than of matters internal to ARC.

2d

As a follow on to the classes I am coordinator of the group

## Information Flow at the NIC through TNLS Classes and Locator

called TU (TNLS Users). It includes station agents, liaisons, other people on the Net who have shown a positive interest in TNLS, people with ARC who use TNLS a great deal and people within ARC (e.g., Dick Watson) who have a special interest in TNLS.

2e

To this group I distribute new information about TNLS from time to time.

2e1

## Locator:

3

Locator is supposed to make available to the Network online information that has to do with the Network. It is very hard to know how much information actually flows out of the NIC via locator or the files linked to Locator. On the basis of the evidence below I'd describe it as a steady trickle.

3a

I tried to monitor the use of Locator and files it links to in the following crude manner: I print out the NIC directory from time to time when I first come in in the morning and instruct TENEX to list the times the files were last read. I assume that a file read between 5 and 8 was read by a Network user from the East.

3a1

There is an exception to this assumption: the Resource Notebook entries which Jake occasionally works on quite early.

3a1a

My general impression is that Locator is read most mornings but by no means all and that two or three of the files that are the objects of Locator have been read on a typical morning. There are large variations. Many morning none of these files have been read. The variations and the times of reading to the minute give me the impression that many of the readers are "exercising the system".

3a2

DVN 2-JAN-72 15:24 13607

Information Flow at the NIC through TNLS Classes and Locator

(J13607) 2-JAN-72 15:24; Title: Author(s): Van Nouhuys, Dirk H./DVN;  
Distribution: Kudlick, Michael D./mdk ; Sub-Collections: SRIARC RC NIC  
IC ; Clerk: DVN;  
Origin: <VANNOUHUYS>FLOW.NLS;1, 2-JAN-72 15:20 DVN ;

NLS System Programming Conventions-- See (13578,) by DIA and  
(13572,) by LPD

Continuing the dialog in (13508,), (13522,), (13521,), (13572,),  
(13571,):

1

Peter's suggestion is quite good. Until we implement such a  
device, though, we should continue to make use of STATUS.

2

As for knowing about important files-- the "bibliography"  
concerning <NLS>STATUS in my previous message should suffice.  
There is the serious problem of being sure that all NLS  
programmers are aware of system conventions. While most of these  
are documented in the Journal, through various oversights they  
were not delivered to all NLS programmers or were simply ignored.

3

Please keep a short note in STATUS under (nls, status,  
rel'nls) or (nls, status, nic'nls) telling what the status is  
of changes and bug fixes you are making. When anyone is ready  
to bring a new system up, these notes will be examined. If  
you want a new system brought up please tell Charles, Diane,  
or me and also put a note in STATUS so that any conflicts may  
be resolved.

3a

Therefore I suggest that all messages to be sent to NLS  
programmers make use of the NLS Programming Group ident (NPG). I  
also suggest that all important documentation concerning system  
conventions be gathered in an accessible notebook in the cave.

4

I volunteer to do the search and gathering. When completed, a  
journal note will be sent with a list of important documents  
which may have been overlooked.

5

At the discussion on NLS programming documentation to be held  
Wednesday, 10 January, we can discuss the subject of system  
conventions and system programming coordination.

6

HGL 2-JAN-73 11:56 13608

NLS System Programming Conventions-- See (13578,) by DIA and  
(13572,) by LPD

(J13608) 2-JAN-73 11:56; Title: Author(s): Lehtman, Harvey G./HGL;  
Distribution: Victor, Kenneth E. (Ken), White, James E. (Jim), Dornbush,  
Charles F., Michael, Elizabeth K., Vallee, Jacques F., Mitchell, James  
G., Deutsch, L. Peter, Kaye, Diane S., Andrews, Don I., Bass, Walt,  
Hopper, J. D., Irby, Charles H., Lehtman, Harvey G., Watson, Richard  
W./npg rww ; Sub-Collections: SRI-ARC NPG; Clerk: HGL;

JSP 2-JAN-73 9:32 13609

AFCS Request for NIC Documents

JSP 2-JAN-73 9:32 13609

AFCS Request for NIC Documents

(J13609) 2-JAN-73 9:32; Title: Author(s): Perry, John S./JSP;  
Distribution: North, Jeanne B./JBN; Sub-Collections: NIC; Clerk: JSP;



JSP 2-JAN-73 9:41 13610

Request for NIC Documents by AFCS

Bruce Dolan would like you to put the following guy on the distribution list for documents on the ARPANET:

Capt. Powell

Headquarters AFCS

DOMA - Stop 145B

Richards-Gebaur AFB, Missouri 64030

Phone (816) 331-4400 ext 2295

Thanks ...

1

JSP 2-JAN-73 9:41 13610

Request for NIC Documents by AFCS

(J13610) 2-JAN-73 9:41; Title: Author(s): Perry, John S./JSP;  
Distribution: North, Jeanne B./JBN; Sub-Collections: NIC; Clerk: JSP;

## Request for Info on IDENT System

Charles ... I would like to have some information about the IDENT files, particularly <IDENTFILE>IDENTS.MASTER. What is its format, how large is it, is there a limit to its size; what NLS programs or subprograms operate on it, and where can I obtain listings of these; any other useful information you may have, such as plans that are yet to be implemented, etc.

