SRL 26-NOV-73 10:07 20501

1g1

A Look at System Responsiveness

DATA

The following is a summary of a few parameters which are indicators of system responsiveness covering a few periods of recent system history.	1a
The first four week period is that preceding the programmer's decreased allocation when the number of users was 23.	1a1
The second period is a three week period when the total allocation was 20.	1a2
The third period is the last week when the allocation was 20.	1a3
The fourth period is the past week when the allocation had been increased again to 23.	1a4
Weekly averages used in the following table are computed Monday through Friday, 8:00 to 17:00.	1a5
The parameters are as follows:	1ь
GJ - Load Average	1ь1
#AU - Number of active users **1b2	
%U - Percent of CPU used	153
AXD - Average Execution Time, DNLS	154
AXT - Average Execution Time, TNLS	1ь5
ARD - Average Real Time for Task Execution, DNLS	166
ART - Average Real Time for Task Execution, TNLS	1ь7
GJ #AU %U AXD AXT ARD ART	1c
1) 9/17 - 10/12 4.7 17.8 58.5 59.3 16.5 359.9 184.0	1 d
2) 10/15 - 11/ 2 4.7 17.9* 61.7 64.8 19.2 364.8 159.4	1e
3) 11/ 5 - 11/ 9 5.3 18.8 63.5 66.2 25.8 413 215	11
4) 11/12 - 11/16 5.4 18.6 61.4 67.4 24.4 425.6 220.8	1g
* Duping this period, printer job was split into two jobs in	

* During this period, printer job was split into two jobs in order to monitor use of the printer. Although this added another user, no additional load was added to the system.

1h

2

2a

A Look at System Responsiveness

In the two month period summarized above, all indices except #AU increase, most from 10-15% with especially sharp increases over the last two weeks.

CONCLUSIONS

It is our conclusion that system use is increasing and that when the allocation was decreased (period 2), the decreased number of users offset the increased system use resulting in very similar averages in period 1 and 2. Period 3 was an unusually heavy week. Period 4 was the heaviest week included in this summary and we feel this is because the number of users was again increased, eliminating the balance that existed previously between number of users and system responsiveness.



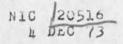
20501 Distribution

Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews, Ia A. Jim Blum, A. Analysis, Meredith(Reddy) E. Dively, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Mark Alexander Beach, Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee, Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake) Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North, James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor 1b

A Look at System Responsiveness

. .

(J20501) 26-NOV-73 10:07; Title: Author(s): Susan R. Lee/SRL; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: SRL; Origin: <LEE>CHANGE.NLS; 3, 26-NOV-73 10:04 SRL; Transmittal to Station Agents -- 114 Jeanne North



Enclosed:

NIC 20327 *NWG/RFC 591 Addition to the Very Distant Host Specification; D. Walden (BBN-Net).

NIC 20615 *NWG/RFC 593 Telnet and FTP Implementation Schedule Change: A. McKenzie (BBN-NET) and J. Postel (MITRE-TIP).

Status of Revision Notices for NIC Functional Documents 6740, 5145, 7104, and 5150; November 1973.

*sent to Liaisons during current week.



JMB 26-NOV-73 12:00 20542

journalizing and printing users' guides

I will journalize the TNLS Users' Guide (and other users' guides	JOURNALIZING AND PRINTING USERS ⁴ GUIDES	1
residing under several files) as follows: All files which comprise it will be available under one catalog number, which will appear as a header in the document. The journal item will consist of a link to ARC LOCATOR, thus: (userguides, arclocator, 2d:eb) be directed to the various files consisting of the actual sections of the document. The hardcopy version only of the userguide will have the date of last revision following its journal number. That date will be changed each time I make substantial changes in the files, at which time a new print file will be made which will carry that date. Thus all hard copies will have their dates changed when and only when I make significant changes in content. The catalog number will not change. Disers' guides which reside under only one file will also be journalized as a link as above so that revised versions will	My understanding of agreements with DVN & JBN on 15-NOV-73:	1 a
<pre>number, which will appear as a header in the focument. The journal item will consist of a link to ARC LOCATOR, thus: 1b1 (userguides, arclocator, 2d:eb) 1b1a with directions to jump to that link. When there the user will be directed to the various files consisting of the actual sections of the document. 1b2 The hardcopy version only of the userguide will have the date of last revision following its journal number. That date will be changed each time I make substantial changes in the files, at which time a new print file will be made which will carry that date. Thus all hard copies will have their dates changed when and only when I make significant changes in content. The catalog number will not change. 1b3 Users' guides which reside under only one file will also be journalized as a link as above so that revised versions will</pre>		1b
<pre>with directions to jump to that link. When there the user will be directed to the various files consisting of the actual sections of the document. 1b2 The hardcopy version only of the userguide will have the date of last revision following its journal number. That date will be changed each time I make substantial changes in the files, at which time a new print file will be made which will carry that date. Thus all hard copies will have their dates changed when and only when I make significant changes in content. The catalog number will not change. 1b3 Users' guides which reside under only one file will also be journalized as a link as above so that revised versions will</pre>	number, which will appear as a header in the focument. The	1ь1
be directed to the various files consisting of the actual sections of the document. 1b2 The hardcopy version only of the userguide will have the date of last revision following its journal number. That date will be changed each time I make substantial changes in the files, at which time a new print file will be made which will carry that date. Thus all hard copies will have their dates changed when and only when I make significant changes in content. The catalog number will not change. 1b3 Users' guides which reside under only one file will also be journalized as a link as above so that revised versions will	(userguides, arclocator, 2d:eb)	1b1a
of last revision following its journal number. That date will be changed each time I make substantial changes in the files, at which time a new print file will be made which will carry that date. Thus all hard copies will have their dates changed when and only when I make significant changes in content. The catalog number will not change. 1b3 Users' guides which reside under only one file will also be journalized as a link as above so that revised versions will	be directed to the various files consisting of the actual	1ь2
journalized as a link as above so that revised versions will	of last revision following its journal number. That date will be changed each time I make substantial changes in the files, at which time a new print file will be made which will carry that date. Thus all hard copies will have their dates changed when and only when I make significant changes in content. The	1ь3
always be available under the catalog number. 1c		
		1c



and d

20542 Distribution

Dirk H. Van Nouhuys, James H. Bair, James C. Norton, Jeanne B. North, Michael D. Kudlick, Richard W. Watson, Jeanne M. Beck, Kirk E. Kelley, Douglas C. Engelbart, 1a

journalizing and printing users' guides

(J20542) 26-NOV-73 12:00; Title: Author(s): Jeanne M. Beck/JMB; Distribution: /DVN JHB JCN JBN MDK RWW JMB KIRK DCE; Sub-Collections: SRI-ARC; Clerk: JMB; A Just-About-Final Journal Privacy Proposal

.

Pass this along to a friend if it seens appropriate.

JEW 26-NOV-73 13:53 20543

3

3a

3a1

A Just-About-Final Journal Privacy Proposal

SUBJECT Support for Private Journal Dialog	1
REFERENCES The following is a summary of the dialog on NLS file/journal privacy of which I am aware.	2
(16021,) RWW "Some Initial Thoughts on Privacy"	2a
(16027,) DSK "A First Hack at File Privacy Requirements"	2ь
(16052,) JEW "Privacy in Journal Dialog Initial Thoughts"	2c
(18976,) JEW "Proposed Design for Initial Privacy Features"	2d
(18982,) JCN "Questions About Private-Journal Catalogs and Speed of Proposed Implementation"	2e
(18993,) JSP "Comments on NLS Privacy"	2f
(19001,) HGL "On Initial Privacy Features (18976,)"	2g
(19053,) SRL "A Comment on Journal Privacy"	2h
(19055,) MDK "On Proposed Initial Privacy Features"	21
(19060,) CHI [Untitled]	2ј
(19619,) JEW "Another Look at Privacy"	2k

PROPOSAL -- The changes and additions to NLS indicated here will be made at once (barring negative responses to this document). If you have concerns about this proposal -- things in it or absent from it -- now is the time to speak up.

GROUNDWORK

In this proposal, the task of identifying the user is performed, as at present, by the monitor in conjunction with the EXEC. Access restrictions within the Journal rely upon this function having been performed at login. The task of determining whether the logged in user should be permitted to load a particular Journal file is performed by NLS.

Wherever NLS idents fall in one-to-one correspondence with TENEX directories, full fexibilitly with regard to assignment of Journal access controls will exist. But whenever more than one ident is assigned to a single directory (i.e., whenever several users are forced to masquerade before the monitor as a single individual), then such users will be effectively A Just-About-Final Journal Privacy Proposal

indistinguishable in terms of effective access control (since they can login as one another without detection).	3a2
Therefore, if one desires that a user be reliably identifiable for purposes of using the Journal for private dialog (indeed for ANY purpose), one must be willing to commit the necessary	
resources to him (e.g., directory space).	3a3
NEW JOURNAL SUBCOMMAND	3ь
Tentative Syntax:	3ь1
"LIMIT" <"Read Access to users"> identlist CONFIRM	3b1a
Function:	3b2
A. The Journalized document will be loadable only by a member of the following set of users:	3b2a
identlist authorlist distributionlist	3b2a1
"Identlist", "authorlist", and "distributionlist" may, of course, contain group, as well as individual idents. Any user who is a member of such a group (or of a group which is itself a member of the group, etc.) will be permitted to	
load the document.	3ь2ь
B. Only members of that same set of users will be permitted to receive secondary distribution of the document.	3b2c
C. The ARC access-copy printing machinery will bypass the document.	3b2d
Implementation:	3ь3
A. Regardless of whether the document is intended for delivery as a message or file (i.e., whether its text or link is to be delivered), the document will be stored by the	
Journal as a separate file.	3b3a
B. The Journal will set a bit in the file, thus marking it private, and store in its origin statement a string of the form:	ЗъЗъ
.Read List=distributionlist identlist authorlist;	3ь3ь1
C. The same list will be stored in the document's catalog entry.	3b3c

JEW 26-NOV-73 13:53 20543

3b3d

3b3d1

3b3d2

3b3e

3b3f

3b3g

3b3h

A Just-About-Final Journal Privacy Proposal

D. NLS's 'Open File' primitive will check the private file bit, and if it finds it set, extract the Read List from the origin statement, and verify that the login ident is implied by that list. If not, the user's attempt to open the file will be aborted.

i. Upon the user's first attempt to open a private file, NLS will construct a list of idents, composed of his individual ident and the idents of all groups of which the login user is directly or indirectly a member. All successive attempts within an invokation of NLS will exploit this list, built only once and stored as a global string.

