

Text editing commands

If the "Insert" command had the same option of typing it or bugging it that the "Replace". command has, the "Copy" command would be unnecessary and the operation would be simpler and more instinctive.

1

Then, in place of "Copy" a much more useful command would be Combined Move and Replace.

2

KIRK 13-NOV-72 14:43 12729

Text editing commands

(J12729) 13-NOV-72 14:43; Title: Author(s): Kelley, Kirk E./KIRK;
Distribution: Irby, Charles H./chi ; Sub-Collections: SFI-ARC; Clerk:
KIRK;
Origin: <KELLEY>COMMAND.NLS;15, 11-NOV-72 16:28 KIRK ;

Notice of New Folklore

The latest version of NLS FOLKLORE is now available. There are several important changes documented there. See (Journal, 12354, 1).

1

Notice of New Folklore

(J12730) 20-OCT-72 16:54; Title: Author(s): Stanford Research Institute/ESRI-ARC; Distribution: Beaman, Kathy, King, David J., Moody, C. Jane, Lemaro, Maria E., Shiffrin, James H., Pitkin, Sue, Fitzsimmons, Jerry, Hicks, Gregory P., Maxey, Gloria Jean, Peeler, Roberta J., Baxter, Faye, Fields, Craig, Benedict, James G., McCauley, Ermalee R., Merry, Diana L., Iwamoto, Margaret, Larson, Dee, Doane, Robert E., Odom, Dan, Shoub, Heather M., Kerr, Ann U., Monroe, Brenda, Beals, Eric R., Reynolds, Dorothy A., North, Jeanne B., Cutler, Pam J. Klotz, Barnett, Barbara, Forman, Ernest H., Page, Cindy, Golding, Stan, Chipman, Steve G., Barden, John P., Ginsberg, Martha A., Reussow, Bradley A., Watkins, Shirley W., Connelly, Linda M., Troxel, Janet W., Rosewall, Connie D., Webster, Linda M., Coley, Anita L., Mostrom, Carol J./NSAG; Sub-Collections: SRI-ARC NSAG; Clerk: MFA;

Some Design Issues for the Identsystem Needing Solution

Some Present Issues for the Identification System

1

The Identification System is a critical part of the DSS and is an important database for the NIC (the identfile is the basis for the NIC directory), therefore its future requires an adequate solution to a number of problems known to me at this point.

1a

SIZE: The identfile is likely to grow to be several times as large as at present. This is inevitable both as the network grows and use of NIC grows and due to special uses such as by the ACM AI Special Interest Group. We need to assume a file with a few thousand entries is going to exist.

1b

NATIONWIDE UNIQUE IDENTIS* Now that Tenex has an integrated Sendmessage facility among the Tenex's, and the network is coming alive as an integrated system people are talking about integrating all the Sendmessage type facilities and using our Identsystem as the standard place to get an Ident. The question is are peoples initials what we want or do we want to consider some other scheme?

1c

PROTECTION FEATURES: In the original design certain fields in Ident records were not to be changed except by the people themselves, group coordinators etc. These features still seem important to me but have never been implemented to the best of my knowledge.

1d

OBSOLETE IDENTIS: The present Identfile contains Idents for obsolete groups and inactive people, This raises the whole question of the procedures clerical and otherwise for recognizing and handling obsolete Idents.

1e

NOVICEMODE: Except for a few people here at ARC most people will only very infrequently come in contact with the Ident system and therefore it seems to me that it should be so clear in its user interaction and what is expected at any point that it is essentially impossible to get lost once you get there and easy to recover from mistakes, easy to get help etc. The present system does not meet these criteria as entry into the Identsystem for the inexperienced usually means doom.

1f

RWW 13-NOV-72 15:24 12731

Some Design Issues for the Identsystem Needing Solution

(J12731) 13-NOV-72 15:24; Title: Author(s): Watson, Richard W./RWW
; Distribution: Nerton, James C., Hopper, J. D., Irby, Charles H.,
Auerbach, Marilyn F., Row, Barbara E., North, Jeanne B., White, James E.
(Jim), Feinler, Elizabeth J. (Jake), Van Nouhuys, Dirk H., Rech, Paul,
Kudlick, Michael D., Engelbart, Douglas C., Vallee, Jacques F./jcn jdh
chi mfa ber jbn jew jake dvn pr mdk dce jfv ;
Sub-Collections: SRI-ARC NIC ; Clerk: RWW ;

Transmittal to Stan Cohen

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

NIC 12739
17-NOV-72

TRANSMITTAL TO: Stan Cohen
Argonne National Laboratory
9700 S. Cass Avenue
Argonne, Ill. 60439

FROM: Susan Lee (SRI-ARC)
Station Agent

At your request I am enclosing the following document:

NIC 12537 Speakeasy Via the ARPA Network

1

2

3

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5

6

6a

SRL 28-NOV-72 11:31 12739

Transmittal to Stan Cohen

(J12739) 28-NOV-72 11:31; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;11, 28-NOV-72 11:29 LLL ;

Transmittal to Rayner Rosich

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

NIC 12740
17-NOV-72

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

FROM: Susan Lee (SRI-ARC)
Station Agent

At your request I am enclosing the following document:

NIC 8123 The ALOHA System (Advanced Forms of Computer -
Communication Networks)

You will have to order NIC 6854 from Rand and NIC 6531 from Mitre Corp. as we do not have copies of these documents. If this is a problem for you, let me know and I'll order them for you.

SRL 28-NOV-72 11:38 12740

Transmittal to Rayner Rosich

(J12740) 28-NOV-72 11:38; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;12, 28-NOV-72 11:35 LLL ;

Transmittal to All INWG Group Members

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

NIC 12743
21-NOV-72

1

TRANSMITTAL TO: All INWG Group Members

2

3

FROM: Susan Lee (SRI-ARC)
Station Agent

4

At the request of Vint Cerf, I am enclosing the following
documents as background information regarding the ARPA Network:

5

6

NIC 9926 A Proposed Experiment with a Message Switching
Protocol

6a

NIC 10510 Function-oriented Protocols for the ARPA Computer
Network

6b

NIC 11626 Improvements in the Design and Performance of the
ARPA Network.

6c

You will also soon be receiving a copy of the Current Network
Protocols which will provide additional background information.

7

encl: NIC 9926, 10510, 11626

8

SRL 28-NOV-72 11:25 12743

Transmittal to All INWG Group Members

(J12743) 28-NOV-72 11:25; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;10, 28-NOV-72 11:08 LLL ;

Transmittal to Shirley Watkins (NBS)

Transmittal to Shirley Watkins (NBS)

NIC 12745

Susan Lee (SRI-ARC)
Station Agent

1

Enclosed is the following document which you requested:

2

3

NIC 8743

3a

SRL 28-NOV-72 11:17 12745

Transmittal to Shirley Watkins (NBS)

(J12745) 28-NOV-72 11:17; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>STATRANS.NLS;2, 28-NOV-72 11:14 LLL ;

Transmittal to Monique Somia

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

NIC 12746
21-NOV-72

1

TRANSMITTAL TO: Monique Somia
Chef de Projet
A la Compagnie IBM Service Developpement
Scientifique
20 Au Gambetta
92 Courbevoie
France

2

FROM: Susan Lee (SRI-ARC)
Station Agent

3

4

At the request of Dick Watson (SRI), I am enclosing the following documents:

5

6

Resource Sharing Computer Networks

6a

The ARPA Network

6b

Enclosures (2)