1

MDK 2-JAN-73 10:02 13611

Request for Info on IDENT System

(J13611) 2-JAN-73 10:02; Title: Author(s): Kudlick, Michael D./MDK;  
Distribution: Irby, Charles H./chi ; Sub-Collections: SRI-ARC; Clerk:  
MDK;

## File Protection in TENEX

These notes on the TENEX File Protection Mechanism have been extracted from the TENEX EXEC Manual. I hope they will be of some use to you. I suggest that all NIC Directory Caretakers review their files and decide what protection mechanisms should be used.

1

## General

1a

File protection in TENEX is controlled by a six-digit octal number, which occurs as part of the file name.

1a1

This protection field follows the version number. For example:

1a1a

ALPHA.NLS;3;P775202

1a1a1

## Protection Fields

1b

The six-digit octal number following the letter "P" above consists of three fields of two digits each.

1b1

The left-most two-digit field controls protection for the file owner.

1b1a

The middle two-digit field controls protection for a group of users.

1b1b

The right-most two-digit field controls protection for all users not covered by the two fields mentioned above.

1b1c

In each two-digit field, the bits have the functional meanings described below.

1b2

## Protection Bits

1c

BIT	PROTECTION ASPECT
0	Read contents of the file (read-only protection)
1	Write onto the file (read-write protection)
2	Execute the program stored in the file (execute-only)
3	Append to the file (append-only)
4	List the file name etc., when listing a Directory

1c1

1c2

1c3

1c4

1c5

1c6

## File Protection in TENEX

5 not used 1c7

When the a bit's value is 1, the indicated action is permitted. When the value is 0, it is prohibited. 1c7a

For example: 1c7b

77 permits full access (read, write, execute, append, list). 1c7b1

52 protects a file from modification (i.e., no write, no append) but permits other functions. 1c7b2

02 protects a file from reading or writing, but allows someone to see it in the directory listing. 1c7b3

How to Invoke the Mechanism 1d

1) When creating a file in NLS (for example via the commands OUTPUT FILE or UPDATE FILE) then type the entire file name --- 1d1

FILENAME . EXTENSION ; VERSION ; P xxxxxx 1d1a

and put the desired protection code octal digits in the field of x's. 1d2

2) In the EXEC, use the COPY command and type the entire file name as above. 1d3

COP [ALTMODE] (TO) !F !F !F Pxxxxxx 1d3a

where the three control F's merely allow you to avoid having to type the name, extension, and version number, and the field of x's is the desired protection code. 1d4

NOTE: Do NOT precede the P with a semicolon, when using this method. 1d4a

How to find out what the protection bits are set to 1e

Use the EXEC command DIRECTORY as follows: 1e1

@ DIR [ALTMODE] Filename [COMMA] [CR]  
 @@ P [CR]  
 @@ [CR] 1e1a

where the symbol [COMMA] means you type the character

File Protection in TENEX

"comma",  
[ALTMODE] means you type the "alt mode" key,  
and [CR] means you type the "carriage return" key.

1e2

## File Protection in TENEX

(J13612) 2-JAN-73 9:53; Title: Author(s): Kudlick, Michael D./MDK ;  
Distribution: Auerbach, Marilyn F., Feinler, Elizabeth J. (Jake),  
Hardeman, Beauregard A., Kelley, Kirk E., Lee, Susan R., North, Jeanne  
B., Van Nouhuys, Dirk H., Row, Barbara E., Vallee, Jacques F., White,  
James E. (Jim)/mfa jake bah kirk srl jbn dvn ber jfv jew ;  
Sub-Collections: SRI-ARC; Clerk: MDK;  
Origin: <KUDLICK>PROTECTION.NLS;6, 2-JAN-73 9:44 MDK ;



making insert sequential better

Kirk-- I got Dirk's message about the insert sequential command. In fact I have been using this for a while with much pain and agony, since the command is very primitive. Could you tell me how to find and use the programs to make the NLS structure nicer that Dirk mentioned? I hope this is just a stop-gap measure, as I agree with Dave Crocker that something still more sophisticated is necessary. Thanks, --Nancy Neigus

1

NJN 2-JAN-73 6:28 13613

making insert sequential better

(J13613) 2-JAN-73 6:28; Title: Author(s): Neigus, Nancy J./NJN;  
Distribution: Kelley, Kirk E./KIRK; Sub-Collections: NIC; Clerk: NJN;

NJN 2-JAN-73 6:34 13614

Sequential --> NLS project

Dick-- When you keep Dave Crocker posted on developments in the  
"Input Processor" project, could you do the same for me please?  
Thanks very much. --Nancy Neigus

1

NJN 2-JAN-73 6:34 13614

Sequential --> NLS project

(J13614) 2-JAN-73 6:34; Title: Author(s): Neigus, Nancy J./NJN;  
Distribution: Watson, Richard W./RWW; Sub-Collections: NIC; Clerk: NJN;

Execute Insert sequential takes every line of a Tenex file and turns it into an NLS statement left justifying any (and all) leading tabs. It is only a linear improvement over retyping the entire file, and a setback for carefully calculated columns. And, although TECO is a very good editor, not every sequentialfile is a Tenex.