[A better solution here for the long term (one which should be pursued in parallel with implementation of this proposal) is to maintain this list in the user's ident file entry, updating it as group memberships change, and load it upon entry to NLS.] 3b3d1a

ii. The user is permitted to open the file if and only if that list and the Read List overlap.

E. Members of secondary distribution lists will be checked for access to the document, using the copy of the Read List stored in the catalog, since the document itself may be archived.

F. The document will be protected in its various transition states (e.g., while it resides in <TEJOURNAL>) using normal TENEX access controls.

G. The Journal will do its part to assure the integrity of private documents at delivery by (whenever it has occasion to create an initial file for a user in the distribution list) assigning TENEX read access only to the TENEX user in whose directory the file resides.

H. NLS and the EXEC will assure themselves of the logged in user's identity by:

 Verifing that the ident typed by the user is assigned to the login directory whenever the EXEC must ask the user for his ident at login.
 3b3h1

ii. Removing the EXEC'S CHANGE IDENT command, or modifying it to permit only a change to another ident assigned to the same TENEX directory.
3b3h2

JEW 26-NOV-73 13:53 20543

A Just-About-Final Journal Privacy Proposal

[A better solution here probably is to substitute a generalization of the EXEC's CONNECT command, with two idents being maintained by the monitor -- a login and a connected-to ident -- with access checks based upon the latter.] 3b3h2a

iii. Removing the Journal's CLERK subcommand, and always taking the login ident to be Clerk, 3b3h3

Notes:

A. The fact of a document's existence and its catalog entry are always public and cannot be protected. 3b4a

B. Although the access control mechanism has the potential for protecting any (i.e., non-Journal, as well as Journal) file, that more general facility is explicitly denied the user at present. Though he can insert what looks like a Read List in the origin statement of any file, he has no way of setting the private bit.

3b4b

20543 Distribution

Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews, John S. Perry, 1a

1

A. Jim Blum, A. Analysis, Meredith(Reddy) E. Dively, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Mark Alexander Beach, Judy D. Cooke, Marcia Lynn Keeney, Carol B. Guilbault, Susan R. Lee, Elizabeth K. Michael, Charles F. Dornbush, Elizabeth J. (Jake) Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Diane S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Douglas C. Engelbart, Beauregard A. Hardeman, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Harvey G. Lehtman, Jeanne B. North, James C. Norton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor 1b

A Just-About-Final Journal Privacy Proposal

. . . .

(J20543) 26-NOV-73 13:53; Title: Author(s): James E. (Jim) White/JEW; Distribution: /SRI-ARC JSP; Sub-Collections: SRI-ARC; Clerk: JEW; Origin: <WHITE>PRIVPROP.NLS;9, 26-NOV-73 13:48 JEW;

1

Systems Programmer Applicant

To: CFD/ CHI/ DSK/ HGL/ EKM/ KEV/ DCW /JEW/ RWW

Les Abrams

WILL BE HERE TUESDAY DEC 4 10:45 AM (till NOON) as applicant for Systems Programmer- (He is also interviewing with Dave Brown and Peter Hart on the same day. He can come back for further interviews on another day if we're interested.)

Mr. Abrams is currently with Qantel Corporation, Hayward, in Data Communications. His resume, which claims expertise in mini-computer real-time operating systems, data communications, and systems software, is being xeroxed and distributed to you.

20544 Distribution

Charles F. Dornbush, Charles H. Irby, Diane S. Kaye, Harvey G. Lehtman, Elizabeth K. Michael, Kenneth E. (Ken) Victor, Donald C. (Smokey) Wallace, James E. (Jim) White, Richard W. Watson,

1

1a





Systems Programmer Applicant

. .. .

(J20544) 26-NOV-73 15:28; Title: Author(s): Michael D. Kudlick/MDK; Distribution: /CFD CHI DSK HGL EKM KEV DCW JEW RWW; Sub-Collections: SRI-ARC; Clerk: MDK;

1

VDH Addition to SRI-ARC IMP

10.00

Ed Schelonka says that Vint Cerf's VDH connection to the SRI-ARC IMP is scheduled for Dec 6th. If there are any problems with this, ARC should send him a note (Schelonka@USC-ISI).



20545 Distribution Richard W. Watson, James C. Norton, James E. (Jin) White, VDH Addition to SRI-ARC IMP

4

(J20545) 26-NOV-73 16:01; Title: Author(s): Michael D. Kudlick/MDK; Distribution: /RWW JCN JEW; Sub-Collections: SRI-ARC; Clerk: MDK;

NDM 26-NOV-73 17:02 20546

1

2

3

3a

3b

3c

4

5

5a

6

6 a

Good Progress on L10

Steve: It was good to hear from you. I'm glad you are making progress. You are among the quickest of my "students". You're absolutely right, SYSGD is rather uniformative to the novice, for which I should apologize. We are hoping that, as the system gets rewritten for the new command language, the procedures will be better commented. This should allow indexing of SYSGD.

It sounds like you are doing quite well. However, from the questions you did ask, I would guess it would be wiser for you to check the new L10 manual to make sure you understand everything up to section 7. I'm serious about wanting you to get a firm foundation before progressing to more confusing program structures.

In content, your program (uk-ics,ca2,) looks fine. I would suggest some format-type changes that might make it easier to read (a very relevant problem as programs get more complex). You could be making better use of structure. I like VERY much the way you put code under comments. That is always the biggest help. You might also:

put the content of a loop or a (IF) THEN or (IF) ELSE as substructure to the LOOP or IF statement,

everything could be substructure of the program statement,

statements 5 through 10 could be substructure of the PROCEDURE statement.

Structure can be very valuable for understanding an unfamiliar program. Please understand that these are just suggestions. I an very impressed with the speed with which you have gotten this far. The code itself looks good. It would be more efficient if you could combine all the FINDs into one statement. Declaring text pointers (you'd need a bunch more) is cheap, FIND statements are very slow.

CCPOS is always initiallized to the front of each new statement, and the scan direction is set to right for each new statement. You don't want to set a pointer in one statement and then initialize the scan of the next statement back in the previous statement. You may set a pointer to the current CCPOS with a statement like

FIND tpt ;

but you can't just say 'pt; . The sttatement you saw in sort key extractor programs of the form

tpt - char;

puts a value into a field to which the byte pointer "pt" is pointing.

NDM 26-NOV-73 17:02 20546

7

8

8a

9

10

11

Good Progress on L10

That is not covered in the L10 manual, but if you get through that and feel you need to know about byte pointers, we can get into that.

The two patterns you mentioned in statement 3 of (ijournal,20486,3) are identical. They should both pass patterns of the form

\$PT SP SPT 2\$SP

which is what I assume you meant. If they didn't, I can't imagine why. Try again and if you still have trouble, I'll look at the specific example.

It's a rel pleasure to work with someone who has the ambition to study programs in the user programs library. I hope the L10 Guide will be equally informative. It's also a pleasure to work with someone who understands what he studies. Keep up the good work. Hear from you soon, I hope.

2

--Dean



20546 Distribution Stephen R. Wilbur, 1 1a

NDM 26-NOV-73 17:02 20546

Good Progress on L10

and and a

(J20546) 26-NOV-73 17:02; Title: Author(s): N. Dean Meyer/NDM; Distribution: /SRW; Sub-Collections: SRI-ARC; Clerk: NDM; Origin: <NEYER>TEMP.NLS;1, 26-NOV-73 17:01 NDM;

1

110 string declarations

Dean -- It appears that I have the choice of delcaring the maximum length of a string, with its contents being initialized to null, or of chinitializing the contents and not being able to have the max. lenth be different from the length of my initialization string.

is this true? D/



them is

20547 Distribution N. Dean Meyer,

110 string declarations

(J20547) 26-NOV-73 21:26; Title: Author(s): David H. Crocker/DHC; Distribution: /NDM; Sub-Collections: NIC; Clerk: DHC;

Tickler for week of 26 Nov - Additional Info	
(nm5) 26 November - Monday	1
0830 hrs. Branch Chief's Meeting	1a
Due Date - ISI/FJT - Management Support for R&D Prog - Completed	gram from DDRSE 15
Col Thayer - Leave	1 c
(nt5) 27 November - Tuesday	2
Col Thayer - Leave	2a
(nw5) 28 November - Wednesday	3
Representatives from AFDSC will visit RADC/Bergstron to begin testing of DM-1 System - Will be here tarou	
Due Date - ISIS/ISIM - Project Engineers Bimonthly B Completions - due in ISM 29 Nov	Review of Tech 3b
Col Thayer - Leave	Зс
Due Date - ISIS/D. Marks - Technical Evaluation of 1	PR-B-4-3232 3d
(nth5) 29 November - Thursday	4
0830 hrs. Branch Chief's Meeting	4a
AFSC Procurement Policy Briefing - Bldg, 106 - Audi hrs. thru 1400 hrs. All Engineers involved in PRs per F. Tomaini.	torium - 1000 should attend 4b
Laboratory Activity Reports due today: Bucciero mu 1000, ISM must have them by 1100, and DOT must have	st have them by them by 1600. 4c
Due Date - ISIM/Bergstrom - Joint Services Electron (JSEP) Proposal Review. Completed	ics Program 4d
0900 - 1000 hrs Officer's Commanders Call - Bldg Auditorium	• 106 - 4e
Col Thayer - Leave	4f
(nf5) 30 November - Friday	5
Due Date - ISIM/Ray Liuzzi - Technical Evaluation -	PR-B-4-3245 5a
Form 2's (employee time expenditures) are due today	. 5b

RJC 27-NOV-73 06:16 20548

Tickler for week of 26 Nov - Additional Info

. . .

Form 6's (projected manpower) are due today.	5c
Bobbie: Travel figures due by noon.	5d
Due Date - ISI/ISIS/ISIM - Course Forms for Data Base due today into ISI/Bobbie	5e
Col Thayer - Leave	5f

Tickler for week of 26 Nov - Additional Info

- --- *

(J20548) 27-NOV-73 06:16; Title: Author(s): Roberta J. Carrier/RJC; Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

20548 Distribution

...