7

SRL 28-NOV-72 11:10 12746

Transmittal to Monique Somia

(J12746) 28-NOV-72 11:10; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;10, 28-NOV-72 11:08 LLL ;

Transmittal to Vint Cerf

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

NIC 12747
 21-NOV-72

TRANSMITTAL TO: Vint Cerf
 Stanford University
 Electronics Research Lab
 Room 414
 Stanford, CA 94305

FROM: Susan Lee (SRI-ARC)
 Station Agent

At the request of Dave Walden, I am enclosing the following documents:

NIC 11283	ASS Note 1	6a
11284	ASS Note 2	6b
11285	ASS Note 3	6c
11286	ASS Note 4	6d
11287	ASS Note 5	6e
11288	ASS Note 6	6f
11289	ASS Note 7	6g
11290	ALOHA Packet System with and without Slots and Capture	6h
11291	Optimal Retransmission Delay for ALOHA System	6i
11292	ASS Note 10 - Some Design Issues	6j
11293	A Brief Simulation of the Dynamics of an ALOHA System with Slots	6k
11294	Analytical Results for the ARPANET Satellite System Model Including the Effects of the Retransmission Delay Distribution	6l
11295	ASS Note 13 - Obsolete	6m
11296	ASS Note 14 - Obsolete	6n
11616	Satellite Channel Simulation	6o
11624	Steady-State Analysis of a Slotted and Controlled ALOHA System with Blocking	6p
11862	Approximations in the Infinite Population Model of the ARPANET Satellite System	6q
11865	Random ALOHA with Slots - Excess Capacity	6r

Transmittal to Vint Cerf

11866	Random ALOHA with Slots - Simulation	6s
11867	Reservation Systems	6t
11881	A System for Broadcast Communication; BBN ALOHA	6u
12166	Effects of Retransmission Delay on the Degradation of an ALOHA Channel	6v
12175	APRANET Satellite System Group Distribution List, 25-OCT-72	6w
12534	Procedures for Distributing ASS Notes	6x

Your name has also been placed on the ASS Note distribution list
and you will receive all ASS Notes published in the future.

7

SRL 28-NOV-72 11:03 12747

Transmittal to Vint Cerf

(J12747) 28-NOV-72 11:03; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;9, 28-NOV-72 11:01 LLL ;

Transmittal to Richard Binder

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

NIC 12748
22-NOV-72

1

TRANSMITTAL TO: Richard Binder
University of Hawaii
THE ALOHA SYSTEM
2540 Dole Street
Honolulu, Hawaii 96822

2

3

FROM: Susan Lee (SRI-ARC)
Station Agent

4

5

6

With the approval of Dave Walden, BBN, your name has been added to the ARPANET Satellite System Group Distribution List. I am enclosing the ASS Notes which have been issued to date. You will receive all new ASS Notes as they are distributed.

7

8

c: Dave Walden

9

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encl: NIC 11283, 11284, 11285, 11286, 11287, 11288, 11289, 11290, 11281, 11292, 11293, 11294, 11616, 11624, 11862, 11865, 11866, 11867, 11881, 12166, 12175, 12534

11

NICSTA 28-NOV-72 10:19 12748

Transmittal to Richard Binder

(J12748) 28-NOV-72 10:19; Title: Author(s): North, Jeanne B./NICSTA;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: NICSTA; Clerk:
LLL;
Origin: <LANE>TRANSMITTAL.NLS;8, 28-NOV-72 10:16 LLL ;

Transmittal to Dr. Joseph W. Rigney

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

NIC 12749
22-NOV-72

1

TRANSMITTAL TO: Dr. Joseph W. Rigney
University of Southern California
Behavioral Technology Laboratories
University Park
Los Angeles, California 90007

2

3

FROM: Susan Lee (SRI-ARC)
Station Agent

4

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6

With the approval 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 an you will
receive future ones as they are published.

7

8

c: T. O'Sullivan

9

10

encl: NIC 9343
9608
9875
9876
9981

11

SRL 27-NOV-72 16:39 12749

Transmittal to Dr. Joseph W. Rigney

(J12749) 27-NOV-72 16:39; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;7, 27-NOV-72 16:38 LLL ;

Transmittal to Lyle B. Smith

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

NIC 12750
27-NOV-72

1

TRANSMITTAL TO: Lyle B. Smith
University of Colorado
Computing Center
Boulder, Colorado 80302

2

3

FROM: Susan Lee (SRI-ARC)
Station Agent

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6

At your request I am sending copies of the following documents:

7

8

NIC 11359 Some Experiences in Implementing Network Graphics
Protocol Level 0

8a

8b

NIC 9929 Level 0 Graphic Input Protocol

8c

NIC 8302 Graphics Protocol - Level 0 Only

8d

At present, distribution of our catalogs and indexes is
restricted. I hope you will find the enclosed helpful
for the present.

9

10

SRL 27-NOV-72 16:32 12750

Transmittal to Lyle B. Smith

(J12750) 27-NOV-72 16:32; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;6, 27-NOV-72 16:29 LLL ;

Transmittal to Reed Mitchell

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

NIC 12751
27-NOV-72

1

TRANSMITTAL TO: Reed Mitchell
Colorado State University
University Computer Center
Fort Collins, Colorado 80521

2

3

FROM: Susan Lee (SRI-ARC)
Station Agent

4

5

6

At your request I am sending copies of the following functional documents:

7

8

- NIC 5150 Current Directory of Network Participants 16-OCT-72
- NIC 7590 Network Information Center User Guide 15-NOV-72
- NIC 5145 Current Catalog of the NIC Collection 1-AUG-72

8a

8b

8c

8d

I will be sending you copies of NIC 6740 and NIC 7104 within the next few weeks as they are available.

9

10

SRL 27-NOV-72 16:25 12751

Transmittal to Reed Mitchell

(J12751) 27-NOV-72 16:25; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;5, 27-NOV-72 16:23 LLL ;

Transmittal to Cecil C. Reames

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

NIC 12752
27-NOV-72

TRANSMITTAL TO: Cecil C. Reames
303 Jones Tower
101 Curl Drive
Ohio State University
Columbus, Ohio 43210

FROM: Susan Lee (SRI-ARC)
Station Agent

At your request we are sending copies of a few of the basic ARPA papers. At present, distribution of our catalogs and indexed is restricted. I hope you will find the enclosed helpful for the present.

encl: The ARPA Network NIC 12324
The ARPA Network NIC 7750

SRL 27-NOV-72 14:19 12752

Transmittal to Cecil C. Reames

(J12752) 27-NOV-72 14:19; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;3, 27-NOV-72 14:11 LLL ;

Transmittal to Hellmut Golde

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

NIC 12753
27-NOV-72

1

TRANSMITTAL TO: Hellmut Golde
Computer Science Group
University of Washington
Seattle, Washington 98195

2

3

FROM: Susan Lee, SRI-ARC
Station Agent

4

5

At your request I am enclosing copies of the following documents:

6

7

NIC 11681 Resource Sharing Computer Networks

7a

NIC 12324 The ARPA Network

7b

I checked on the possibility of your ordering these booklets for a class. If the quantity you needed was small (under twenty-five) we would probably be able to furnish these ourselves. If it were larger, we would be unable to supply them. At present, you would not be able to obtain these anywhere else. If we can be of any help in this matter be sure and contact us in advance and we'll see that you get the booklets.