NJN 2-JAN-73 6:48 13615

(J13615) 2-JAN-73 6:48; Title: Author(s): Neigus, Nancy J./NJN;  
Distribution: Crocker, David H., Van Nouhuys, Dirk H./DHC DVN;  
Sub-Collections: NIC; Clerk: NJN;

this is a request for information on any network resident macro processors. the anticipated application consists of inputting codes and generating fortran or pl1 source statements.

1

PLEASE RESPOND TO:  
SUSAN POH  
(SSP) VIA NIC OR  
THE MITRE CORPORATION  
1820 DOLLEY MADISON BLVD.  
MC LEAN, VIRGINIA 22101  
(703)893-3500 ext.

2230/2318

2

(J13617) 2-JAN-73 13:22; Author(s): Silberski, Robert/RS2;  
Distribution: North, Jeanne B., Newell, Allen, McCarthy, John, Dines,  
Thomas R., Roberts, Lawrence G., Bobrow, Daniel G., Heart, Frank E.,  
Glaser, Edward L., Marill, Thomas M., Cheatham, T. E., Stone, Duane L.,  
Forgie, James W., Vorhaus, Alfred H., Pyke, Thomas N., Uncapher, Keith  
W., Weissman, Clark, Feigenbaum, Edward A., Kleinrock, Leonard, Harris,  
David O., Pratt, William K., Evans, David C., Engelbart, Douglas C.,  
Raphael, Bertram, Slotnik, Daniel L., Iseli, John/PI JI;  
Sub-Collections: NIC PI; Clerk: RS2;



ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:23 13618  
NIC 13618  
19 JAN 73

TRANSMITTAL TO: Mrs. Connie Rosewall  
Station Agent  
Computer Systems Laboratory  
University of California  
Santa Barbara, California 93106

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

At your request, we are enclosing two copies each of the  
following documents:

3

encl.

4

NIC 5480 An NCP for the ARPA Network  
NIC 6797 NCP Operators Guide  
NIC 7955 IMPDIAG -- A Diagnostic Program for Hardware  
Checkout of System 360/ IMP Interfaces

4a

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

13619

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:23 13618  
NIC 13618  
19 JAN 73

(J13618) 14-JAN-73 23:23; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T18.NLS;5, 9-JAN-73 19:00 KIRK ; -

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:24 13619  
NIC 13619  
19 JAN 73

To: Richard P. Wishner  
Vice President  
Systems Control, Inc.  
260 Sheridan Avenue  
Palo Alto, California 94306

1

From: Jeanne North  
Information Coordinator

2

Subject: Your letter to Dr. Engelbart requesting  
distribution of our ARPA reports.

3

We have issued no formal reports in the last year. A forthcoming  
report, The Online Team Environment, Final Report, 8 June 1972,  
13041, will be available soon and a copy will be sent to you.

4

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:  
Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

13621

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:24 13619  
NIC 13619  
19 JAN 73

(J13619) 14-JAN-73 23:24; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T19.NLS;5, 5-JAN-73 13:54 KIRK ; -

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:26 13621  
NIC 13621  
19 JAN 73

TRANSMITTAL TO: W. M. Roberts  
U. S. Department of Commerce  
OTS/ITS  
325 Broadway, Room 1-4528B  
Boulder, Colorado 80302

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

Enclosed are three of the documents you requested, NIC 6033, 10659, and 10168. Rayner Rosich has also requested NIC 10168. If it would be no problem. I'll send this one copy for both of you. If you find you need two copies let me know and I'll order another.

3

You had also requested NIC 6149. This document is now included in a book, UNDERSTANDING NATURAL LANGUAGE, and is unavailable separately. The book was published by Academic Press, New York, in 1972.

4

encl.

5

NIC 6033 Catalog of Network Features  
NIC 10659 Microprogramming and its Use in an Extensible Processor  
NIC 10168 Computer Network Measurements: Techniques and Experiments.

5a

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:26 13621  
NIC 13621  
19 JAN 73

(J13621) 14-JAN-73 23:26; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T21.NLS;4, 9-JAN-73 12:46 KIRK ; -

SRL 14-JAN-73 23:28 13622

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC 13622  
19 JAN 73

TRANSMITTAL TO: Rayner K. Rosich  
U. S. Department of Commerce  
OTS/ITS  
325 Broadway, Room 1-3415M  
Boulder, Colorado 80302

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

You have previously requested NIC 10168, as has W. M. Roberts. I have sent a copy of this document to Mr. Roberts, and if you could both use this document I will not send another. If this is a problem, let me know and I'll order another.

3

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

13623

Author Copy

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:28 13622  
NIC 13622  
19 JAN 73

(J13622) 14-JAN-73 23:28; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T22.NLS;2, 9-JAN-73 18:51 KIRK ; -



ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:30 13623  
NIC 13623  
19 JAN 73

TRANSMITTAL TO: Linda Connelley  
The Rand Corporation  
Computer Science Department  
1700 Main Street  
Santa Monica, California 94025

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

At your request, we have sent the following documents:

3

NIC 7104 Current Network Protocols 27-NOV-72  
NIC 11622 A Model and System of Machine Recognition of  
Speech.

3a

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

13624

Author Copy

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:30 13623  
NIC 13623  
19 JAN 73

(J13623) 14-JAN-73 23:30; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T23.NLS;2, 9-JAN-73 19:03 KIRK ;; -

SRL 14-JAN-73 23:31 13624

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC 13624  
19 JAN 73

TRANSMITTAL TO: Dr. Jehuda Kella  
Deputy Chief Scientist  
Ministry of Communications  
38 King George Street  
P. O. B. 23005  
Tel-Aviv 61230 ISRAEL

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

At the request of Vint Cerf, your name has been placed on the  
INWG distribution list.