Larry M. Lombardo, Anna A. Cafarelli, Roberta J. Carrier, Donna R. Robilotta, David L. Daughtry, Richard H. Thayer, Frank J. Tomaini, Mike A. Wingfield, Edmund J. Kennedy, Ray A. Liuzzi, John W. Johnson, Donald Van Alstine, Dean F. Bergstrom, William P. Bethke, Frank S. LaNonica, William E. Rzepka, Rocco F. Iuorno, Frank P. Sliwa, Thomas J. Bucciero, Robert E. Doane, David A. Luther, Roger B. Panara, John L. McNamara, Joe P. Cavano, Duane L. Stone, Marcelle D. Patell, Josephine R. Stellato, Robert K. Walker, Thomas F. Lawrence, James H. Bair, Letter To D. Vaskevitch

Augmentation Research Center Stanford Research Institute Menlo Park, California 94025

David Vaskevitch c/o Prof. Peter Meinke, Vice Provost University of Toronto Simcoe Hall Toronto M5S 1A1 Ontario, Canada

Dear Mr. Vaskevitch:

Professor Pauline Atherton has told us you would be interested in information about our augmentation work. I an enclosing some reports which describe what wa're doing. When you've seen them perhaps you will want to commant or ask questions.

In return, we'd like to have information about your work. Please send us anything you've prepared which describes it.

Sincerely,

Jeanne B. North Augmentation Research Center

JBN/jml

Enclosures

Vaskevitch/North

1

20549 Distribution Douglas C. Engelbart, James C. Norton, James H. Bair,

.

.

Letter To D. Vaskevitch

(J20549) 30-NOV-73 11:34; Title: Author(s): Jeanne B. North/JBN; Distribution: /DCE JCN JHB; Sub-Collections: SRI-ARC; Clerk: JML; Origin: <LEAVITT>VASKEVITCH.NLS;1, 30-NOV-73 11:11 JML; JML 14-DEC-73 14:14 20550 Letter to Don Jackson, sending some ARC publications

> Augmentation Research Center Stanford Research Institute Menlo Park, California 94025

Mr. Donald Jackson Central Intelligence Agency DCI/IC/IHC Room 6E2917 Washington, D. C. 20505

Dear Mr. Jackson:

I am enclosing the following ARC publications for your attention.

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

D. C. Engelbart and W. K. English. "A Research Center for Augmenting Human Intellect", AFIPS Proceedings, Fall Joint Computer Conference, 1968, Washington, D.C. (XDOC -- 3954.)

Augmentation Research Center, ONLINE TEAM ENVIRONMENT: NETWORK INFORMATION CENTER and COMPUTER AUGMENTED TEAM INTERACTION, Final Report on project RADC-TR-72-232, June 1972 (Journal -- 13041,)

J. C. Norton, R. W. Watson, WORKSHOP UTILITY SERVICE FOR ARPA AND IPT CONTRACTOR USE OF KNOWLEDGE WORKSHOP UTILITY, Technical Proposal to ARPA/IPTO, SRI No. ISU 73-5, March 1973 (Journal -- 14946,)

J. B. North, EXPERIMENTAL DEVELOPMENT OF A SMALL COMPUTER-AUGMENTED INFORMATION SYSTEM, Annual Report on ONR project N00014-70-C-0302, April 1973 (Journal -- 16508,)

D. C. Engelbart, R. W. Watson, J. C. Norton, THE AUGMENTED KNOWLEDGE WORKSHOP, paper presented at the National Computer Conference, New York City, June 1973. (Journal -- 14724.)

D. C. Engelbart, DESIGN CONSIDERATIONS FOR KNOWLEDGE WORKSHOP TERMINALS, paper presented at the National Computer Conference, New York City, June 1973. (Journal -- 14851.)

J. C. Norton, R. W. Watson, NETWORK INFORMATION CENTER AND AUGMENTED KNOWLEDGE WORKSHOP DEVELOPMENT, Technical Proposal 1

2

3

4

5

6

7

JML 14-DEC-73 14:14 20550 Letter to Don Jackson, sending some ARC publications

to ARPA/IPTO, SRI No. ISU 73-128, August 1973 (Journal -- 18368,)

J. C. Norton, R. W. Watson, WORKSHOP UTILITY SERVICE FOR THE USE OF KNOWLEDGE WORKSHOP TECHNOLOGY, Technical Proposal to Bell Canada, SRI No. ISC 73-147, October 8, 1973 (Journal --19250,)

Sincerely,

Douglas C. Engelbart Augmentation Research Center

DCE/jml

9

10

JML 14-DEC-73 14:14 20550 Letter to Don Jackson, sending some ARC publications

(J20550) 14-DEC-73 14:14; Title: Author(s): Jeanne M. Leavitt/JML; Sub-Collections: SRI-ARC; Clerk: JML; Origin: <ENGELBART>LJACKSON.NLS;2, 11-DEC-73 15:22 DCE; RE - TRAVEL VOUCHERS

Info Cy - Col Thayer

. .

1

RE - TRAVEL VOUCHERS

. . .

PLEASE BE ADVISED THAT PERFRANK TOMAINI NO TRAVELVOUCHERS ARE TO BE HANDCARRIED. THEY MUST BE SUBMITTED THROUGH THE BRANCH OFFICE WITH TRIP REPORT. PLEASE COMPLY RE - TRAVEL VOUCHERS

(J20569) 27-NOV-73 07:54; Title: Author(s): Roberta J. Carrier/RJC; Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

20569 Distribution

. . . 61

Larry M. Lombardo, Anna A. Cafarelli, Roberta J. Carrier, Donna R. Robilotta, David L. Daughtry, Richard H. Thayer, Frank J. Tomaini, Mike A. Wingfield, Edmund J. Kennedy, Ray A. Liuzzi, John W. Johnson, Donald Van Alstine, Dean F. Bergstrom, William P. Bethke, Frank S. LaMonica, William E. Rzepka, Rocco F. Iuorno, Frank P. Sliwa, Thonas J. Bucciero, Robert E. Doane, David A. Luther, Roger B. Panara, John L. McNamara, Joe P. Cavano, Duane L. Stone, Marcelle D. Petell, Josephine R. Stellato, Robert K. Walker, Thomas F. Lawrence, James H. Bair,

1

System Access

Tonorrow (28 Nov.) at 1330 D L Stone is giving a pitch and a demonstration to the SADPR- 85 study group. Your cooperation is solicited. Anything you can do to insure that DLS has access to the system at that time will be appreciated. Since the RADC quota at that time of day is only two, the best thing that you can do is to stay off. System Access

(J20570) 27-NOV-73 08:37; Title: Author(s): Edmind J. Kennedy/EJK; Distribution: /RADC JCN(Info); Sub-Collections: RADC; Clerk: EJK;

20570 Distribution

Larry M. Lombardo, Anna A. Cafarelli, Roberta J. Carrier, Donna R. Robilotta, David L. Daughtry, Richard H. Thayer, Frank J. Tomaini, Mike A. Wingfield, Edmund J. Kennedy, Ray A. Liuzzi, John W. Johnson, Donald Van Alstine, Dean F. Bergstrom, William P. Bethke, Frank S. LaMonica, William E. Rzepka, Rocco F. Iuorno, Frank P. Sliwa, Thomas J. Bucciero, Robert E. Doane, David A. Luther, Roger B. Panara, John L. McNamara, Joe P. Cavano, Duane L. Stone, Marcelle D. Petell, Josephine R. Stellato, Robert K. Walker, Thomas F. Lawrence, James H. Bair, James C. Norton,

WALKERS DUDDD FOR INCLE 1074 DEPORT	1
ANALYSIS PAPERS FOR ARC'S 1974 REPORT	
The next ARC annual report will be due around March 1974. It will be made up of a series of technical papers that correspond to the various activities within ARC. In particular, next year, Dick wants to have a series of papers reporting about the activities of	
Analysis.	2
I gave him he following list as possible candidates for inclusion in the report. The suggested names, as well as the list itself, are	
still tentative, and my only intention for the time being is to get	
the process started.	Э
Superwatch: Technical Description (DIA)	3a
Experience with Superwatch (SRL & DIA)	3ь
NLS Command Frequencies (SRL)	
Timing of NLS Commands (SRL)	
Usage Profiles of NLS Users (SRL)	
Evaluation of the new NLS and comparison with previous version	
(SRL)	3c
Overall Performance of NLS within the ARC Environment (PR & SRL)	3d
Experience with ARC's Group Allocation System (PR & DCW))	3e
Analysis within ARC (PR)	
An RSD Community for Augmentation Research (PR)	
The Concept of an EVolutionary Information Center (PR)	
An analysis of Personal Information Management Naads (PR)	31
Please, give me your suggestions and comments about the whole	
subject. Does end of February seem a reasonable deadline fo the	

A Suggested List of Analysis Papers for ARC's 1974 Report

PR 27-NOV-73 09:20 20571

4

first drafts?

1

PR 27-NOV-73 09:20 20571

A Suggested List of Analysis Papers for ARC's 1974 Report

(J20571) 27-NOV-73 09:20; Title: Author(s): Paul Rech/PR; Distribution: /RWW SRL DIA DCE; Sub-Collections: SRI-ARC; Clerk: PR; Origin: <RECH>PAPERS.NLS; 4, 27-NOV-73 09:15 PR; this is a test of the journal system, larry

from K.S.H. attached tto C.A.C. report

THE LETTER THAT WAS SENT HAD DIFFERENT WORDING THAN THIS DRAFT VERSION

The attached report, "Computer-Augmented Conferencing - Its Impact on Bell Canada", was prepared last summer by the Business Planning Group, H.Q. Planning. It is being distributed at this time to keep you aware of the developments in the field of computer-augmented conferencing. Some of the recent developments in this field are outlined below.

A number of the report's recommendations have been implemented since it was written. The Business Planning Group is now making extensive use of the computer-augmented conferencing systems developed by Stanford Research Institute and Institute for the Future (described in the report). Additional funding has been extended by the group to the Systems Engineering Group at Bell-Northern Researchh to carry out their work on computer-augmented conferencing. Perhaps most important, the popularity of the computer-augmented conferencing concept is spreading rapidly. In addition to research interest now developing within TCTS, a number of outside organizations have expressed an interest in BNR's research. Some of these organizations represent government or university groups, but others represent companies that might conceivably offer some sort of conferencing capability to the general public as a connercial venture. Since Bell Canada may wish to enter this market as well, these outside groups shold be regarded as potential competitors for a potential new service offering.

