

Forms Questions

FORMS

DVN and EKM talked with DLS on the telephone Wednesday, June 13 and presented a number of questions about the Forms System. The questions and answers follow.

Dirk also suggested that EKM visit RADC to get a clearer picture of their office procedures and needs in the forms area. Dirk indicated that a visit could be helpful in planning for a future data management system.

DLS did not think a visit would be necessary but didn't object to strenuously.

q..Frequency count of forms

We need to estimate the load on the printer, the work load on personnel entering the forms descriptions, the volume of data to be kept online, the volume of data to be archived, how often online and archived material will be referenced, and many other things which will effect the usefulness of the Forms System.

A starting point for these estimates is a simple frequency count of the number of forms that are filled out per week and per year. It would also be helpfull to have some idea of the most heavily used forms for example a count by form of the 10 most often used.

a..They do not have the slightest idea idea of how many forms are filled out and do not think it is possible to find out. One of the things they would like from the forms system is a frequency count. DLS guessed that there are very roughly 500 form 77s generated a year.

q..Are there forms that require more than 1 person to complete? If so how many and are they in widely separated locations?

a..Form 77 requires 3 different people to complete the information.

Then 3 other people review and sign it.

Each form 77 would need to be available on line for from 1 to 3 months prior to archiving.

q..DLS plans to create the form descriptions himself. He hopes that, at 'some time in the future', there will be an administrative assistant responsible for this very important work.

Forms Questions

- a..Where will the responsibility for entering the form descriptions be placed? 11
- q..Where does the information come from to complete the forms? 12
- a..For many forms the information is gathered in bits and pieces, not necessarily in sequence, from files, talking with people, and from old examples of the same form. It may take many sessions before all the information is complete. 13
- q..Do we know which forms have to be kept on line and for how long? which forms should be archived? 14
- a..We know for some the forms. It varies from form to form. 15
- q..What are your expectations concerning capture, collation and retrieval of material in the forms? 16
- a..RADC is presently experimenting with 4 data management systems. The most seriously used seems to be IDS (Integrated Data System) which runs under GCO. 17
- DLS said that he does not believe that GCO has the proper interface to make it possible to use IDS over the network. 17a
- He seems to be interested in considering the possibility of expanding the forms systems to interface with a data management system. However, he realizes that this is a major project and is most anxious to get a simple forms system to aid them right now. 17b
- q..What other devices do you have which could be used to print forms other than the I/O Devices printer/terminal? 18
- a..It looks as though the I/O Devices printer will not be delivered. 19
- The manufacturer is now obtaining more than 50 % of the parts from Japan which is in conflict with the 'Buy American' rule of the GSO. 19a
- Therefore, DLS is thinking about looking at other printers. 19b
- He asked us about the Diablo print. This is just a printer and not a terminal but DLS seemed to think an interface could be built. Dirk said he would check this out. 19c
- They do have in use at RADC an IBM selectric that functions as a network terminal. Dirk has the specs for this. 19d

Forms Questions

DLS said he had seen an IBM typewriter (terminal ???) with a split platten and would check it out.

19e

DLS also mentioned a Lytton Business Systems printer/terminal.

19f

17206 Distribution

James C. Norton, Dirk H. Van Nouhuys, Richard W. Watson, Harvey G.
Lehtman,

Forms Questions

(J17206) 14-JUN-73 09:37; Title: Author(s): Elizabeth K.
Michael/EKM; Distribution: /JCN DVN RWW HGL; Sub-Collections: SRI-ARC;
Clerk: EKM;
Origin: <MICHAEL>QUESTIONS.NLS;3, 14-JUN-73 09:33 EKM ;

New Command Language Prompting for DNLS

Charles, Dick Watson wants the N/E Team to make detailed recommendations for the HELP system and the new command feedback.

1

These need to be tailored exactly to the new command language.

2

I need to coordinate with you on the feedback question. Certainly, this feedback needs to be defined separately for each command, even though there is a certain amount of consistency in the language now. It begins to look very similar to the "noise word" aspect.

3

I think my feedback suggestions should be made on an updated version of your document. (I did not write in the new corrections on my copy.)