3

Enclosed are INWG notes 2, 4, 5, 6, 7, 8, and 9. Notes 1 and 3  
are obsolete.

4

Also enclosed are documents for your background information (see  
below).

5

NIC 7104 Current Network Protocols 27-NOV-72  
NIC 9926  
NIC 10510  
NIC 11626  
NIC 12396  
NIC 12520  
NIC 12535  
NIC 13026  
NIC 13156  
NIC 13157  
NIC 13176

5a

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:31 13624  
NIC 13624  
19 JAN 73

(J13624) 14-JAN-73 23:31; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T24.NLS;2, 9-JAN-73 13:19 KIRK ; -

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:34 13625  
NIC 13625  
19 JAN 73

TRANSMITTAL TO: Professor Leonard Kleinrock  
Computer Science Department  
3732 Boelter Hall  
University of California  
Los Angeles, California 90024

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

At the request of Vint Cerf, your name has been placed on the  
INWG distribution list.

3

Enclosed are INWG notes 2, 4, 5, 6, 7, 8, and 9. Notes 1 and 3  
are obsolete.

4

Also enclosed are documents for your background information (see  
below).

5

NIC 7104 Current Network Protocols 27-NOV-72  
NIC 9926  
NIC 10510  
NIC 11626  
NIC 12396  
NIC 12520  
NIC 12535  
NIC 13026  
NIC 13156  
NIC 13157  
NIC 13176

5a

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:34 13625  
NIC 13625  
19 JAN 73

(J13625) 14-JAN-73 23:34; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T25.NLS;5, 9-JAN-73 13:20 KIRK ; -

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:38 13626  
NIC 13626  
19 JAN 73

TRANSMITTAL TO: Buz Owens  
Seismic Array Analysis Center  
c/o Teledyne-Geotech  
Box 334  
Alexandria, Virginia 22313

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

At your request, I am enclosing the following documents:

3

NIC 5830 RECOMMENDATIONS FOR FACILITY DOCUMENTATION  
NIC 5831 NETWORK FORTRAN SUBPROGRAMS  
NIC 5832 NETWORK PL1 SUBPROGRAMS  
NIC 10703 DNLS Preliminary Reference Guide

3a

I am checking on the "Distribute Document" command and will send  
you a message when I find out more about it.

4

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

13627

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:38 13626  
NIC 13626  
19 JAN 73

(J13626) 14-JAN-73 23:38; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T26.NLS;5, 9-JAN-73 13:21 KIRK ; -



ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:40 13627

NIC 13627  
19 JAN 73

TRANSMITTAL TO: John Iseli  
MITRE Corporation  
Information Systems Dept., W140  
Westgate Research Park  
McLean, Va. 22101

1

FROM: Susan Lee (SRI-ARC)  
Station Agent

2

At the request of Ernie Forman, (MITRE-TIP), I am enclosing the  
following documents:

3

NIC 7104 Current Network Protocols 27-NOV-72  
NIC 5150 Current Directory of Network Participants  
16-OCT-72

3a

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

SRL 14-JAN-73 23:40 13627  
NIC 13627  
19 JAN 73

(J13627) 14-JAN-73 23:40; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;  
Origin: <KELLEY>T27.NLS;4, 10-JAN-73 16:13 KIRK ; -

SRL 22-JAN-73 20:38 13628

TRANSMITTAL TO: Bert Benson

TRANSMITTAL TO: Bert Benson  
Flight Dynamic Laboratory  
FDL/FxG  
Wright Patterson AFB, Ohio 45433

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At the request of Stan Golding, I am enclosing the following documents:

1a

NIC 7750 The ARPA Network  
NIC 12324 The ARPA Network  
NIC 11681 Resource Sharing Computer Networks

1a1

SRL 22-JAN-73 20:38 13628

TRANSMITTAL TO: Bert Benson

(J13628) 22-JAN-73 20:38; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

Transmittal Letter to Connie Rosewall

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC 13635  
11-JAN-73

TRANSMITTAL TO: Connie Rosewall  
Computer Systems Lab  
Univ. of California at Santa Barbara  
Santa Barbara, California 93106

FROM: Susan Lee (SRI-ARC)  
Station Agent

At your request, I am enclosing ten copies of the following  
document:

NIC 11863 Scenarios for using the ARPANET

Thank you.

SRL 12-JAN-73 19:59 13635

Transmittal Letter to Connie Rosewall

(J13635) 12-JAN-73 19:59; Title: Author(s): Lee, Susan R./SRL;  
Distribution: Agent, Station/SA; Sub-Collections: SRI-ARC; Clerk: LLL;  
Origin: <LANE>LETTERTRANS.NLS;3, 12-JAN-73 19:57 LLL ;

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC #13637  
Packet Radio Temporary Note #9

Robert E. Kahn ARPA  
11-DEC-72

Packet Radio Meeting

The next meeting of the Packet Radio Group has been scheduled for January 22 and 23 at Collins Radio Corporation in Dallas, Texas. The meeting will begin at 9:00 am. each morning and will likely continue through mid or late afternoon on Tuesday.