Developments in tis field are taking place rapidly. H.Q. Planning will keep you informed of the status of this project as it evolves.

1d

1c

1

1a

1 b

this is a test of the journal system, larry

(J20572) 27-NOV-73 10:26; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /LHD; Sub-Collections: NIC; Clerk: MIKE; 20572 Distribution Lawrence H. Day,

.....

•

1a

1b

1c

1d

1d1

1d1a

1d1b

1d1b2

1e

this is a test to self

to John Gilliand - Dep't. of Environment : Nov. 22/73

Mr. John Gilliand Inland Wates Directorate Department of the Environment Place Vincent Massey St. Joseph Boulevard Hull, Quebec

Dear Mr. Gilliand:

I understand that the Department of the Environment is becoming increasingly interested in technological forecasting and technology assessment, and that the Inland Waters Directorate is currently researching some methodologies that have received substantial use in this department.

<BELL>PHIL.NLS;1, 22-NOV-73 11:12 MIKE ;

FVenture Management Distribution LetterUTURES INFORMATION SYSTEM, PHASE TWO

EXTENSION TO OTHER DEPARTMENTS

IMPROVEMENTS TO EXISTING SYSTEM

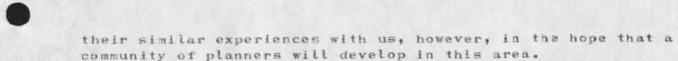
GREATER FLEXIBILITY IN THE USAGE OF KEY WORDS TO RETRIEVE TEXT 1d1b1

PdirARTICIPATION OF PLANNERS IN THE SELECTION OF FORECASTS

SELECTION OF PERSONNEL TO CONTINUE ABSTRACTING 1d1b3

I have enclosed a number of documents which I believe will be of interest to you and your group. We refer to the documents loosely as "the Delphi package", because it summarizes in a few volumes our experiences to date with the technique. In addition to the reports that were written to document four of the studies we have conducted, there is "Delphi - The Bell Canada Experience" (a collection of papers on the use of the technique), and "A Technology Assessment of Future Home Communications Services - A Study Proposal" (which outlines some of our reservations about Delphi and proposes an alternative methodology developed within this group).

We have distributed a number of copies of these papers, and there is never any charge to the recipient. We ask recipients to share this is a test to self



We are looking forward to hearing from you; I hope the enclosed literature is useful.

Yours sincerely,

Michael T. Bedford Supervisor - Business Planning

1h

1f

1g

this is a test to self

-

(J20573) 27-NOV-73 10:27; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /MIKE; Sub-Collections: NIC; Clerk: MIKE;



- --

20573 Distribution Michael T. Bedford,

1 a

1b

1b1

1b2

1c

2

2a

2b

2.0

A suggestion on NLS File Structure, with Application to Back-Links and Output Processor Directives

MOTIVATION

This brief note has been motivated in part by discussions with Charles P. Bourne, Kjell Samuelson, and Pauline Atherton, during their recent visit to ARC. These three members of ASIS were interested in NLS, especially from the standpoint of dialogue and reference support. They were concerned that we had not implemented any solution to the problem we at ARC have referred to as "back-links".

Consequently, I've been thinking about the problem again, and I want to share what I believe to be a useful scheme for organizing and storing back-link and similar information for files. The scheme is intended to make it practicable that

a) the back-link and other similar information be automatically displayed at the time a file is read, but

b) the original file remains unchanged.

In addition to being applicable to Journal files, the scheme also should be applicable to an unrelated problem associated with use of the Output Processor. These two applications are described in this note, after a sketch of the general scheme is given.

SCHEME

The scheme is an extension of the "partial copy" concept, and has these attributes:

There should be a new file type (or at least a new distinct subset of existing NLS files), which for want of a better name I am suggesting we call a "quasi" partial copy (QPC) --- namely a file which has some but not all the attributes of partial copies.

The QPC of a file F would not normally be visible separately from F; the QPC's contents would normally be seen only when "merged" with those of F at the time a viewer looks at F. (Here of course the QPC shares a very important attribute of ordinary PC's, namely that it is intimately tied to the structure of the parent file F.) 2c

The QPC would have its own PC, in order to allow someone to make modifications to the QPC while others are viewing F + PC + QPC. (Here the QPC has some of the attributes of an ordinary NLS file.) 2d

Three new mutually exclusive viewspecs are recommended:

A suggestion on NLS File Structure, with Application to Back-Links and Output Processor Directives

capital X: show F together with its QPC (this would be the default viewspec)	2e1
capital Y: show F but not F's QPC	2e2
capital Z: show F's QPC but not F	2e3
When updating F the contents of F's QPC (and of the QPC's PC) would be IGNORED by NLS. (This is the crucial distinction between a PC and a QPC.)	2f
Update File QPC and Output File QPC would be possible only when viewspec Z is on.	2g
Implementation of the QPC concept would have to be compatible with BSYS (especially the Archive System).	2h
JOURNAL SYSTEM APPLICATION	3
For Journal files, the main goal of introducing the QPC concept is to be able to preserve back-links and notes that are made to a Journal file, and to be able to see them at the time that Journal file is read.	За
These back-links and notes would be stored in the Journal file's QPC, and so would be visible to the user; but they would not alter the contents of the original Journal file.	3ь
The QPC of a Journal file F would therefore have four main purposes:	3c
- to hold links back to other Journal files that "obsolete" F.	3c1
These links would automatically be stored in a separate branch of the QPC when the Journal subcommand "obsolete" was used.	3c1a
- to hold links back to other Journal files that "update" F.	3c2
These links would automatically be stored in a separate branch of the QPC when the Journal subcommand "update" was used.	3c2a
- to hold links back to other Journal files that "cite" F.	3c3
These links would automatically be stored in a separate branch of the QPC when the Journal system discovers a link	

A suggestion on NLS File Structure, with Application to Back-Links and Output Processor Directives

> to F in the origin statement of a different Journal file, G.

- to hold notes that are placed there (in a "NOTES" branch of the QPC) by what I propose be a new Journal system subcommand, "submit note".

"submit note" would be similar to submit message or submit statement, in that only one statement's worth of note would be allowed. But instead of creating a separate Journal iten for the note that is submitted, the submit note subcommand would append the note to the "NOTES" branch of the QPC of F.

The submit note subcommand could also (if thought desireable) cause a footnote indication to be made in the QPC at the statement the note refers to, so that the reader of F would be aware of the note when reading the relevant statement in F.

If a viewer wanted to see just the original Journal file F_{*} he need only jump to it with viewspec Y on, or turn Y on while viewing F_{*}

If user A was submitting a Journal item which caused modification to F's QPC while viewer B was looking at F, then the modifications caused by viewer A would be stored in the QPC's PC (i.e., the QPC would be locked). The QPC would be updated by a background process (before or during archiving), and viewer B would not be able to see the modifications until after that update had taken place.

OUTPUT PROCESSOR APPLICATION

For the Output Processor, the main goals are

1) to permanently remove the directives from the text, thereby making it possible to view a file on-line without seeing the directives, and without having to invoke a process that scans for and deletes the directives.

2) to remove what I perceive as one barrier to certain types of further development of the Output Processor, the barrier being that the O.P. doesn't know at once where all the directives are embedded, and it must always look for them (a time-consuming process).

To achieve these goals through the QPC scheme, we would need a new noun (the word "directive" seems obvious) in the text editing

100

3c3a

3c4

3c4a

3c4a1

3d

3e 4

4a

4a1

4a2

A suggestion on NLS File Structure, with Application to Back-Links and Output Processor Directives

commands. Then the commands insert directive, copy directive, substitute directive, etc., would all do their thing in the QPC, without changing the original file F at all. That is, each directive that is inserted, moved, copied, etc by a user would exist in the QPC (where it would be explicitly or implicity coupled to a DAE) and would be manipulated by NLS in the QPC.

The display generator and output quickprint would be able to ignore directives and not display them, simply by use of viewspec "Y" (show F but not its QPC). But the option to see the directives would be available with viewspec "X" (show F and its QPC).

The Output Processor would (in principle, at least) be able to run nuch faster. It would read the QPC separately from the parent file F, so that it had a kind of "road-map" to the directives, and could handle statements without having to scan them to find the directives. I think this would open up new possibilities for directives, and especially for human engineering of the whole O.P. concept.

4

4d

4b

4c

A suggestion on NLS File Structure, with Application to Back-Links and Output Processor Directives

·

(J20574) 27-NOV-73 10:36; Title: Author(s): Michael D. Kudlick/MDK; Distribution: /SRI-ARC NP; Sub-Collections: SRI-ARC NP; Clerk: MDK; Origin: <KUDLICK>FILES.NLS;8, 27-NOV-73 10:33 MDK; HGL 27-NOV-73 10:44 20575 Comment on Jim White's Privacy Proposal-- (20543,): Some Questions

1

What about the earlier proposal to provide an encryption mechanism in NLS? I assume that the current proposal will not affect that. Also, is there any thought to making parts of files (e.g., statements, branches, etc.) private to some users? For the forms/query system we may want or need such a feature. What about the feasibility of such a feature? (Perhaps an access list associated as a property node with a statement or branch in the new file structure if it is ever implemented.) Otherwise, Jim's proposal seems to solve some immediate privacy problems associated with the Journal. H3L 27-NOV-73 10:44 20575 Comment on Jim White's Privacy Proposal-- (20543,): Some Questions

(J20575) 27-NOV-73 10:44; Title: Author(s): Harvey G. Lehtman/H3L; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: HGL;

1

DEX-2 Reply to SRW's (20444,)

. .. .

I read the inquiry concerningthe use of DEX-2 from Steve Wilbur (SRW) in England (20444,). DEX-2 has never been complately tested in production runs at ARC and therefore, until it is, I feel it cannot be made available to other users. While all commands seemed to work on small test runs in June, undetected bugs wil no foubt turn up in production testing. Also, with the change in command language in the rest of NLS and the possibility of using CML to interpret sequential file input, many of the facilities of DEX-2 may be obsolete or may need to be modified.