8

9

SRL 27-NOV-72 14:03 12753

Transmittal to Hellmut Golde

(J12753) 27-NOV-72 14:03; Title: Author(s): Lee, Susan E./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;2, 27-NOV-72 13:54 LLL ;

Transmittal to Joseph B. Reid

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

NIC 12754
27-NOV-72

1

TRANSMITTAL TO: Joseph B. Coordonnateur, des programmes aux
communications
2875 Boul. Laurier
Ste-Foy, Quebec 10

2

3

FROM: Susan Lee (SRI-ARC)
Station Agent

4

5

6

At the request of Jeanne North, I am enclosing the following
documents:

7

8

NIC 3537 A Study of Computer Network Design Parameters

8a

8b

NIC 11681 Resource Sharing Computer Networks

8c

NIC 12324 The ARPA Network

8d

SRL 27-NOV-72 16:19 12754

Transmittal to Joseph B. Reid

(J12754) 27-NOV-72 16:19; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;4, 27-NOV-72 16:17 LLL ;

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

NIC 12756
28-NOV-72

1

2

TRANSMITTAL TO: Ted Strollo
Bolt Beranek and Newman Inc.
50 Moulton Street
Cambridge, Mass. 02138

3

4

FROM: Susan Lee (SRI-ARC)
Station Agent

5

At your request I am enclosing a copy of the following document:

6

7

NIC 10703 DNLS PRELIMINARY REFERENCE GUIDE

7a

SRL 28-NOV-72 14:15 12756

(J12756) 28-NOV-72 14:15; Author(s): Lee, Susan R./SRL; Distribution:
North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA; Clerk: LLL;
Origin: <LANE>TRANSMITTAL.NLS;13, 28-NOV-72 13:59 LLL ;

Transmittal to Nancy J. Neigus (BBN)

Transmittal to Station Agent - Nancy J. Neigus (BBN)
12757

NIC

Susan Lee (SRI-ARC
Station Agent
Network Information Center

1

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

2

3

NIC 10703 DNLS PRELIMINARY REFERENCE GUIDE

3a

3b

4

SRL 28-NOV-72 13:11 12757

Transmittal to Nancy J. Neigus (BBN)

(J12757) 28-NOV-72 13:11; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>STATRANS.NLS;3, 28-NOV-72 13:06 LLL ;

Transmittal to Buz Owen (SAAC-TIP)

Transmittal to Buz Owen - SAAC-TIP

NIC 12758
28-NOV-72

Susan Lee (SRI-ARC)
Station Agent

1

2

3

The following document is being sent to you as an update to NIC 10703, DNLS Preliminary Reference Guide, Section 4, Editing and Composition.

4

NIC 10707 Section 4. EDITING AND COMPOSITION

4a

Please discard your old Section 4.

4b

5

6

SRL 28-NOV-72 13:43 12758

Transmittal to Buz Owen (SAAC-TIP)

(J12758) 28-NOV-72 13:43; Title: Author(s): Lee, Susan R./SRL;
Distribution: North, Jeanne B./NICSTA; Sub-Collections: SRI-ARC NICSTA;
Clerk: LLL;
Origin: <LANE>STATRANS.NLS;6, 28-NOV-72 13:35 LLL ;

Transmittal to R. Fink (LBL)

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

NIC 12525
9-NOV-72

1

Ralph Alter
Packet Communications, Inc.
176 2nd Ave.
Waltham, Mass. 02154

2

Dear Mr. Alter:

3

We have received notice that your office is now an Associate of the ARPA Network. As such, you will be receiving documents on distribution from the Network Information Center (NIC).

4

We are sending you a core collection of existing documents, including the following Functional Documents for which we will provide updates:

5

NIC 5145 Current Catalog of the NIC Collection
1-AUG-72

5a

5150 Current Directory of Network Participants
16-OCT-72

5b

7590 Network Information Center User Guide
19-JUL-72

5c

The Network Resource Notebook (NIC 6740) and the Current Network Protocols (NIC 7104) are in the process of being revised. A copy will be sent to you within a few weeks.

6

We are also sending you a number of documents which you may need as background (see 1st below).

7

We will be glad to supply copies of particular documents indicated by a back arrow in the Catalog Listings, and will loan or direct you to sources of other documents in the Listings.

8

Susan Lee, our Station Agent, accomplishes NIC distribution, and has now put you on distribution for all documents sent to Site Liaisons.

9

Jeanne North,
Information and Station
Agent Coordinator

10

c: S. Crocker (ARPA)

Transmittal to R. Fink (LBL)

encl: The ARPA Network
Resource Sharing Computer Networks
NIC 7542
7750
11924
10507

11

DVN 15-NOV-72 14:24 12765

RED Contract Status Report for October, Project 1894

Duane, this report includes a table with Cumulative Man Hours Expended During each Report Period from 5/6/72 to 10/28/72.

RED Contract Status Report for October, Project 1894

Stanford Research Institute
 Augmentation Research Center
 333 Ravenswood Avenue
 Menlo Park, California 94025

Mr. Burns, RADC/PMA
 Department of the Air Force
 Headquarters Rome Air Development Center (AFSC)
 Griffiss Air Force Base, New York 13440

Dear Mr. Burns:

This responds to block 10 of DD Form 1664 with respect to contract F30602-72-C-0333 (SRI #1894).

1

The table below shows the man hours expended on the subject contract since its inception.

2

Cumulative to

5/6

Supervisor	40
Senior Professional	47
Professional	513
Technical	32
Other	82

	714

2a

Cumulative to

5/27

Supervisor	40
Senior Professional	159
Professional	662
Technical	32
Other	92

	985

Man Hours Expended During Report Period

Supervisor	0
Senior Professional	112
Professional	149
Technical	0
Other	10

2b

R&D Contract Status Report for October, Project 1894

Cumulative to		Man Hours Expended During
7/1		Report Period
Supervisor	40	0
Senior Professional	237	78
Professional	662	0
Technical	32	0
Other	92	0
<hr/>		
	1063	

2c

Cumulative to		Man Hours Expended During
7/29		Report Period
Supervisor	40	0
Senior Professional	335	98
Professional	687	25
Technical	32	0
Other	92	0
<hr/>		
	1186	

2d

Cumulative to		Man Hours Expended During
9/2		Report Period
Supervisor	40	0
Senior Professional	421	86
Professional	694	7
Technical	32	0
Other	92	0
<hr/>		
	1279	

2e

Cumulative to		Man Hours Expended During
9/30		Report Period
Supervisor	40	0
Senior Professional	487	66
Professional	703	9
Technical	32	0
Other	92	0
<hr/>		
	1354	

2f

RSD Contract Status Report for October, Project 1894

Cumulative to		Man Hours Expended During Report Period
10/28		
Supervisor	40	0
Senior Professional	581	94
Professional	900	197
Technical	32	0
Other	92	0

	1645	

2g

Please note that the first three periods of this contract have not hitherto been reported because our understanding of this contract was that such monthly letters were not a requirement and we only began to submit them in August.

2h

We estimate that the percentage of technical completion at the end of October was 65 per cent.

3

During October we continued to cooperate with Rome in development of software which allows Rome to use our system in the display mode over the ARPA Network. In October for the first time we operated with "shared screens" which allows someone at ARC and someone at Rome to see and manipulate the same file at the same time at their respective locations.

4

Work is continuing at ARC on the calculator package that Rome has requested.

5

We are still awaiting specifications for a Report Generator.

6

During October ARC gave a demonstration of Network operation at the International Conference on Computer Communication in Washington. The Demonstration involved collaboration with Rome.