If you need assistance with local arrangements, please contact Francis Dickson at Collins, (214) 235-9511 ext. 2806. I look forward to seeing you there.

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

13644

REK2 22-JAN-73 21:03 13637

ARPA Network Information Center  
Stanford Research Institute  
Menlo Park, California 94025

NIC #13637  
Packet Radio Temporary Note #9

Robert E. Kahn ARPA  
11-DEC-72

(J13637) 22-JAN-73 21:03; Title: Author(s): Kahn, Robert E./REK2 ;  
Distribution: Kahn, Robert E., Abramson, Norman, Dickson, Francis,  
Frank, Howard, Kleinrock, Leonard, Metcalfe, Robert M. (Bob), Shapiro,  
Elmer B., Agent, Station, North, Jeanne B./PRG SA JBN ;  
Sub-Collections: NIC PRG; Clerk: KIRK ;  
Origin: <KELLEY>PRT9.NLS;4, 12-JAN-73 12:25 KIRK ; --a-



TRANSMITTAL TO: Kathleen Edwards

TRANSMITTAL TO: Kathleen Edwards  
Computing Center Librarian  
Computing Center  
Washington State Univ.  
Pullman, Wash. 99163

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At the request of Jim White, I am enclosing the following documents:

1a

NIC 4279 GRAPHICS  
NIC 5145 Current Catalog of the NIC Collection  
NIC 5645 Research Activities during 1970 under the  
Lincoln Laboratory Graphics Program  
NIC 5842 Request for Comment: 126  
NIC 6799 UCLA-Computer Science Graphics Overview  
NIC 8133 Research Activities during 1971 under the  
Lincoln Laboratory Graphics Program  
NIC 13490 Network Logical Map

1a1

SRL 22-JAN-73 20:39 13638

TRANSMITTAL TO: Kathleen Edwards

(J13638) 22-JAN-73 20:39; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

TRANSMITTAL TO: Richard B. Neely

To: to  
From: author  
Subject: subjectmatter

1

TRANSMITTAL TO: to  
FROM: author

2

TITLE:TRANSMITTAL TO: Kathy Beaman  
COMMENT:  
AUTHOR(S):SRL  
DISTRIBUTION:SA  
SUBCOLLECTION:NIC  
NUMBER:13644 NICSTA  
CLERK:KIRK

3

4

TITLE:TRANSMITTAL TO: Richard B. Neely  
COMMENT:  
AUTHOR(S):JBN  
DISTRIBUTION:SA JBN  
SUBCOLLECTION:NIC  
NUMBER:13639 NICSTA  
CLERK:KIRK

5

6

Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

To:  
Lee, Susan R.  
Stanford Research Institute  
Augmentation Research Center  
333 Ravenswood Avenue  
Menlo Park, California 94025

JBN 22-JAN-73 20:51 13639

TRANSMITTAL TO: Richard B. Neely

(J13639) 22-JAN-73 20:51; Title: Author(s): North, Jeanne B./JBN ;  
Distribution: Agent, Station, North, Jeanne B./SA JBN ;  
Sub-Collections: NIC ; Clerk: KIRK ;  
Origin: <KELLEY>JTRANS.NLS;18, 22-JAN-73 20:47 KIRK ; --a-

SRL 22-JAN-73 20:42 13640

TRANSMITTAL TO: John Seely Brown

TRANSMITTAL TO: Professor John Seely Brown  
Department ICS  
University of California  
Irvine, Cal. 92664

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At the request of Tom O'Sullivan, Raytheon, Coordinator of the CBI Group, your name has been added to the Group list. We are enclosing the CBI Notes which have been issued and you will receive future ones as they are published.

1a

c: T. O'Sullivan

1b

NIC 9343  
NIC 9608  
NIC 9875  
NIC 9876  
NIC 9981  
NIC 12741  
NIC 12742  
NIC 12755

1b1

SRL 22-JAN-73 20:42 13640

TRANSMITTAL TO: John Seely Brown

(J13640) 22-JAN-73 20:42; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

SRL 22-JAN-73 20:43 13641

TRANSMITTAL TO: Richard Rubinstein

TRANSMITTAL TO: Mr. Richard Rubinstein  
School of Social Science  
University of California  
Irvine, California 92664

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At the request of Tom O'Sullivan, Raytheon, Coordinator of the CBI Group, your name has been added to the Group list. We are enclosing the CBI Notes which have been issued and you will receive future ones as they are published.

1a

c: T. O'Sullivan

1b

NIC 9343  
NIC 9608  
NIC 9875  
NIC 9876  
NIC 9981  
NIC 12741  
NIC 12742  
NIC 12755

1b1

SRL 22-JAN-73 20:43 13641

TRANSMITTAL TO: Richard Rubinstein

(J13641) 22-JAN-73 20:43; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;



SRL 22-JAN-73 20:44 13642

TRANSMITTAL TO: Margaret Iwamoto

TRANSMITTAL TO: Margaret Iwamoto  
University of Hawaii  
THE ALOHA SYSTEM  
2565 The Mall  
Honolulu, Hawaii 96822

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At your request I am enclosing the following documents:

1a

NIC 12534 Procedures for distributing ASS Notes  
NIC 12734 Correction ASS Note 21  
NIC 12744 ASS Note 28

1a1

ASS Note 31 has not yet been completed, and you should receive it  
in the regular distribution.