1

DEX-2 Reply to SRW's (20444,)

15 er 4

(J20576) 27-NOV-73 10:56; Title: Author(s): Harvey G. Lehtman/H3L; Distribution: /SRW(I'll keep you informed about any new developments) DCE KIRK DVN CHI; Sub-Collections: SRI-ARC; Clerk: H3L;

1

It's Fergs turn in the barrel

h in a

As many of you know I am now working fulltime with NLS and CML. I would like you therfore to please contact FERG for all TENEX related problems. FERG is doing an outstanding job in covering the TENEX front and can answer most all your questions. I am still available to help in emergency situations but for the day-to-day stuff I would appreciate you contacting Ferg. Smokey It's Fergs turn in the barrel

(J20577) 27-NOV-73 12:20; Title: Author(s): Donald C. (Smokey) Wallace/DCW; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: DCW;

1

Request for Information regarding Network Access

Request for Information

. .. .

So that I may better relate to people who inquire, could you please tell me what policy, if any, governs network access to the NIC. I have been of the understanding that the Network Users where assured of access slots in number equal to the number specified when doing a groUPSTAT after logging in as a net user. To my dismay, I see that a guest job has been occupying one of these allocated slots for in excess of 26 hours of connect time and in excess of 5:44:00 used CPU time, and that SIGART has been connected for in excess of 3 hours with cpu usage of: 0:02:46. Upon further exploration, through: <guest>who.sav;*, it appears that both of these jobs are local to SRI-ARC, leaving a net balance of one slot for network users under this allocation.

I spent in excess of one hour to log in to accomplish some tasks which had to be done today, and talked to a few other network users who were somewhat distressed with the situation.

If there is a policy, may I invite you to publish it so that network users can better plan their activities.

Thank you for your interest and consideration, Jean

Request for Information regarding Network Access

e 1.5 19

(J20578) 27-NOV-73 13:24; Title: Author(s): Jean Iseli/JI; Distribution: /JCN MDK RWW; Keywords: access-network-users; Sub-Collections: NIC SRI-ARC MITRE-TIP; Clerk: JI; Planning for ARPA Contract Final Report

Everybody Please look at this

.

RWW 27-NOV-73 13:47 20579

Planning for ARPA Contract Final Report

Plans for Final Report

This year I would like to try a different approach to our ARPA contract final report. I would like to treat the report much as a conference proceedings and have it contain a series of papers, some of which can later be submitted elsewhere for publication. Others can be papers we have published. This approach would have two advantages:

1) We could get a good leg up on writing for publication and neet our final report obligations in a single effort.

2) As each paper would be written as if it was going to be published, readers of the report could more easily start anyplace of interest and get what they need without having to read cover to cover for continuity.

What I need is either complete or partial agreement on the suggested papers off the top of my head below and/or suggestions for alternatives, deletions etc. The titles given are only meant to be suggestive of content. Authors are also suggestions. I will be around to talk to people next week about this topic.

A Possible Table of Contents

TOPIC

AUTHORS

5

3

4

2

2a

25

GENERAL

1) Introduction to Report	RWW,DCE	6a
2) The Augmented Knowledge Worksho	op (14724,) DCE,RWW,JCN	6b
3) Some Basic Characteristics of a Workshop System and Status of NLS w		
to Them (an update of (20367,))	RWW	6c
4) Coordinated Information Service Discipline or Mission Oriented Comm (12445,)		6d
5) Aspects of ARC's Technology Tra	ansfer RWW	6e
Strategy	K W W	oe
6) A View on the Symbiotic Relation Between ARC and the Applied RSD Com		6f
7) The Concept of an Evolutionary		
Information Center	PR	6 g

RWW 27-NOV-73 13:47 20579

Planning for ARPA Contract Final Report

NLS User Interface and Terminal Type Subjects 8) The NLS Command Language and User Interface: An Overview RWW,DCE,CHI	6h 61 6j
User Interface: An Overview RWW, DCE, CHI	
지수는 것은 것 같아요. 그는 것은 것은 것은 것은 것은 것은 것은 것은 것이 같아요. 것은 것이 같아요. 것이 있는 것은 것이 없는 것은 것은 것을 가지 않는 것이 같아요. 것이 같아요. 것이 같아요.	6 j
9) A Command Neta-Language System for an Interactive System CFD,CHI,DCW	
10) A Query System for an ONline HELP Facility HGL, EKM, MDK, DSK	6 k
11) Problems and Experience in the Building of an Online HELP Data Base An Approach to	61
Online Documentation DVN,MDK,KIFK,JMB	OL
12) CHI'S NCC Paper CHI	6 m
13) DIA's NCC Paper DIA	6 n
14) MEH's CompCon Paper MEH	60
15) Experience with Network Running of DNLS KEV	6p
16) Experience with COM and the Output Processor DVN,NDM	6 q
16b) An Offline Text Editing Facility HGL	6r
Dialog Support System	7
17) Experience and Status of the NLS Journal System RWW, JEW, JDH	7a
18) Design Considerations for a Distributed Recorded Dialog Support System JEW, JDH	7ь
Information Management	8
19) An Overview of the NLS File System HGL,CHI	8a
20) Experience and Plans for Improved Data Management and Query of NLS Based Files EKM, HGL,	8ь
21) Thoughts on Needs for Personal Information Management PR	8c
22) Experience with Catalog and Directory Production NDK, JBN	8đ
Analysis	9

RWW 27-NOV-73 13:47 20579

Planning for ARPA Contract Final Report

23) System Measurement Tools DIA	9a
23b) Use of System Measurement Tools as Aid to Operations PR,SRL	9b
24) Group Resource Allocation Design and Experience PR,DCW	9c
25) Early Results of NLS Command Usage Characteristics PR,SRL	9 đ
25b) System Usage Profiles PR,SRL	9e
25c) NLS Timing Study PR,	91
25d) Use of NLS over Network PR, SRL	9g
25e) A Look at Reactions and Evaluation of New NLS Command Language PR, SRL	9h
26) The Analysis Function PR	91
Software Tools and Conventions	10
27) Software Engineering in an NLS Environment HGL, KEV, CHI	10a
28) Programming and Documentation Conventions in an NLS Environment HGL,KEV	10ь
29) A Source Language Debugging Facility CHI,CFD	10 c
30) Assembly Language Programming in an NLS Environment DCW,KEV	10 d
(see CML paper above)	10e
NIC	11
31) The NIC: Reflections after Three Years MDK, RWW	11a
32) The Resource Notebook Data Base and Query EJF	11ь
33) The NIC: Future Directions MDK	11c
Operations	12
34) Thoughts on Training for an Online Environment JHB,JCN	12a

Planning for ARPA Contract Final Report

35) The Knowledge Workshop Utility: JCN Background and Plans

others?

....

12b 12c Planning for ARPA Contract Final Report

(J20579) 27-NOV-73 13:47; Title: Author(s): Richard W. Watson/RWW; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC SRI-ARC; Clerk: RWW; Origin: <WATSON>REPORT.NLS;4, 27-NOV-73 13:45 RWW;

JBN 27-NOV-73 13:52 20580

Request to MLK for Enterprise Survey

Marcia-	1
We want to make a survey of the use of Enterprise service. For two weeks, please do the following for all NIC calls received:	2
Ask the caller how he placed the call.	3
Record the answer on the NIC log form using the code:	4
DIALED Dialed direct	4a
OPERATOR, NIC Placed with his operator, using NIC phone number	4b
AUTOVON Used Autovon	4c
ENTERPRISE Used Enterprise number	4d
(Enter any other means)	4e
Hold the phone log forms for JBN	5

Request to MLK for Enterprise Survey

(J20580) 27-NOV-73 13:52; Title: Author(s): Jeanne B. North/JBN; Distribution: /MLK MDK; Sub-Collections: NIC SRIARC; Clerk: JBN; Origin: <NORTH>MARCIAMSG.NLS;2, 27-NOV-73 13:48 JBN;

1

Documentation Search

•

at

Steve,

Concerning your journal message of 26 November, I think your best bet would be to contact Jake Feinler (she's here at ARC and her ident is JAKE) -- she's in charge of the Resource Notebook and knows where all that type of stuff is on-line and how to access it. You might also check with Jim White (also of ARC, ident=JEW), the Liaison here as he is a veritable fountain of knowledge. Marcia Documentation Search

A 1.5 Y

(J20582) 27-NOV-73 14:34; Title: Author(s): Marcia Lynn Keeney/MLK; Distribution: /SRW; Sub-Collections: SRI-ARC; Clerk: MLK;

1

Your Change of Address -- Related Matters

Tak I I

When I talked to you on the phone the other day, I forgot to ask you if you were going to keep the same local network mailbox address and the same host name. Let me know if there is a change in those fields. Thanks. Marcia Your Change of Address -- Related Matters

41.00

(J20583) 27-NOV-73 14:36; Title: Author(s): Marcia Lynn Keeney/WLK; Distribution: /ELT; Sub-Collections: SRI-ARC; Clerk: MLK;

1

page stop for scope devices

I just tried to use the scope terminal scope option, which the exec accepted, but which hls ignored. Any plans to incorporate the page stop? (I hope). Dave. page stop for scope devices

(J20585) 27-NOV-73 14:48; Title: Author(s): David H. Crocker/DHC; Distribution: /BUGS DVN; Sub-Collections: NIC BUGS; Clerk: DHC;

1

alex:

i talked to abhay (via network) and he agrees that what i suggested to you is a reasonable thing to do (as he previously suggested in rfc 559). He now uses socket 69 which is a socket for "host specific" functions and is used at ccn for their rjs. thus i have selected socket 23 (decimal) for new Telnet. Let me know what you think of the memo. either journal to jbp or sndmsg to postel at isi (faster) or telephone to mitre ((703) 893 3500)(fastest). --jon. (J20586) 27-NOV-73 15:15; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /AAM; Sub-Collections: NIC; Clerk: JBP;

1

2

3

4

5

6

7

7a

7b

telnet schedule memo draft

Alex McKenzie [AAM] (BBN) Jon Postel [JBP] (MITRE)

Telnet and FTP Implementation Schedule Change

We have been contacted by several Telnet implementers and concerned users regarding the scheduled changeover from old to new Telnet. There is a good deal of concern about accomplishing a coordinated changeover especially in light of the potential incompatabilities [RFC 559, NIC 18482]. Therefore the changeover is reformulated as follows.

New Telnet implementations are to be ready 1 Jan 74 (as before), but are to use ICP socket 23 (decimal). This will provide an oppertunity for testing and debugging the new programs in a way that does not interfere with normal use.