7

During the Conference personnel from Rome attending the Conference consulted with ARC personnel on purchasing terminals appropriate for the NLS system and on other matters. The ARPA Network functioned on several occasions as a communication medium between ARC and Rome personnel in Washington and personnel back at Rome.

7a

Following the Conference, Douglas Engelbart, Dirk van Nouhuys, and Jim Norton of the ARC staff spent a day at Rome.

8

Dirk van Nouhuys discussed progress of this contract with Duane Stone and others at Rome.

8a

R&D Contract Status Report for October, Project 1894

Dr. Engelbart made a presentation in which he described the history and current status of our research, the events and implications of the ICCC meeting and plans for making more NLS service available to Rome and others through the establishment of NLS on a utility.

8b

Sincerely,

**Dirk van Nouhuys
Research Analyst
Augmentation Research Center**

ber

DVN 15-NOV-72 14:24 12765

RED Contract Status Report for October, Project 1894

(J12765) 15-NOV-72 14:24; Title: Author(s): Van Nouhuys, Dirk
H./DVN; Distribution: Stone, Duane L./DLS; Sub-Collections: SRI-ARC;
Clerk: BER;
Origin: <ROW>REDCONTRACT.NLS;5, 15-NOV-72 14:00 BER ;

Test of "Quotes" in Titles

this is a test of quotation marks in a title. the title is : Test
of "Quotes" in Titles

1

AAM 14-NOV-72 12:22 12766

Test of "Quotes" in Titles

(J12766) 14-NOV-72 12:22; Title: Author(s): McKenzie, Alex A./AAM;
Distribution: Levin, Joel B./JBL; Sub-Collections: NIC; Clerk: AAM;

Please do what you can to get me an SRI phone as soon as possible. I've tried to do without one, but it just isn't working out. Thanks.

1

DSK 14-NOV-72 10:19 12767

(J12767) 14-NOV-72 10:19; Author(s): Kaye, Diane S./DSK ;
Distribution: Norton, James C., Irby, Charles H., Van Nouhuys, Dirk
H./jcn chi dvn ; Sub-Collections: SRI-ARC; Clerk: DSK;

Is it really true that "flag" is a reserved word in L10? If so, can anything be done to fix it? Also, are "macros" documented anywhere?--Thanks.

1

DSK 14-NOV-72 10:26 12768

(J12768) 14-NOV-72 10:26; Author(s): Kaye, Diane S./DSK ;
Distribution: Andrews, Don I./dia ; Sub-Collections: SRI-ARC; Clerk:
DSK;

I would recommend that if we are going to limit the number of local users to 15, we remove the Refuse Autologout command, because leaving a terminal under such circumstances for more than 5-10 min. is unfair to those waiting.

1

DSK 14-NOV-72 10:32 12769

(J12769) 14-NOV-72 10:32; Author(s): Kaye, Diane S./DSK ;
Distribution: Rech, Paul/pr ; Sub-Collections: SRI-ARC; Clerk: DSK;

IDENTSYSTEM Problems -- Reply to (12731,)

This is a reply to Dick Watson's journal item (12731,) about the IDENT System.

1

As the main user of the IDENT System, I would like to see less feedback. It's annoying and a waste of time to have the same message print out after each new Ident is entered. Yesterday between 8 am and 10:30 am I was able to modify two IDENTs, and enter four new people at new affiliations. After 10:30 I didn't even try entering anyone. Maybe less feedback would speed things up? However, I can see where the IDENT System would be very confusing to someone who hadn't used it before. I also agree with Dick; there should not be just one person at the NIC entering all the IDENTs for the whole world.

2

I hope I never see the IDENTFILE grow to several times its present size; it would probably not work at all. Maybe if there were some way we could delete obsolete IDENTs that would help.

3

I think the main problem with the IDENTFILE is that we are trying to make it all things for all people. It is the vehicle by which people are recognized by NLS. If only NLS users were in the IDENTFILE, it would be only half its present size I imagine. Then we also use it to make the Directory of Network Participants and put everyone (EVERYONE) that we know (have heard) about on the NET, even people who don't and probably never will use NLS.

4

As for a NOVICEMODE, I don't know of a single time when an entry made by someone on the NET has not needed to be corrected in some way or at least checked by someone at the NIC in order to make it consistent (again for the Directory...) with the other IDENTs. Also, I don't think anyone in his right mind would put in more than one IDENT; the system is still very unreliable and so S-L-O-W. We would have to make it easier and much faster for it to be attractive enough to be used by the Net users.

5

BER 14-NOV-72 10:31 12770

IDENTSYSTEM Problems -- Reply to (12731,)

(J12770) 14-NOV-72 10:31; Title: Author(s): Row, Barbara E./BER;
Distribution: Watson, Richard W., Irby, Charles H., North, Jeanne B.,
White, James E. (Jim), Feinler, Elizabeth J. (Jake), Engelbart, Douglas
C., Auerbach, Marilyn F., Norton, James C./RWW CHI JBN JEW JAKE DCE MFA
JCN; Sub-Collections: SRI-ARC; Clerk: BER;
Origin: <ROW>IDENTSYSTEM.NLS;1, 14-NOV-72 10:22 BER ;

Money for Christmas Party

To: Parsley

1

From: Barbara

2

Subject: Money for Christmas Party

3

The SRI Staff Activities Committee, through SRI management, makes available to each lab or center in the Institute funds for parties at Christmas. We can request a dollar for each staff member, whether full or part time, to be used as we wish. The request must be signed by the lab or center director (i.e., Doug Engelbart), and sent to Alan Burt, A213, who is the treasurer for SAC.

4

Dirk suggested Parsley should handle this.

5

BER 14-NOV-72 8:19 12771

Money for Christmas Party

(J12771) 14-NOV-72 8:19; Title: Author(s): Row, Barbara E./BER;
Distribution: Auerbach, Marilyn F., Van Nouhuys, Dirk H., Hopper, J. D.,
Wallace, Donald C. (Smokey), Victor, Kenneth E. (Ken), Lehtman, Harvey
G., Kelley, Kirk E., Lane, Linda L., Meyer, N. Dean, Jernigan, Mil E.,
Rech, Paul, Engelbart, Douglas C./PARSLEY DCE; Sub-Collections: SRI-ARC
PARSLEY; Clerk: BER;
Origin: <ROW>MONEY.NLS;1, 14-NOV-72 8:17 BER ;

Carriage Return May Now Be Redefined in "NLSControlCharacters" Branch

EOL (the character NLS receives when you type Carriage Return) may now be redefined in a user's "NLSControlCharacters" branch (see (journal,12237,) for a discussion of this branch). This will be particularly useful for people using line-at-a-time terminals and people who like Carriage Return as Command Accept but also want to input Carriage Returns by typing a single character.

For Line-at-a-time terminals the following will (I hope) prove useful:

(NLSControlCharacters)

EOL = NULL;

This will make typing Carriage Return (necessary to return the carriage) a no-op to NLS (a literal CR can still be entered by typing the literal escape character followed by CR.

If you wish to redefine CR to be some other character, use

(NLSControlCharacters)

EOL = <some other character>; ECHO = <some character>;

NOTE: If you wish to continue using CR as CA, but would like to enter a CR into the text by typing only one character, you must also include a CA = 370; ECHO = 370; definition following the EOL redefinition.

NOTE: At present we are letting TENEX echo literal input for NLS. Thus it is not possible to change some echoing. In particular, if you define some printing character as your CR, it will get echoed as that printing character although a CR (EOL) will be input into your text.