1b

SRL 22-JAN-73 20:44 13642

TRANSMITTAL TO: Margaret Iwamoto

(J13642) 22-JAN-73 20:44; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

TRANSMITTAL TO: Kathy Beaman

TRANSMITTAL TO: Kathy Beaman  
University of Illinois  
Advanced Computation Building  
Urbana, Illinois 61801

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At your request I am enclosing the following documents:

1a

NIC 8644 Tenex Executive-Level Messages for BBN-NET

1a1

NIC 9902 Tenex Memos

1a2

NIC 9902 contains memos 9909-9915 which you requested. I am sending this binder to you on loan, and if you need copies of any of these documents you can order them from Bolt Beranek and Newman or copy them yourself.

1b

NIC 9471, Tenex Monitor Manual, will have to be ordered from Bolt Beranek and Newman as we have no extra copies to loan.

1c

NIC 7563 has been obsoleted and the most recent version can be found on page 47 in the "Other Groups" section of NIC 5150--Current Directory of Network Participants.

1d

If you have any trouble, feel free to give us a call.

1e

SRL 22-JAN-73 20:46 13644

TRANSMITTAL TO: Kathy Beaman

(J13644) 22-JAN-73 20:46; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

TRANSMITTAL TO: Robert Bernard

TRANSMITTAL TO: Robert Bernard  
Telecommunications Network, Inc.  
21 Charles Street  
Westport, Conn. 06880

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At the request of Robert Field, I am enclosing the following documents:

1a

NIC 4694 FUNCTIONAL SPECIFICATIONS FOR THE ARPA NETWORK  
(NWG/RFC-8)  
NIC 6729 DATA SHARING ON COMPUTER NETWORKS  
NIC 7137 SOME FACTORS WHICH A NETWORK GRAPHICS PROTOCOL MUST  
CONSIDER  
NIC 7542 MERIT  
NIC 8277 NETWORK INFORMATION CENTER AND COMPUTER AUGMENTED  
TEAM INTERACTION  
NIC 9632 NETRJS RFC 325  
NIC 9702 BUILDING A NATIONWIDE COMPUTER NETWORK  
NIC 9706 THE AUGMENTED RESEARCH CENTER  
NIC 9858 Memo for Members of the NFG  
NIC 13490 Network Logical Map

1a1

NIC 13490 is a more up-to-date version of NIC 10354 which you requested.

1b

We do not keep a supply of the remainder of the documents you requested. For future reference you might note that in the Catalog (NIC 5145), we normally supply copies only of those documents which are indicated by a back arrow.

1c

The following is a list of the remainder of the documents you requested and where they may be obtained.

1d

UCLA, School of Engineering and Applied Science

1d1

NIC 10168 Report Number UCLA-ENG-7165

1d1a

TRANSMITTAL TO: Robert Bernard

Network Analysis Corporation, Glen Cove, N.Y.	1d2
NIC 10108 Semi-Annual Report No. 2	
NIC 9046 Networks, Vol.1, No.2 p.99-112, 1971	
NIC 10166 Networks, Vol.1, p. 279-290, 1972	1d2a
UCLA, Department of Computer Science	1d3
NIC 10106	1d3a
Bolt Beranek & Newman, Inc., Cambridge, Mass.	1d4
NIC 9904, 9912, 9913, 9914, 9915, 9916, 9750	1d4a
NIC 4157 Report Number 1763	
NIC 4357 Report Number 1928	
NIC 9186 Report Number 2270	
NIC 9185 Report Number 2175	
NIC 8882 Report Number 2353	
NIC 6753 Report Number 2123	
NIC 6019 Report Number 2059	
NIC 5749 Report Number 2103	
NIC 5736 Report Number 1877	
NIC 9193 Report Number 2309	1d4b
Rand Corporation, Santa Monica, CA	1d5
NIC 9826 Report Number R-860-ARPA	
NIC 9477 Report Number R-664-ARPA	1d5a
Advanced Research Projects Agency, Arlington, Virginia	1d6
NIC 9120	
NIC 3630	1d6a
Mitre Corporation, Washington, D.C.	1d7
NIC 8194 Report Number MTP-357	1d7a

SRL 22-JAN-73 20:19 13648

TRANSMITTAL TO: Robert Bernard

(J13648) 22-JAN-73 20:19; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

TRANSMITTAL TO: Masao Kato

TRANSMITTAL TO: Mr. Masao Kato  
Head, Data Network Research Section  
Musashino Electrical Communication Laboratory  
Musashino-shi  
Tokyo 180 JAPAN

FROM: Susan Lee (SRI-ARC)  
Station Agent

1

At the request of Vint Cerf, your name has been placed on the  
INWG distribution list.

1a

Enclosed are INWG notes 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and  
14. Notes 1 and 3 are obsolete.

1b

Also enclosed are documents for your background information (see  
below).