Durring January we will survey the technical liasons to determine the status of the Telnet implementations. As soon as we determine that the Telnet implementations have reached a point where the changeover can be made without disruption of user srevices the technical liasons will be n'otified.

In light of this change in the Telnet implementation schedule, the FTP schedule is also modified. New FTP implementations are to be ready by 1 Feb 74 (as before), but will continue to use ICP socket 21 (decimal) until we can determine that a changeover is appropriate.

1

References:

Telnet Protocol	NIC 18639
File Transfer Protocol	NIC 17759

telnet schedule memo draft

(J20587) 27-NOV-73 15:18; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /AAM; Sub-Collections: NIC; Clerk: JBP;

1

I-Colony Membership

Rosy: We are delighted to welcome you and know you bring a real strength to the achievement of our objectives. Mil will refer you to appropriate material we are working on; please feel free to link to any of us and rap about things of common interest. We are absolutly delighted to have you join us and look forward to many fruitful dialogs and joint accomplishments.

I 27-NOV-73 13:17 20589

I-Colony Membership

(J20589) 27-NOV-73 18:17; Title: Author(s): Al J. Rosenfeld, David M. Grothe, John D. Day, Alan R. Hill, Clayton A. Greer, Jean Iseli, Jim O. Calvin, Mil E. Jernigan/I; Distribution: /AJR I; Keywords: i-colony-collaboration-membership; Sub-Collections: I; Clerk: JI;



.....

20589 Distribution

Al J. Rosenfeld, Al J. Rosenfeld, David M. Groth≥, John D. Day, Alan R. Hill, Clayton A. Greer, Jean Iseli, Jim O. Calvin, Mil E. Jernigan,

1a

1b

2

2a

2b

261

2c

Introduction

For a long time now, we have realised that there will be a distribution problem for ARPA Network documentation once the British node is being used regularly. The British Library (Lending Section) (BL) suggested that they could perhaps help by keeping commonly referenced documents, and allowing access to them through their normal channels.

With this sort of activity in mind, a visit was made to the BL to look at their methods of distribution, and to see how they prefer to deal with small collections. The preferred acquisition methods are dealt with in section 5, whilst section 2 deals with the types of document which we may want distributing. This obviously has a bearing on the method of distribution, eg. Xerox, microform or loan, and these are discussed to some extent in section 3. Section 4 deals with the question of copyright, where whole documents are being reproduced.

Types of Document

Broadly, there are three types of document which are associated with the ARPA Network project. They are as follows.

Small documents.

About twenty items per week arrive through the normal mail. They are typically of only a few pages in length, and are not often of general interest. The majority of such items are also on-line at the NIC (Network Information Centre). Such documents at present are kept at UCL and it is proposed to distribute a catalogue of these items to registered users about once every six weeks. The catalogue will also exist in an on-line form at the NIC.

Reference works at NIC.

A large amount of information is kept on-line at the NIC, including all the NIC (SRI-ARC) installation nanuals, information about users, sites, and hosts, and some general documentation of other sites. This information can all be accessed easily, and lineprinter printouts can be made at UCL.

Other manuals.

2d

2c1

SRW 28-NOV-73 01:03 20592 NIC 20592 30 NOV 73

These documents are somewhat less organised than the two previous categories, although it is not anticipated that there will be any problem in getting documentation from any sites which British users are likely to use. In general this category represents material which is not on-line.

From this it can be seen that the documents which are of nost use to users in general, rather than UCL specifically, are user manuals of one kind or other. Typically they range in size from 20 to over 100 pages, and the user will normally require access to a whole volume rather than individual pages.

Thus the requirement we have is somewhat different from many which the BL deal with for their normal users, who in general are requesting an item from a journal, but rarely a copy of a whole work.

Costs of Duplication

General

There are basically three methods of reproducing documents on the scale which we are interested in. Their virtues and limitations all depend on the number of copies one requies and the number of pages being copied.

Let us try to arrive at some reasonably representive figures of circulation and document size. If the normal material we are considering is a manual of some kind its size is on average going to be about 50 pages, and rarely larger than 120 pages. A proportion; possibly 30%, will be of less than 20 pages. On the user side, we have at present over 20 registered users, and about five who are already active; the link has only been in operation for three weeks at this time. Obviously, all users will not want all documentation, but certain manuals will be required by almost all users, so let us say we shall want twenty copies at least of some manuals. On average the remaining 50-60% of the collection will be required by probably less than five users, assuming that all currently registered users start using the network within the next few months, and that no more users arrive.

Now that the proportions have been estimated, let us look at the volume of documentation over a year. Initially, there are probably between thirty and fifty manuals which could be ready for the BL collection within the first three weeks, mostly in the approaching fifty page category.

•

2e

2f

3

3a

2d1

3a1

3a2

After that, bearing in mind user requests, I would estimate the number would be around the four per week level averaged over the rest of the year.

From the above we are therefore talking about 250 documents per year, and assuming 70% are large with an average size of 50 pages, and 30% are small with average 20 pages, we have approximately 10,000 pages in the collection in the first year. With 50% required by say three users, and 50% by 20 users, this results in 125,000 pages of copies in the same period.

Thus in summary:

Min	Mean	Max	
Docs/year	50	150	250
Size (pp)	20	50	130
Users (copies)	5	15	30

Xeroxing

The majority of the work done at the BL in terms of duplicating is by means of Xeroxing. They are obviously geared up to this activity, but as we noted earlier, our demands are somewhat different to those of their general user. Xeroxing rates are approximately 1p per page, and for the volume we are talking of this amounts to 11,250 per year. Not only is this expensive in terms of the requirement, but Xeroxing a fifty page manual would effectively tie up one of their machines for half an hour. For xeroxing, the cost is directly proportional to the number of copies made, thus a halving of the load would result in half the cost, and a doubling of the load a doubling of cost.

Postage of documents xeroxed by the BL must be paid for by the user, and this would amount to about 10p per 100 pages. Thus the postal bill for the above amount of xeroxing would likely be around L125 per year.

Microforms

The preferred type of microfiche used at the BL has 56 frames on the first sheet, and subsequent sheets can hold up to 72 frames. The cost of making a sheet is approximately L1 and copies on microfiche cost about 2p 3a3

3a4

3a5

36

361

each. If paper copies are required, then these cost 2p per page.

Obviously, microfiche is not a desirable medium for handy computer room reference On the other hand, the costs of producing the estimated number of copies for the first year would be about L450 For computer room reference, there are two solutions.

The first would be for the user to produce his own notes from the fiche while he is reading it. If he is using a system which few other people are using then this is not too unreasonable.

Secondly, we at UCL could, for the more connon systems, produce pocket guides, which would obviously be no substitute for a manual, but would prompt the user sufficiently whilst he is on-line.

BL themselves, generally do not feel that it is worth making fiche for documents which are going to be requested less than about twelve times. I think our application is somewhat different and consequently the economics have to be evaluated on their own merits.

One further point, with regard to microforms, is that postage must be considered since at second class rates 3p postage brings the cost of each document up from an average of 3p to 6p. Thus wherever possible we must endeavour, if using microfiche, to send several fiche at the same time.

Should my estimates for the demand for these documents be wrong by a factor of two, then for only half the requests the cost would be L400 whilst for double the demand the costs would be around L500

Offset Masters

The above two methods of reproduction are those which the BL are well set up to handle. However, normal document production processes are worthy of consideration, both from the standpoint of cost and for distribution of certain classes of document.

Sprocket fed offset masters suitable for our printers and terminals cost about L40/1000 sheets, ie. about 4p per plate excluding on-line time. This grade of plate is suitable for running off up to about 250 copies and the

3c2

3c1

303

3c5

3d

3c4

3d1

SRW 28-NOV-73 01:03 20592 NIC 20592 30 NOV 73

duplicating process adds little extra cost for such a number of copies. However, further effort, and indirectly cost, is required to collate these documents. Thus a 100 page document would cost about 6p to 8p if 100 copies were being made, or 30p to 40p for about 20 copies.

There is another disadvantage of this approach for our general documentation, and that is that the masters are once-only type. This means that one has to predict the demand for an item and run off the appropriate number of copies. If an attempt is made to keep a float of about 20 copies when the item is printed, this results in a lot of storage space being needed, which in this instance would have to be provided at UCL.

I do see a need for certain documents being prepared in this way, but these would fall into the class of User Notices, ranging from one to about ten pages. These would be kept and distributed normally by UCL rather than by BL, although for certain documents of this type we may wish a copy to be at BL so that they could be available to a wider audience.

Copyright

The question of copyright is somewhat difficult, since the American copyright laws are different from ours. Although there is no copyright on most of the on-line manuals, many documents do bear the copyright marks.

In such cases it is proposed to get approval from the authors to copy the documents, since otherwise they would have to mail us about twenty copies of each item. This I am sure they would rather not do

BL Procedure for Small Collections

At the BL there is a section which deals with small collections. These are typically items which appear irregularly, and do not fit into other categories. One of the small collections was in fact miscellaneous translations of technical papers.

Each small collection has associated with it a "shelf mark" which is assigned by the BL, and aids in their location of the items when they are requested. Appended to this number is a serial number of the item which is assigned by the group responsible for the collection. Both these numbers, shelf 620.1

3d2

3d3

3d4

4a

4b

5

5a

SRW 28-NOV-73 01:03 20592 NIC 20592 30 NOV 73

mark and serial, are required when an item is needed for copying.	5ь
Other points about small collections which the BL do not insist on, but obviously prefer are:	5c
1. all items preferably have a similar cover,	5c1
2. size preferably A4, certainly not line printer size,	5c2
3. items should be stapled or bound, not loose leaf,	5c3
4. in our case items should bear a legend to the effect that they may be duplicated, especially where copyright may be concerned	5c4
If we were to have a small collection at the Bl for our	

nanuals, they would be normally sent by post to the BL, and normally should be on the shelves the same or next day. It is possible, provided a set of labels are included, to have a number of copies sent immediately to a distribution list. In such cases the BL must know who to charge.

As far as a catalogue of the items is concerned, this would be largely our responsibility. At present our intentions are to keep it on-line at SRI-ARC, and periodically print it out and distribute it to users.

Proposed Course of Action

From the foregoing, it would seem best that UCL filter the documents which they receive, and send those of a general nature to BL. Before being sent to BL each item will be catalogued, and have a blue cover put on, even it it already has a cover. UCL will arrange that proper permission is obtained for duplication of any items sent to BL.