CHI 10-NOV-72 12:01 12772

Carriage Return May Now Be Redefined in "NLSSControlCharacters"
Branch

(J12772) 10-NOV-72 12:01; Title: Author(s): Irby, Charles H./CHI;
Distribution: For expanded distribution of this item, see master copy.;
Sub-Collections: NIC SRI-ARC TU; Clerk: CHI;

Comment on (Journal,12598,),Resource Notebook content and Format

Jake

I highly recommend, that the name delimiters be changed in the Resource Notebook file. Several people asked, "Why the parens?" and I could not justify it very easily. I recommend NULL for the left and ': for the right delimiters. Also, I would like to re-open the question of structure and indenting in the printout. I realize that this may mean changing the query program slightly and the data base a lot, but given the large amount of clerical work that has and will go into that file, I think we owe it to the clerical people involved to make it as easy as we can for them. -- Charles

1

CHI 13-NOV-72 23:48 12773

Comment on (Journal,12598,),Resource Notebook content and Format

(J12773) 13-NOV-72 23:48; Title: Author(s): Irby, Charles H./CHI;
Distribution: Feinler, Elizabeth J. (Jake)/JAKE; Sub-Collections:
SRI-ARC; Clerk: CHI;

Acknowledgement Re: (journal, 12599,)

Jake,

Thanks for your input concerning viewspecs and Output Quickprint. I personally am inclined to simplify such commands, but agree that specifying viewspecs (not to mention starting location) might be a good addition to that command. You are aware that you can specify viewspecs (using the mouse buttons) in DNLS for Output Quickprint, aren't you?

CHI 13-NOV-72 23:52 12774

Acknowledgement Re: (journal, 12599,)

(J12774) 13-NOV-72 23:52; Title: Author(s): Irby, Charles H./CHI;
Distribution: Feinler, Elizabeth J. (Jake)/JAKE; Sub-Collections:
SRI-ARC; Clerk: CHI;

Acknowledgement of (journal, 12731,1), Some Design Issues for the Ident System

Dick,

Re: SIZE, The current ident system has somethin on the order of 800 to 1000 idents and uses 14 out of 95 structure pages and 61 out of 370 data pages. Based on this, I estimate we can handle about 4000 to 5000 Idents without changing the current system (updates will get slower as the file gets larger, unless we adopt a new way of "proofing" new idents or changes to Idents).

Re: Protection features, I see no reason why these cannot be implemented.

Re: Obsolete Idents, Dave and I are talking about that now (and have been thinking about it for about a week).

Re: Novice Mode, I would appreciate your suggestions. I added quite a bit of that flavor the last go-round. If we add more, I think we will have to go to novice-expert distinction or we will drive BER mad.

Re: Nationwide Unique Idents, The current scheme seems fine to me, especially if people can choose their own Ident.

CHI 14-NOV-72 0:05 12775

Acknowledgement of (journal, 12731,1), Some Design Issues for the
Ident System

(J12775) 14-NOV-72 0:05; Title: Author(s): Irby, Charles H./CHI;
Distribution: Watson, Richard W., Hopper, J. D./RWW JDH;
Sub-Collections: SRI-ARC; Clerk: CHI;

DCE 14-NOV-72 17:46 12776

SRI-ARC Steering committee, 4 Oct 72 agenda items and discussion notes

SRI-ARC Steering committee, 4 Oct 72 agenda items and discussion notes

Prepared before the meeting:	1
Agenda-item candidates:	1a
SRI's Position, its perception, understanding, valuation, commitments, capability with respect to:	1a1
Me, with respect to such as applied creativity, depth and breadth of perception, etc. -- like how much can be gambled on issues that swing on nothing but my judgement?	1a1a
My goals	1a1b
My strategic framework	1a1c
SRI's possibilities for future activities as outgrowth of following these goals and strategies (scope, scale, social value, payoff to SRI, ...)	1a1d
What it takes to achieve these possibilities.	1a1e
SRI "Commitment":	1a2
Space, people	1a2a
SRI reputation	1a2b
Longer-term fiscal ventures	1a2c
Work out new modes of doing business	1a2d
Example: Value (need) for some sort of "position paper" that represents official SRI commitment, about a "program."	1a2e
Growth NP: Bottlenecks, opportunity, SRI position, DCE position	1a3
Early goals for OEM action	1a4
Contacts and agenda for Wash trip	1a5
NSF Net-seminar plans, EDUCOM role	1a6
Working topics:	1b

SRI-ARC Steering committee, 4 Oct 72 agenda items and discussion notes

SRI OEM (file ORGNP) -- Basic considerations for next stage (OEM/Architecture dichotomy, high-energy OEM operation, high need for review of all roles principles, operations, etc.)

1b1

SRI POSITION (file SRIPOS) --

1b2

PLANNING FRAMEWORK (file BCNOT) -- Evolving toward a thinkpiece to release to potential sponsors, etc.

1b3

SPECIFIC PROMOTIONAL PLAN (file BCPROP) -- --

1b4

Discussion notes (with Don Scheuch and Bart Cox):

2

I printed out copies of ORGNP and BCNOT for them to take with them. They both volunteered to study them.

2a

Considered briefly the difference between "looking forward" and "looking back" (i.e. doing what we are committed for now). These were terms that Bart used.

2b

Much time spent trying to formulate an expression of scope, with respect to prospects for our program, to the kind of energy and commitment needed from SRI at various stages (like now, to hit the re-org planning as hard as might indeed be needed), etc.

2c

I sketched pictures relating such as my goal structure, the market i

2c1

Discussed quite a bit about SRI's possibly producing a position statement. And also, about for instance its taking on a commitment to BC stuff it might be analogous to if SRI had done the formulating, promoting, etc. to establish NCAR, and taken the commitment to manage it under the direction of the consortium that helped establish the funding base.

2d

Bart and Don mention that The Environmental Protection Agency wants to have a center established for air-pollution study; SRI is bidding for the job, which would have something of the same flavor as what I was describing -- except that we declare intention seriously when there is yet to be found the sources of support.

2d1

Bart and I talked some after Don left. One topic was the opportunity and potential value in achieving more coordination between applied (or R&D) activities in ISL and ARC. Talked at

SRI-ARC Steering committee, 4 Oct 72 agenda items and discussion notes

some length about the difference between subscribing seriously to an evolutionary, whole-system approach and taking on jobs as they appear, with the approach not necessarily coordinated with year-after-year evolution and with the aim of acquiring whole-system experience.

2e

(Example used of the impact in the computer field of getting operating computer systems in use in the mid 50's, where the experience and relative-value orientation gained toward succeeding evolution was worth more than all (that I perceive) of the concurrent research into new and tricky componentry and techniques.)

2e1

Mentioned DPCS as a specific area in our domain tha seems very ripe for getting resources pooled and a long-term cooperative program going. Plan to talk about that at next meeting.