1c

NIC 7104 Current Network Protocols 27-NOV-72  
NIC 9926  
NIC 10510  
NIC 11626  
NIC 12396  
NIC 12520  
NIC 12535  
NIC 13026  
NIC 13156  
NIC 13157  
NIC 13176

1c1



SRL 22-JAN-73 20:14 13655

TRANSMITTAL TO: Masao Kato

(J13655) 22-JAN-73 20:14; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

TRANSMITTAL TO: Frode Aschim

TRANSMITTAL TO: Frode Aschim  
1504 Gilbert Ct.  
Ann Arbor, Michigan 48105

FROM: Susan Lee (NIC)  
Station Agent

1

At your request we are sending the following documents:

1a

NIC 7147 HOST/HOST Protocols  
NIC 6768 TELNET Protocols  
NIC 7104 Current Network Protocols

1a1

NIC documents 7812 and 7813 were obsoleted by documents in NIC 7104. NIC 7101, which you had also requested, is contained in NIC 7104.

1b

If we can be of any further help please feel free to contact us.

1c

SRL 8-FEB-73 22:50 13657

TRANSMITTAL TO: Frode Aschim

(J13657) 8-FEB-73 22:50; Title: Author(s): Lee, Susan R./SRL ;  
Distribution: Agent, Station/SA ; Sub-Collections: NIC ; Clerk: KIRK  
;

Dec 18-22, A Week In Review

WEEK: DEC 12-18, 1972

					1
					2
					2a
IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	2b
(DIA)	.404	5.660	.071	1.7	2c
(MFA)	0.000	0.000	0.000	0.000	2d
(WLB)	.233	4.410	.053	1.0	2e
(KFB)	.115	7.563	.015	1.5	2f
(CFD)	1.488	30.788	.016	6.3	2g
(DCE)	.263	9.406	.028	1.1	2h
(JAKE)	.814	16.597	.049	3.5	2i
(WRF)	.676	28.883	.023	2.9	2j
(BAH)	.431	15.986	.027	1.8	2k
(MEH)	.327	9.754	.034	1.4	2l
(JDH)	.049	1.438	.034	.2	2m
(CHI)	.116	5.929	.020	.5	2n
(MEJ)	.084	5.279	.016	.4	2o
(DSK)	.929	19.456	.048	4.0	2p
(KIRK)	.460	13.224	.035	2.0	2q
(MDK)	0.000	0.000	0.000	0.000	2r
(LLL)	.079	5.930	.013	.3	2s
(SRL)	.014	.586	.024	.1	2t
(HGL)	.335	6.735	.050	1.4	2u
(NDM)	.642	13.936	.046	2.7	2v

## Dec 18-22, A Week In Review

(EKM)	.240	7.771	.031	1.0	2w
(JBN)	.461	18.717	.025	2.0	2x
(JCN)	1.167	23.042	.051	5.0	2y
(WHP)	.002	.527	.004	.0	2z
(JCP)	1.352	18.438	.073	5.8	2a@
(JR)	0.000	0.000	0.000	0.000	2aa
(PR)	.162	6.123	.026	.7	2ab
(BER)	.651	13.191	.049	2.8	2ac
(JFV)	.274	13.736	.020	1.2	2ad
(EKV)	0.000	0.000	0.000	0.000	2ae
(DVN)	1.125	16.738	.067	4.8	2af
(KEV)	.020	.478	.042	.1	2ag
(DCW)	.796	19.041	.042	3.4	2ah
(RWW)	0.000	0.000	0.000	0.000	2ai
(JEW)	.317	4.910	.065	1.4	2aj

Highest CPU User: CFD	1.488 hrs	Lowest CPU User: WHP	.002	3
hrs				4
Highest CON User: CFD	30.788 hrs	Lowest CON user: KEV	.478	5
hrs				
Highest Ratio User: JCP	.073	Lowest Ratio User: WHP	.004	6
Average Ratio Of Group:	.037	Total % Sys By Group:	64.8	7

Dec 18-22, A Week In Review

(J13660) 3-JAN-73 15:36; Title: Author(s): Hardeman, Beauregard A./BAH ; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./SRI-ARC ; Sub-Collections: SRI-ARC; Clerk: BAH ;

Some information about the Ident System

Mike, some data on the Ident System:

Format of idents.master: see (nic-nls, idlibe, 2 : gw)

Size of idents.master: 15/95 structure pages, 65/370 data pages;  
141 affiliations, 100 groups, 575 last names for individuals;  
currently limited to maximum NLS file size (it can get about 4 or  
5 times larger)

Programs: (nic-nls, idtctl,:x) and (nic-nls, idlibe,:x) implement  
the Ident System and the Journal interface to the Ident system,  
(nic, idprogs,:x) are the programs which are used by the catalog  
production system to generate the IDENT INDECIES.

1

CHI 3-JAN-73 10:58 13661

Some information about the Ident System

(J13661) 3-JAN-73 10:58; Title: Author(s): Irby, Charles H./CHI;  
Distribution: Kudlick, Michael D., Watson, Richard W./MDK RWW;  
Sub-Collections: SRI-ARC; Clerk: CHI;



CHI 3-JAN-73 18:37 13662

Some General Comments About Our Displays, Re: (Mjournal, 13583,  
1:w)

I will try to be more specific in a follow-up note.

Some General Comments About Our Displays, Re: (Mjournal, 13583,  
1:w)

Display notes:

1

persistence

1a

The problem that seems most easily remedied, and the one that annoys me the most is the long persistence of some (most) of our display terminals.