Since all items will be wanted in full by users, as soon as they arrive at BL they will be made into microficne, and also added in their original form to our small collection. Once the fiche has been made a copy will be sent, free, to everyone on a mailing list which we enclose with the original document. In practice, several documents will be processed at once to save on postage. The reason for sending everything to everyone on the mailing list is that it is simpler from the administrative side, and does not increase the cost over much.

Charging arrangements from the BL point of view will be that

5d

50

6

6a

JCL are charged for making microfiche masters and copies, but users will be charged for any form of prints, either Xerox of	
from fiche.	6c
Thus, the most important aspects of starting the procedure now are to:	6 đ
1. Prepare covers in a suitable format for BL,	6 d 1
2. Find out our shelf mark, so that it may be added to the covers,	6 d 2
3. Draw up a mailing list, and not least,	6d3
4. Finalise arrangements with BL.	6d4





ARPA Documents at the British Library

Stephen R. Wilbur

Abstract

This document is a result of a visit to the British Library (Lending Section). It discusses which documents, in broad terms, ought to be sent to the BL, and how they pught to be distributed, bearing in mind cost, and the nature of requests by users. 20592 Distribution Peter Kirstein, Douglas C. Engelbart,

.

SRW 28-NOV-73 01:03 20592 NIC 20592 30 NOV 73

(J20592) 28-NOV-73 01:03; Title: Author(s): Stephen R. Wilbur/SRW; Distribution: /PK DCE; Sub-Collections: NIC; Clerk: SRW; Origin: <UK-ICS>BLVISIT.NLS;8, 28-NOV-73 00:56 SRW;



1

2

3

Ja.

3b

3c

4

5

6

Problems with SENDPRINT



Kirk: Hello again I have problems yet again which perhaps you may be able to help with. This time they concern Sendprint for use with a TIP.
One of the things I am trying to do is to receive some documentation from your machine onto offset litho plates here. Whilst I have had no trouble using sendprint and an Odec at this end, (saying yes to form feeds, and no to stop on page ends), I do have problems with other devoices where I MUST stop at page end.
The problems are basically these:

Send form feeds seems to simulate form feeds for 11" paper, which for other sizes is useless,

replied yes to the simulate form feeds question, but

3. The worst point of all, is that when Sendprint does stop at the bottom of a page, this on a TIP is about 3 lines from the bottom of the page

I have tried experimenting with buffer sizes at this end to see if it was the TIP which was doing this, but there seems to be little difference in effect between a 10 word output buffer and a 120 word buffer.

If you have any ideas on an immediate solution I would be grateful, since I suspect that it is to a large extent tied up with the workings of a TIP one way or another,

Cheers .. Steve

1

Problems with SENDPRINT

(J20594) 28-NOV-73 01:40; Title: Author(s): Stephen R. Wilbur/SRW; Distribution: /KIRK DCE(for info); Sub-Collections: NIC; Clerk: SRW; Origin: <UK-ICS>MES.NLS;1, 28-NOV-73 01:11 SRW;

General Documentation

Jake Feinler and Jim White:

I sent the following message to Marcia Keeney the other day, and she referred me to you two. Have you any comments?

Marcia:

Sa dia da

Dean Meyer sugested that I contact you over L10 documentation. However, I have been able to pick that up on-line. Our main problems at present are general documentation of the network, and I thought you might be able to help, or forward this on to someone who can.

At present we in the UK are trying to set up a collection of generally useful documents for UK users. The bulk of the collection is at present envisaged as being user manuals for various hosts and systems on the network. Much of this information may be on-line, but in looking around the NIC it seems that you mainly keep your own documentation on-line and other hosts have their own systems. The exception to this seems to be that almost all general network documentation is on-line in some form at the NIC, but as I say our primary interests at present are manuals.

Whilst we are willing to pick up any documentation which is on-line, the real problem is in finding it. Is there any group in the Journal sense which I can contact to request such information, or do I have to go via the Resource notebook? Even that is not over helpful, as sites do not generally list anyone responsible for documentation. Have you any ideas? Is there anyone at the NIC who would have a list of useful contacts in this sense?

If you have any ideas on this front, please contact me via Journal ident (SRW).

1

Cheers .. Steve Wilbur U. of London

1c

1 b

1

1a

General Documentation

.. .

(J20595) 28-NOV-73 02:25; Title: Author(s): Stephen R. Wilbur/SRW; Distribution: /JAKE JEW; Sub-Collections: NIC; Clerk: SRW; Origin: <UK-ICS>MES.NLS;1, 28-NOV-73 02:17 SRW; DHC 28-NOV-73 17:35 20596 L10 Program to Create Keyword Index of L10 System Procedures

(pproclist) PROGRAM proclist	1
%global declarations%	1 a
DECLARE STRING retstr[2000];	1a1
DECLARE TEXT POINTER wrdptr;	1a2
(proclist) PROCEDURE;	1ь
% declarations%	1ь1
LOCAL TEXT POINTER ptr;	1b1a
LOCAL proc, last, temp;	1515
ptr + proc + last + retstr.L + 0; %some initialization %	1b1c
% Get filename%	1ь2
IF nlmode=typewriter	1b2a
THEN BEGIN	1b2a1
crlf();	1b2a1a
crlf();	1b2a1b
typeas(\$"L10 System Procedures Index Generator Select file: ") ;	1b2a1c
tbug(Sptr) ;	1b2a1d
crlf();	1b2a1e
typeas(\$"here goes") ;	152a1f
END;	152a1g
%Set to selected file and beginning/end of first branch%	1ь3
ptr.stpsid . origin;	1b3a
ptr[1] + 1;	1ь3ь
proc + getnxt(ptr);	1b3c
%For each branch (procedure reference) in top plex%	164

DHC 28-NOV-73 17:36 20596 L10 Program to Create Keyword Index of L10 System Procedures

LOOP BEGIN	154a
IF NOT procproc(proc) THEN	1646
BEGIN	16461
temp 🕈 getprd(proc);	15451a
cdb(proc); %get rid of statement w/out comments%	164616
proc + temp;	15451c
END;	1b4b1d
IF getftl(proc) THEN EXIT LOOP; %turns proc refe branches into index, by first comment line, refing proc name (NOT st. #); ignores branches without comments%	16462
proc . getsuc(proc);	16463
END;	16464
Sort resultant Plex%	1ь5
sortplx(proc);	1b5a
ireset%	166
proc + gethed(proc);	1 b6a
crlf();	1 b6 b
typeas(\$"starting reductions");	1 b6 c
eliminate repeated words, by grouping statements with them, inder same branch%	157
LOOP BEGIN reduce(proc);	1 b7a
IF getftl(proc) THEN EXIT LOOP;	1b7a1
proc + getsuc(proc);	1b7a2
END;	1b7a3
Put in header statement%	168
ptr.stpsid + origin;	1 b8a

DHC 28-NOV-73 17:35 20596

```
*retstr* + "L10 System Procedures Index
```

.H1=", "", "L10 System Procedures Index", "", ";";	1686
cis(ptr, \$retstr, \$"d");	1b8c
RETURN (TRUE);	169
END.	1 b 1 0
(procproc) PROCEDURE(curproc) ; %passed cmntid, replaces branch	
with index entry%	1c
% declarations %	1c1
LOCAL length, cmntid, grptail;	1c1a
LOCAL STRING procname[2000], tempstr[2000], cmnt[2000];	1c1b
LOCAL TEXT POINTER begin, end;	1c1c
tempstr.L . procname.L . begin . end . cmnt.L . 0;	
%initialization%	1c1d
<pre>begin[1] + end[1] + 1; %more initialization%</pre>	1cle
% Get stid of comment line; if no comment line, delete branch	
and return%	1c2
cmntid . getsub(curproc);	1c2a
IF curproc = (cmntid + getend(cuntid)) THEN	
RETURN(FALSE);	1c2a1
IF FIND SF(cmntid) ("(" / "-") THEN	1c2b
RETURN(FALSE); %flag for deletion%	1c2b1
% Get procedure name %	1c3
FIND SF(curproc) [LD] < CH > thegin \$LD tend;	1c3a
procname . begin end;	1c3b
%Get parms of procedure & append to procnme %	1c4
cmntid + gethed(cmntid);	1c4a
IF FIND SF(cmntid) "(" < CH > thegin [")"] tend	1c4b
THEN *procname* . *procname*, begin end;	1c4b1
cmntid . getail(cmntid);	1c4c
%get fircmnt line of comment%	1c5
FIND SF(cmntid) [PT] < CH > thegin;	1c5a
cmnt + begin SE(cmntid);	1c5b
IF procname.L < 54	1c5c
THEN length + (55-procname.L)	1c5c1
ELSE length . (120-procname.L); %max length of one or two	
Lines%	1c5c2
IF length < cmnt.L	1c5d
THEN BEGIN	1c5d1
cmnt.L . length; %truncate cmntatement%	1c5d1a
IF NOT FIND SE(*cmnt*) [("." / "," / ";")] fend	le5d1b
THEN FIND SE(*cmnt*) [PT] [NLD] tend ;	1c5d1b1
cmnt + SF(*cmnt*) end;	1c5d1b2
END;	1c5d1c
% format cmntring%	1c6
cmnt . *cmnt*, " ", *procname*;	
%replace branch with index line%	1c7
cdp(cmntid);	1c7a