2e2

DCE 14-NOV-72 17:46 12776

SRI-ARC Steering committee, 4 Oct 72 agenda items and discussion
notes

(J12776) 14-NOV-72 17:46; Title: Author(s): Engelbart, Douglas
C./DCE ; Distribution: Scheuch, Don R., Cox, Bonnar, Brown, David R.,
Norton, James C., Watson, Richard W./drs bc drb jcn rww ;
Sub-Collections: SRI-ARC; Clerk: DCE ;

NEW JOURNAL COMMANDS

1

Submit Comment on Document (docaddress) comment 1a
1b

This sends out a message entitled: 1b1

COMMENT ON (document link): (original title) 1b1a

The comment goes out as a message to the author of the old document and to the original distribution. 1b2

Submit Acknowledgement of Document (docaddress) (optional message) 1c
1d

This sends out an optionally null message entitled: 1d1

ACKNOWLEDGEMENT OF (document link): (original title) 1d1a

It goes out only to the original author. 1d2

DOCADDRESS 1e
1f

BUG / 'N(umber) (lit/BUG) / digits / literal link / 'L(ink) literal link 1f1

BUG 1f2
1f3

The system checks 3 places to determine what sort of link to build 1f3a

origin statement = journal document, then link to the exact statement bugged, Use header information right there for distribution, etc. 1f3a1

1f3a2

statement bugged has name of format Jnnnnn and origin statement shows file named JRNLnnnnn, link to statement name. 1f3a3

1f3a3a

statement bugged or UP of statement bugged contains citation format of link (ident SP date/time SP number)	1f3a4
'N	1f4
bug a number string of digits optionally starting with 'j or type in a string of digits	1f4a
digits	1f4b 1f5
begin typing in the number without typing 'N	1f5a
'L or literal link	1f6 1f7
this is the actual link used by the system	1f7a
	1f7b
Except where noted, other files may have to be consulted for distribution, author and title as follows:	1f8 1g
If there is a Jnnnnn branch in tjcat, the information is there.	1g1 1g2
If not, it may be in jcat.	1g3
If the document was in jcat, but without the full information, it should be in <NORTON>JOU1S.	1g3a
If it was not in jcat at all, it should be in <TEJOURNAL>Jnnnn.NLS;	1g3b
If none of the above, the number given by the user was not legitimate.	1g4 1h
	2

(J12777) 14-NOV-72 16:29; Author(s): Kaye, Diane S./DSK;
Distribution: 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., Riet, Ed K. Van De, 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: DSK;
Origin: <KAYE>JOURNAL.NLS;2, 14-NOV-72 16:20 DSK ;

IDENTSYSTEM problems -- Reply to (12713,)

This is a reply to Dick Watson's journal item (12731,) about the IDENT System. 1

As the main user of the IDENT System, I would like to see less feedback. It's annoying and a waste of time to have the same message print out after each new Ident is entered. Yesterday between 8 am and 10:30 am I was able to modify two IDENTs, and enter four new people at new affiliations. After 10:30 I didn't even try entering anyone. Maybe less feedback would speed things up? However, I can see where the IDENT System would be very confusing to someone who hadn't used it before. I also agree with Dick; there should not be just one person at the NIC entering all the IDENTs for the whole world. 2

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BER 14-NOV-72 17:16 12778

IDENTSYSTEM problems -- Reply to (12713,)

(J12778) 14-NOV-72 17:16; Title: Author(s): Row, Barbara E./BER;
Distribution: Watson, Richard W., Irby, Charles H., North, Jeanne B.,
White, James E. (Jim), Feinler, Elizabeth J. (Jake), Engelbart, Douglas
C., Auerbach, Marilyn F., Norton, James C./RWW CHI JBN JEW JAKE DCE MFA
JCN; Sub-Collections: SRI-ARC; Clerk: EKM;
Origin: <ROW>IDENTSYSTEM.NLS;1, 14-NOV-72 10:22 BER ;

DCE 14-NOV-72 18:32 12779

An obscure bug in Jump Link sometimes doesn't recreate display

An obscure bug in Jump Link sometimes doesn't recreate display

NOTE: the Jump-Link matter discussed here is different from that of 11-OCT-72, (12127,).

1

Apparently if one does a Jump Link from text in one window, to put it in another window, when the target statement has already been put at the top of the target window by a Jump Link, the JL machinery is so smart that it doesn't re-do some of its work -- but there is a small detail overlooked. If the user had changed the VSPECS, the new JL action doesn't seem to know about it -- it thinks that the viewspecs are still set as specified by that last JL. If the new JL asked for the sam VSPEC as that lst one did, then the user won't get the new view until he makes a further action to cause recreation of the display. Apparently the last JL execution process changed the VSPECS but didn't do a Recreate Display.

2

DCE 14-NOV-72 18:32 12779

An obscure bug in Jump Link sometimes doesn't recreate display

(J12779) 14-NOV-72 18:32; Title: Author(s): Engelbart, Douglas
C./DCE ; Distribution: Irby, Charles H./chi ; Sub-Collections:
SRI-ARC; Clerk: DCE ;

Bugs in L10 Compiler in User Program Mode

Several bugs in the L10 compiler when accessed in the user program mode have come to my attention.

1

1. When a user program tries to access an NLS symbol of greater than six characters outside the program, it is said to be undefined. (L10 not passing truncated IDs to DDT for symbol table lookup?)

1a

2. When a user program has procedure calls as links (in angle brackets), the file name (in capital letters) is said to be undefined when it is, in fact, irrelevant. (Bill Paxton says that this is because the attribute which tells the symbol resolver to ignore an identifier is not being set when these UIDs are recognized.)

1b

3. The name "flag" is a global in the system (While this is not a bug, it is often inconvenient as it is an ID which is often used by novice programmers in their user programs and can lead to confusion when they discover it is multiply defined.)

1c

As keeper of compilers, I give these to you, Don.

2

HGL 14-NOV-72 10:37 12780

Bugs in L10 Compiler in User Program Mode

(J12780) 14-NOV-72 10:37; Title: Author(s): Lehtman, Harvey G./HGL;
Distribution: Irby, Charles H., Andrews, Don I., Paxton, William H.,
Dornbush, Charles F., Kaye, Diane S., Hopper, J. D./chi dia whp cfd
dsk jdh ; Sub-Collections: SRI-ARC; Clerk: HGL;

Dates of Document Preparation and Journalization Both Desired

Another desirable provision for journal headings is:

1

At the time of submission of a document, it should be possible to enter both the date of preparation of the document, and the date of its submission to the Journal, as part of the heading.

Example:

2

7 October 1972 12275
Journalized: 14 November 1972

3

JBN 14-NOV-72 9:03 12781

Dates of Document Preparation and Journalization Both Desired

(J12781) 14-NOV-72 9:03; Title: Author(s): North, Jeanne B./JBN;
Distribution: Irby, Charles H., Bass, Walt, Norton, James C., Watson,
Richard W./chi wlb jcn rww ; Sub-Collections: SRI-ARC; Clerk: JBN;
Origin: <NORTH>NEWJLHDTWO.NLS;1, 14-NOV-72 8:48 JBN ;

question on imp-imp line protocol

<UCLA-NMC>ALEX-QUESTION.NLS;1, 14-NOV-72 11:10 JBP ;

1

Hello alex. How is everything ? We have a visiting scholar here who is very interested in the arpa net. In going over the documents he noticed that in the discussion of the line protocol between IMPS it is not clear how re synchronization is achieved when the line goes bad after a message text has begun. it appears that if the final DLE ETX sequence is missed then the procedure does not return to search mode. this of course can not be the case but it is not stated what really happens. Reference BBN Report 1822 (4/72) pages f=12 to f=17.

1a

JBP 14-NOV-72 11:23 12782

question on imp-imp line protocol

(J12782) 14-NOV-72 11:23; Title: Author(s): Postel, Jonathan B./JBP;
Distribution: McKenzie, Alex A./AAM; Sub-Collections: NIC; Clerk: JBP;

Retraction of PARSLEY/ISAG recommendation

In reference to the Plans for Parsley Activities Thanksgiving week (LJOURNAL, 12608, 7b:w) and specifically the recommendation of Jake Feinler for ARC ISAG representative: we were laboring under the misconception that each group is entitled to a ISAG representative and that groups may select their ISAG representative. We have since been informed that this is not the case and so please ignore our previous statement about Jake replacing Don Limuti.