1a1

I understand the need for long persistence to counteract the inherent jitter of tasker, and you have done a fine job of removing the annoying flicker that we used to have. However, I also understand that we ordered our current vidicons based on the persistence characteristics of one sample. The persistence characteristics vary greatly from one vidicon to another. I think it would be worth our while to try a few more experiments with the tasker tubes and the vidicons to see if we can get a better match in characteristics. Are there people around (within SRI?) who could analyze our system and suggest some tube configurations that would fit our needs better? Can we borrow or rent some tubes to experiment with? On many displays the cursor disappears when you move it and reappears when you stop. This is terrible feedback also. the system seems considerably more sluggish because the old image lingers on the screen during a display change.

1a2

clarity of characters

1b

Most visitors cannot distinguish our characters very well. I even have a fair bit of trouble and I have been doing it for four years. Yet when a display is tuned up for a demo, it is quite sharp. How many people would we have to have to keep them all sharply tuned? How often do they have to be tuned? What if you trained some of us to do it?

1b1

CHI 3-JAN-73 18:37 13662

Some General Comments About Our Displays, Re: (Mjournal, 13583,  
1:w)

(J13662) 3-JAN-73 18:37; Title: Author(s): Irby, Charles H./CHI ;  
Distribution: Hardy, Martin E./meh ; Sub-Collections: SRI-ARC; Clerk:  
CHI ;

New Charges at BBN

## AN ANNOUNCEMENT TO TENEX USERS

1

W. R. Sutherland  
Bolt Beranek and Newman inc.  
December 19, 1972

1a

Effective January 1, 1973 Bolt Beranek and Newman Inc. is revising the Research Computer Center charges by halving the connect charge. This reduction has been made possible by increased system reliability and will provide a better balance between user charges and the costs of providing service. We are pleased to make this reduction which increases the cost effectiveness of our computer center for users. The table below summarizes the new rates.

2

We have additional plans for improved future facilities within the next few months including expanded main memory, a dual processor configuration, and new line printer, all in addition to our recently expanded disc storage capacity.

3

We would like to use this notice to point out that there is an inherent incentive in the TENEX accounting system for using the computer when it is lightly loaded (small load average). Not only is the console connect time reduced but the CPU time (and charges the user for this time) doing a given task when it is heavily loaded and must compete for system resources (particularly main memory). We have observed factors varying between 2:1 and 1.1:1 in the CPU time required to complete a given task as load averages vary from 10 to 1. This factor appears to be highest when the program does a lot of page faulting and the compute time per interaction is less than 30 seconds.

4

Finally, we welcome comments on our service and suggestions for improvements. To improve user knowledge of system developments, we have instituted a newsletter which will be available on-line to all users early in 1973. If you have any problems with the system or need information please contact Steve Chipman on extension 358. If you prefer to communicate with the TENEX operations personnel on-line, you can do so via our mailbox procedures or the "GRIPE" subsystem. Contact Steve Chipman for details.

5

Effective January 1, 1973 BBN-TENEX PDP-10 CHARGE OUT RATES

6

Approximate Gov't. Charge Rate\*

6a

CPU cost per minute

\$7.91

New Charges at BBN

Console/connect cost per hour	\$3.96	
File rate per pay period per page	\$ .506	6b
(page = 512 words or equivalently		
2560 characters)		6b1
[per month per page \$1.01]		6b2
* Varies slightly due to fee negotiated on CPFF Contracts.		6c

New Charges at BBN

(J13663) 3-JAN-73 11:03; Title: Author(s): Wallace, Donald C. (Smokey)/DCW; Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I./sri-arc ;  
Sub-Collections: SRI-ARC; Clerk: DCW;  
Origin: <STATION-AGENT>BBN.NLS;2, 2-JAN-72 16:26 KIRK ;

Suggestion: I'd like to be able to save views

When romping through a large and unfamiliar file, I often have the urge to get a handle for a view -- i.e. i want to do a jump return to a particular place I once was, but which is no longer in the jump stack. This happens when I'm reading a file, and don't what to do any kind of a write. How about letting a user give a name to a jump stack type entry and save it away. It would be associated with the file, but would be local to the user and not part of the file. They would go away when the file was closed.

1

Suggestion: I'd like to be able to save views

(J13664) 3-JAN-73 10:58; Title: Author(s): Andrews, Don I./DIA;  
Distribution: Agent, Station, Hoffman, Carol B., Lee, Susan R., Michael,  
Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J.  
(Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N.  
Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee,  
Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson,  
Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart,  
Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D.,  
Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne  
B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey  
C., Ratliff, Jake, Row, Barbara E., Van De Riet, Edwin K. (Ed), Van  
Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey),  
Watson, Richard W., Andrews, Don I./SRI-ARC; Sub-Collections: SRI-ARC;  
Clerk: DIA;



## How to print through a TIP

When you send an NLS file through our output processor, you create a sequential file. It is possible to print such sequential files through a TIP. A somewhat cryptic description of the commands involved appears in (wallace,send-print-how,). Within a few days I plan to issue a rewrite that will demand less background knowledge.

How to print through a TIP

(J13665) 3-JAN-73 15:55; Title: Author(s): Van Nouhuys, Dirk  
H./DVN; Distribution: Forman, Ernest H., Neigus, Nancy J., Crocker,  
David H., Lawrence, Thomas F., Stone, Duane L., Bair, James H., Wallace,  
Donald C. (Smokey), Auerbach, Marilyn F./ehf njn dhc tfl dls jhb  
dcw mfa ; Sub-Collections: SRI-ARC; Clerk: DVN;