DHC 28-NOV-73 17:35 20596 L10 System Procedures Index

ST curproc + *cmnt*;	1c7b
RETURN (TRUE) ;	1c7c
END.	1c8
(reduce) PROCEDURE(topptr);	1 d
%declarations%	1d1
LOCAL grphd, grptl, tempref, nomove;	1d1a
LOCAL TEXT POINTER curstate;	1d1b
LOCAL STRING curwrd[100];	1d1c
nomove - 1;	1d1d
% Get test word in first statement%	1d2
getwrd(topptr);	1d2a
curwrd 🖕 *retstr*;	1d2b
IF FIND SF(*curwrd*) ((" ") / ("Dotsplit")) THEN	
RETURN(FALSE);	1d2c
% set up group head and tail pointers%	1d3
IF getftl(topptr) THEN RETURN;	1d3a
grphd + getsuc(topptr);	· 1d3b
grptl 🗸 grphd;	1 d3c
%search for last statement with the same keyword / delete	
repeat words as you go %	1d4
getwrd(grptl);	1d4a
IF *retstr* # *curwrd* THEN nomove - 0;	1d4b
LOOP BEGIN	1d4c
IF *curwrd* # *retstr* THEN	1d4c1
BEGIN	1d4c1a
grptl . tempref;	1d4c1b
EXIT LOOP	ld4c1c
END;	1d4c1d
IF FIND wrdptr NP THEN wrdptr[1] - wrdptr[1] + 1;	1d4c2
ST grptl . wrdptr SE(grptl);	1d4e3
IF getftl(grptl)	1d4c4
THEN EXIT LOOP;	1d4c4a
tempref . grptl;	1d4c5
grptl + getsuc(grptl);	1d4c6
getwrd(grptl)	1d4c7
END;	1d4c8
% move group under first statement%	1d5
IF nomove = 1 THEN cmg(topptr,grphd,grptl, \$"d")	1d5a
ELSE RETURN(FALSE);	1d5a1
%move tail of first statement to be first sub-statement of	
branch%	1d6
getwrd(topptr);	1 d6 a
IF FIND wrdptr NP	1 d6 b
THEN wrdptr[1] + wrdptr[1] + 1;	1d6b1
curwrd • wrdptr SE(topptr);	1 d6 c
cis(topptr, Scurwrd, \$"d");	1 d6 d
ST topptr . SF(topptr) wrdptr;	1d6e
%sort resultant plex%	1d7
curstate + getsub(topptr);	1d7a

DHC 28-NOV-73 17:36 20596

sortplx(curstate);	1d7b
%recurse reduce, to break new plex into branches %	1d8
LOOP BEGIN reduce(curstate);	1d8a
IF getftl(curstate) THEN EXIT LOOP;	1d8a1
curstate + getsuc(curstate);	1d8a2
END;	1d8a3
curstate + getsub(topptr) ;	1d8b
grptl . getail(curstate) ;	1d8c
RETURN (TRUE);	1d9
END.	1d10
(getwrd) PROCEDURE(stid);	1e
% procedure to get the first word of a statement %	1e1
IF NOT(FIND SF(stid) [PT] [NLD] < CH > fwrdptr)	1e2
THEN typeas(S"End of statement reached. Program will	
probably crash");	1e2a
typeas(\$"1/");	1e3
IF FIND SF(stid) NLD	1e4
THEN wrdptr[1] + wrdptr[1] + 1;	1e4a
retstr - SF(stid) wrdptr;	1e5
RETURN(TRUE);	1e6
END.	1e7
FINISH proclist ;	1f



5

DHC 28-NOV-73 17:36 20596 L10 Program to Create Keyword Index of L10 System Procedures

(J20596) 28-NOV-73 17:36; Title: Author(s): David H. Crocker/DHC; Keywords: L10 User-programs; Sub-Collections: NIC; Clerk: DHC;

.

1

Jean, Could you please mention to someone at the NIC that it is past time to update the <netinfo> computers file. It is missing some new servers, and is out-of-date on some old ones (e.g., Multics is still listed as having the old machine. Many thanks, Mike Leavitt (J20597) 28-NOV-73 06:55; Title: Author(s): Guest O. ARC/ARCG; Distribution: /JI; Sub-Collections: SRI-ARC; Clerk: ARCG;

. . .

Am reminding you guys about the Procurement Meeting Thursday at 10:00

(nm5) 26 November - Monday	1
0830 hrs. Branch Chief's Meeting	1 a
Due Date - ISI/FJT - Management Support for RSD Program from DDRSE - Completed	1ь
Col Thayer - Leave	1c
(nt5) 27 November - Tuesday	2
Col Thayer - Leave	2a
(nw5) 28 November - Wednesday	3
Representatives from AFDSC will visit RADC/Bergstrom (Focal Point) to begin testing of DM-1 System - Will be here through the 30th	3a
Due Date - ISIS/ISIM - Project Engineers Bimonthly Review of Tech Completions - due in ISM 29 Nov	3ь
Col Thayer - Leave	3c
Due Date - ISIS/D. Marks - Technical Evaluation of PR-B-4-3232	3d
(nth5) 29 November - Thursday	4
0830 hrs. Branch Chief's Meeting	4 a
AFSC Procurement Policy Briefing - Bldg. 106 - Aufitorium - 1000 hrs. thru 1400 hrs. All Engineers involved in PRs should attend per F. Tomaini.	4ь
Laboratory Activity Reports due today: Bucciero nust have then by 1000, ISN must have then by 1100, and DOT must have then by 1600.	4 c
Due Date - ISIM/Bergstrom - Joint Services Electronics Program (JSEP) Proposal Review. Completed	4d
. 0900 - 1000 hrs Officer's Commanders Call - Bldg. 106 - Auditorium	4e
Col Thayer - Leave	4f
(nf5) 30 November - Friday	5
Due Date - ISIN/Ray Liuzzi - Technical Evaluation - PR-B-4-3245 - Extended to 14 December	5a

RJC 28-NOV-73 07:20 20598

Tickler for 26 Nov Thru 7 Dec 73

Form 2's (employee time expenditures) are due today.	5b
Form 6's (projected manpower) are due today.	5c
Bobbie: Travel figures due by noon.	5đ
Due Date - ISI/ISIS/ISIM - Course Forms for Data Base due today into ISI/Bobbie	5e
Col Thayer - Leave	51
(dm2) 3 December - Monday	6
0830 hrs. Branch Chief's Meeting	6 a
Robert Stover - Interview w/Col Thayer 1330 hrs.	6 b
News Brief items due into Becky Today.	6c
Bobbie: Personnel Strength Rpt. due.	6 đ
Due Date - Action Items (IS) Reply to Thayer - Review status of DM-1	6e
(dt2) 4 December - Tuesday	7
Due Date to ISF - For Tom B. Draft Proposal Re Equipment Maintenance	7a
(dw2) 5 December - Wednesday	8
ISC Confessions - 0830 hrs.	8 a
(dth2) 6 December - Thursday	9
0830 hrs. Branch Chief's Meeting	9 a
Laboratory Activity Reports due today: Bucciero must have then by 1000, ISM must have them by 1100, and DOT must have them by 1600.	9ъ
(df2) 7 December - Friday	10
Timecards due today.	10 a
Bobbie: Travel figures due by noon.	10ь
Due Date - ISIM - Unsol Prop DO 85-74, "Network Info Center S Augmented Knowledge Workshop Development" w/SRI (1 cy) - Completed	10c

. . . .

Due Date - ISIM - Unsol Prop DO 82-74,"Interactive Command Language III" w/Honeywell (2 cys)

10d

4. 1. 1 . .

(J20598) 28-NOV-73 07:20; Title: Author(s): Roberta J. Carrier/RJC; Distribution: /RADC; Sub-Collections: NIC RADC; Obsoletes Document(s): ; Clerk: RJC;

1

Response to (20391) and (20367)

.......

Dick: Having read your (20391) and (20367), I just wanted to say HEAR HEAR....Right ON Thanks...I share many of your views and look forward to meaningful future dialog on these important areas....Jean Response to (20391) and (20367)

(J20599) 28-NOV-73 08:33; Title: Author(s): Jean Iseli/JI; Distribution: /RWW I(please read these if you have the time, well worthwhile...thanks, jean); Sub-Collections: MITRE-FIP I SRI-ARC; Clerk: JI; 20599 Distribution

Richard W. Watson, Al J. Rosenfeld, David M. Grotae, John D. Day, Alan R. Hill, Clayton A. Greer, Jean Iseli, Jim D. Calvin, Mil E. Jernigan,

1



2

3

4

5

5a

6

7

8

9

Reply to NIC# 20480: ARPANET Newsletter Revisions

Our reactions to Jean Iseli's proposals on the ARPANET Newsletter are mixed. (See JI -- 20480,)

We think the proposed changes for expediting further development of the Newsletter are good ones. Unless there is some nuance of the system not obvious at this time, the idea of using one copy for both on-line and off-line distribution seems a sound one, and putting the Newsletter in the HELP directory would seem to have advantages both to the NIC and to MITRE.

But we disagree with Jean's statement that the "promulgation of policy for the Newsletter is the function of the MITRE Corporation"; and we don't understand the statement that "policy will be developed as a cooperative venture under its [MITRE's] direction". Cooperative how and among whom? Why under MITRE's direction? We were not aware that ARPA had charged MITRE with the responsibility for directing and publishing the Newsletter.

We think editorial policy should be initially developed and occasionally reviewed through the collaboration of ARPA, NIC, MITRE, RML, and other interested parties.

There are of course many factors that must be considered in order to establish a Newsletter policy, among them being:

purpose and scope of content length of articles and size of an issue frequency of publication on-line/off-line availability of the Newsletter procedures and responsibilities for reviewing and editing contents before publication

Therefore, we view Jean's memorandum as a first draft of an editorial policy, not as a final decree. We are a little surprised that Jean would issue his document without prior discussion.

The NIC is not interested in controlling the ARPANET Newsletter; we recognize, and we hope others do as well, that it wouldn't have been started when it was, if it weren't for Jean Iseli's irduous efforts.

But we ARE interested in seeing that the NIC and NIC-like functions (of which the Newsletter is one) receive the attention, collaboration, and coordination they deserve.

We have invested considerable effort in helping make the Newsletter go, and have invested scarce dollars for publication and distribution. We view the Newsletter as important to the ARPANET community, and want to see it prosper. But we feel strongly that it can only do so as a healthy collaborative effort. Reply to NIC# 20480: ARPANET Newsletter Revisions

1

1. 10 M

(J20600) 28-NOV-73 11:19; Title: Author(s): Michael D. Kudlick/MDK; Distribution: /JBN JCN DCE DHC JSP SDC2 JBP MEJ MDK RWW MAP SSP JI; Sub-Collections: SRI-ARC; Clerk: MDK; Origin: <KUDLICK>J1.NLS;2, 28-NOV-73 11:13 MDK;

20600 Distribution

Jeanne B. North, James C. Norton, Douglas C. Engelbart, David H. Crocker, John S. Perry, Steve D. Crocker, Jonathan B. Postel, Mil E. Jernigan, Michael D. Kudlick, Richard W. Watson, Michael A. Padlipsky, Susan S. Poh, Jean Iseli,

1