1

ISE has only a limited number of ISAG representatives, a number not equal to the total number of groups. Don Limuti is still our representative and is located in the J wing of the first floor of this building.

2

Retraction of PARSLEY/ISAG recommendation

(J12783) 14-NOV-72 10:44; Title: Author(s): Auerbach, Marilyn F./MFA
; Distribution: 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., Riet, Ed K. Van De, Van Nouhuys, Dirk H., Victor,
Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W.,
Andrews, Don I./sri-arc ; Sub-Collections: PODAC SRI-ARC; Clerk: MFA
;

I'm getting the hang of the journal system.

1

DGR 14-NOV-72 22:07 12784

(J12784) 14-NOV-72 22:07; Author(s): Ricart, D. Glenn/DGR;
Distribution: Laube, Sheldon J./SJL; Sub-Collections: NIC; Clerk: DGR;

Response to message...

Hey

I wanted to submit an acknowledgment of document 12768 but the command isn't in yet. I guess I have to brush up on the NLS-L10 user program game a bit -- too bad about FLAG. And all the documentation on MACROS I know about is in WSD's head. I don't remember seeing anything in the Journal about them, and indeed I have never used them and don't know how they work exactly... but I think it just substitutes a fixed string for a predefined identifier of some sort. (FLAG is not a reserved word really, but a predefined symbol - in NLSL10). See ya. Don

1

DIA 14-NOV-72 19:41 12785

Response to message...

(J12785) 14-NOV-72 19:41; Title: Author(s): Andrews, Don I./DIA;
Distribution: Kaye, Diane S./DSK; Sub-Collections: SRI-ARC; Clerk: DIA;

DIA 14-NOV-72 20:16 12786

More on NLS Call and Return Tracing

Describes the new one which uses ↑K and ↑L to turn the trace on and off.

More on NLS Call and Return Tracing

More on the NLS Call and Return tracing: addition to <LJOURNAL, 12387, 1:w)

Charles made a wonderful suggestion for the TRACER thingy, namely: have pseudo-interrupt characters turn the trace mechanism on and off.

This allows one to turn the trace on and off inside a command to find out what is happening without swimming through reams of paper.

I implemented his suggestion, using ↑K and ↑L to turn the thing on and off, respectively.

One compiles branches 1 and 2 of <ANDREWS,TRACER,> as before (called arm and disarm respectively).

Executing arm activates the control characters and executing disarm restores the world to normal.

Type ↑K anywhere to start tracing. Type ↑L to turn it off: Indeed, even inside a long substitute or something.

The ↑K and ↑L result in NO ECHO.

I use interrupt channels 24 and 25 (decimal).

Doing several ↑K ↑L traces result in as many TRACE.DATA files, i.e., ↑L closes the file.

Get it right ↑K turns it on, ↑L turns it off. Typing ↑L when it is turned off already, or typing ↑K when it is already on both result in a HALTF on the part of the user program -- which bombs you out.

Also avoid executing arm or disarm in the wrong sequence.

The TRACE.DATA files have the same format and are printed in the same manner.

More on NLS Call and Return Tracing

(J12786) 14-NOV-72 20:16; Title: Author(s): Andrews, Don I./DIA;
Distribution: Irby, Charles H., Lehtman, Harvey G., Kaye, Diane S.,
Bass, Walt, Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey),
Hopper, J. D., Deutsch, L. Peter/CHI HGL DSK WLB KEV DCW JDH LPD;
Sub-Collections: SRI-ARC; Clerk: DIA;
Origin: <ANDREWS>BLURB.NLS;3, 14-NOV-72 20:10 DIA ;

Action on DSK Telephone Request (see -- 12767,)

Barbara: Please order a telephone for Diane Kaye to be installed in her residence. Contact her for details of when and where. She will use it for programming work (compiling and loading new systems) she is performing evenings and weekends to take such loads off the system during the daytime hours. Thanks. Jim Norton 11/15/72

1

cc: DSK DVN

2

JCN 15-NOV-72 7:23 12787

Action on DSK Telephone Request (see -- 12767,)

(J12787) 15-NOV-72 7:23; Title: Author(s): Norton, James C./JCN ;
Distribution: Row, Barbara E., Van Nouhuys, Dirk H., Kaye, Diane S./BER
(for action) DVN DSK ; Sub-Collections: SRI-ARC; Clerk: JCN ;

DISCRETIONARY FUND PROPOSAL

This my first cut at a proposal for Lab Director's funds. I can provide more detail as required, but apparently there is a deadline and I would like to get this over to Gabe as soon as possible to get his reaction.

DLS 15-NOV-72 7:45 12788

DISCRETIONARY FUND PROPOSAL

EVALUATION OF COMPUTER AIDS

WITHIN OFFICE ENVIRONMENTS

15 NOV 72

Duane Stone

DLS 15-NOV-72 7:45 12788

DISCRETIONARY FUND PROPOSAL

ISIM X3857

DISCRETIONARY FUND PROPOSAL

PROPOSAL:

Purpose & Goals: The purpose of this task is to incorporate on-line computer aids into the daily office environment of a branch at RADC and to evaluate the effect this has on the performance of individuals, teams and organizations.

Potential: If this evaluation indicates that significant improvements in performance are gained through the application of on-line computer aids, these aids have application in any environment where the primary activity is the production, coordination and documentation of thought. Specific application areas include; Air Staff, Intelligence, R&D, SPOs, and Administration. It is expected that coordination and communication times will be reduced by at least an order of magnitude, that documentation will be prepared with significantly less manpower, and that the contents of the resulting documents will be of a higher caliber.

Related Programs: This work is dependent upon the ARPA project at Stanford Research Institute, "Network Information Center and Computer Augmentation System Development". This task will use the software developed by SRI, via the ARPANET, to conduct the evaluation.

The primary questions to be addressed during the evaluation in FY-74 are:

Can the SRI technology be introduced into an Air Force environment at all? Individuals may not be motivated to use the system. Training is required, procedures may have to be changed to take advantage of the technology.

If it can be used, what is its value? Does it increase efficiency of individuals and organizations? Is there an increase in their effectiveness? How much are efficiency and effectiveness increased?

What is the cost of the improvements and are they worth it?

The evaluation of a system as complex as AHI must be conducted over an extended period of time, an extended set of jobs, and across a representative sample of Air Force people to allow the results to be generalized to other environments. The evaluation at RADC will cover a two year period, and include engineers, secretaries, administrators, and managers at three levels in the chain of command. The evaluation will evolve slightly behind the actual implementation of the system within the ISI branch. Results on the effectiveness of the system in augmenting individuals and teams will be available at the end of FY-73, and organizational results at the end of FY-74.

DISCRETIONARY FUND PROPOSAL

Before any evaluation can take place there are a number of prerequisites which must be met. These are:

Terminals--Sufficient terminals must be made available to allow training on and use of the system when the individuals have the need/desire to do so.

Training--Individuals must have a chance to exercise the system to learn its command language to the point where it is second nature.

NLS service--The software/hardware facility at SRI must provide sufficient quantity and quality of service to support training and use of the system.

Status: All the efforts in this area are based on the Augmented Human Intellect (AHI) technology developed at Stanford Research Institute (SRI) under ARPA sponsorship over the past 10 years. RADC personnel have monitored this program for the past 5 years and are convinced that the feasibility of significant job performance improvement in an intellectual environment is indeed possible. SRI has developed the system through a "bootstrapping" process where the system's capabilities at any particular instance in time are used to further develop the system. The augmentation capabilities of the system have evolved through the individual, to the team, to the organization stage, and are now approaching the community stage via use by individuals and teams around the ARPANET.

The development activity during FY-72 was concentrated on acquiring the necessary physical plant for use and evaluation of the SRI AHI system. RADC is connected to the ARPANET via a standard H316 Terminal Interface Processor (TIP). Internal lines have been acquired to connect the terminals to the TIP. Twelve Execuport 300 teleprinters, three IMLAC PDS-1D crt display terminals, and four Termicette cassette recorders have been purchased. Nine engineers, a section chief, a secretary and an administrator have received varying amounts of training in the use of the system and the rest of the ISIM section are currently undergoing training. The initial specification of a baseline management system complete with SOPs, file design, and personnel role assignment has been completed. The research group at RADC has progressed to the point where they are doing the bulk of their daily work using the system; in fact, this writeup was prepared, coordinated and edited a number of times using the system.

DISCRETIONARY FUND PROPOSAL

The FY-73 activity will be concentrated on training the rest of the ISI branch (giving a total of 45 people using the system), procuring additional terminals and a medium speed line printer, and refining the baseline management system--to include interfacing it with MASIS. The activity in FY-74 will be concentrated on evaluating the efficiency and effectiveness of using the system. Out years will be concerned with developing and incorporating advanced management techniques such as DELPHI, resource allocation strategies, and advanced graphics capabilities. This activity will be significantly enhanced by the use of others' research work via the ARPANET.

Requests for funds from Project 5550 have been turned down. Project 5581 had agreed to provide the necessary funds, but it has since gone bankrupt. If the project is to continue, approximately \$90K funds are needed during FY-73 for terminals and access to SRI's facility. If these funds are provided it will allow an increase in the user population from the ISIM section to the ISI branch. We feel that this size population is vital to providing a meaningful evaluation. These funds would be used in the following manner:

Item	each	total
Forms Printer	5000	5000
Typewriter terminal	3500	3500
CRT terminal	5000	10000
Line Printer	15000	15000
Maint & Supplies for above		3000
NLS service		50000*

TOTAL		90000

*The \$50K for NLS service includes some programming services for form printer software and calculation software.

DISCRETIONARY FUND PROPOSAL

BACKGROUND:

We are evaluating the Augmented Human Intellect System developed over a period of ten years by the Stanford Research Institute (SRI). This prodigious undertaking is motivated by a fascinating technology and the desire to determine whether or not it can be implemented in a working environment. We noted the costs (over 10 million for development and hardware) and the fact that it appears to work well for the team that developed it. Realizing that those who created the system have a special motivation to use it, we decided that implementation in our own offices would provide a more objective test bed. Thus, certain organizational units in the Information Sciences Division of RADC are accessing the computer at SRI through the ARPA Network, and using it in the daily performance of their jobs, while performance comparisons and psychometric tests are run.

Dr. Douglas Engelbart, the originator of the system, has stated that the purpose was to "...increase the capability of man to approach a complex problem situation, to gain comprehension to suit his particular needs, and to derive solutions to problems." This intention to provide an extension to man's intellect by utilizing a set of powerful computer based tools was gradually broadened to provide an extension to a group's capability and then to that of an organizational structure. Very briefly, the software now has the capability to do almost anything with written information that can be done. This does not include question-answering or other systems that have deductive logic algorithms. It does enable persons to accomplish their entire job through the system where that job involves language based activities. For example, the creation, composition, editing, storing, structuring, communication and printing of information, from memos to publishable papers, can be done on-line.

The effects of this capability are threefold. (1) The individual is no longer limited to the rigidity of written information. Instead, he has an "information space" structured to his requirements through which he can "travel" as fast as he can think and type. (2) A team of users can also move with great ease through the information spaces of all team members, to consolidate, collaborate, and reach a higher level of consensus. (3) Consequently an organization can operate around a visible, dynamic body of information developed by the various levels in its hierarchy, and instantaneously share and communicate managerial as well as technical matters. The total result is to have a "living" corpus of ideas, thoughts, etc. which represents the ongoing work of an organization.

DISCRETIONARY FUND PROPOSAL

To determine whether these effects can be realized, we are studying what is happening as increasing numbers of our engineers, scientists and managers are trained. A variety of methods are being employed to compare the system to conventional ways of accomplishing business. The psychometric techniques include a specially designed, experimentally controlled attitude questionnaire, a content questionnaire, ratings of comparative quality, interviews in a case study format, and population profiles based on job and experience. The performance measurements include learning curve data, and comparative manhours and throughput time on specified tasks. The emphasis is on the people in the system rather than software and hardware performance, a somewhat unusual approach to computer technology.

At present, we have a user group of 20 persons including two levels of management and a comparable control group using conventional methods. We plan to double the population and to include one more level of management by the summer of 1973. We plan to add the Occupational Climate Index and the Activities Index developed by Stern of Syracuse University to the present evaluative techniques. There is a considerable amount of work to be done to provide the software and hardware support for such a large group, but we are gradually overcoming the current limitations. The promise, potential, and our experiences to date spur us on. The system could result in an intellectual community where the free flow of information is a reality.

DLS 15-NOV-72 7:45 12788

DISCRETIONARY FUND PROPOSAL

(J12788) 15-NOV-72 7:45; Title: Author(s): Stone, Duane L./DLS;
Distribution: Bucciero, Thomas J., McNamara, John L./tjb2 jlm ;
Sub-Collections: RADC; Clerk: DLS;
Origin: <STONE>PROPOSAL.NLS;3, 14-NOV-72 11:34 DLS ;

Answer on IMP-IMP line protocol

Hi Jon; Things are fine here (and I'm finally recovering from the ICC and the associated set of visits from people interested in the Net). With regard to your question about IMP-IMP line protocol:

1

The IMP knows the maximum possible length of a packet (69 16-bit words in the IMP-IMP case) and sets up buffer-pointers for the DMC channel to which the modem interface is connected accordingly. (The x16 DMC takes a "buffer begin" and a "buffer end" pointer.)

1a

If the modem interface hardware ever sees its buffer pointers "cross" (and it always looks) it generates an interrupt to the program which allows the program to notice the error in the location of the buffer pointer. At the same time, the modem interface resets ITSELF to "search" mode and starts looking for another "SYN" byte.

1b

Note that the buffer pointer is incremented when a word is deposited in the IMP's memory, so that the DLE-doubling does not affect the length of the packet by the time this "is-the-packet-too-long" check is made.

1c

AAM 15-NOV-72 11:49 12789

Answer on IMP-IMP line protocol

(J12789) 15-NOV-72 11:49; Title: Author(s): McKenzie, Alex A./AAM;
Distribution: Postel, Jonathan B./JBP; Sub-Collections: NIC; Clerk: AAM;

Test of "Quotes" in a Title

This is a test of quotation markes in a message title. The title
is: Test of "Quotes" in a Title

1

AAM 15-NOV-72 5:57 12790

Test of "Quotes" in a Title

(J12790) 15-NOV-72 5:57; Title: Author(s): McKenzie, Alex A./AAM;
Distribution: White, James E. (Jim)/JEW; Sub-Collections: NIC; Clerk:
AAM;