4

Your recent suggestion for prompts in the arrow feedback line is the best I have heard and I would like to get it written up soon. Should we add such text to your document, and cut down on standard noise words in some cases? I need to talk to you about it soon, and I want to assist in the revision of your document.

5

17208 Distribution
Charles H. Irby,

New Command Language Prompting for DNLS

(J17208) 14-JUN-73 10:02; Title: Author(s): Diane S. Kaye/DSK;
Distribution: /CHI; Sub-Collections: SRI-ARC; Clerk: DSK;
Origin: <KAYE>WINDOW.NLS;3, 14-JUN-73 09:52 DSK ;

Reported TNLS bugs

Answering (17148,)

Reported TNLS bugs

Yes - I get it now - I learned something from your bugs Now we'll
see what can be done. Thanks for pesisting...Diane Kaye

1

17209 Distribution
Robert N. Lieberman,

Reported TNLS bugs

(J17209) 14-JUN-73 10:10; Title: Author(s): Diane S. Kaye/DSK;
Distribution: /RLL; Sub-Collections: SRI-ARC; Clerk: DSK;

Q4ed in Catch 22

I feel the least we can do when we institute a new user allocation scheme is to let the user know what his allocation is and who his 'group' is so that he has some reasonable notion of when he can get his work done. I have gotten autologged out in the middle of several things and since I do not know who my group is I do not know with whom I should negotiate. Then I tried typing OFFQUOTA per the instructions and was told to read IJOURNAL, 16824 which I would have done except I couldn't log in - Thus the title of this memo

1

17210 Distribution

Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews, 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, Augmentation Research Handbook, Kirk E. Kelley, N. Dean Meyer, Kay F. Byrd, James E. (Jim) White, Diane S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Linda L. Lane, Marilyn F. Auerbach, Walt Bass, 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, William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

Q4ed in Catch 22

(J17210) 14-JUN-73 12:12; Title: Author(s): Elizabeth J. (Jake)
Feinler/JAKE; Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk:
JAKE;

Phone Numbers

Could you please send me your current phone number and also that of J.A. Smith? The ones currently listed in our directory don't seem to work — perhaps you have a new number? Please let me know via NIC phone, sendmessage (mlk@sri-arc) or journal message. Thank you.
Marcia Keeney, Station Agent.

1

17211 Distribution
George N. Petregal,

Phone Numbers

(J17211) 14-JUN-73 16:04; Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /GNP; Sub-Collections: SRI-ARC; Clerk: MLK;

** - 73 16:19 17212

This is the text of the message.

17212 Distribution
James E. (Jim) White,

(J17212) 14-JUN-73 16:19; Author(s): James E. (Jim) White/JEW ;
Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW; .SNF=HIRM;

DCE 14-JUN-73 18:18 17213

Visit Log: 14 Jun 73, Professors Lenard Troncale, Emilo Stanley, and John Biddle, from California State Polytechnic University, Pomona

Action required by JCN, DCE; potential here for Utility subscription.

Visit Log: 14 Jun 73, Professors Lenard Troncale, Emilo Stanley, and John Biddle, from California State Polytechnic University, Pomona

Refer to prior interactions: Stanley's visit to ARC on 10 May (17157,); documents left or sent by Stanley regarding their Institute for Multidisciplinary Programs (IMP) and Project Alliance, X(15542,) and X(15543,); and Stanley's 29 May Letter confirming today's visit X(16528,).

1

Their main interest is in the potential of integrating the AKW Utility into their Program. They'd like to consider buying a minimum module (\$40K/yr), beginning this Fall -- involving several Workshop Architects, Len Troncale (as their Community nucleator), and having application scope and extent evolve with the Institute's evolution. Future communication would be with:

2

Dr. Lenard R. Troncale,
Institute for Multidisciplinary Programs
California State Polytechnic University
3801 West Temple Avenue
Pomona California 91768
(714) 598-4536 (Institute office)

2a

Questions re. actions, if they seriously would want to pursue an early subscription to the AKWU:

3

Costs to them:

3a

Basic Module: \$40 K/yr

3a1

Communication costs:

3a2

If ANET o.k., then link to ULA (40 mils) or USC (30 miles)

3a2a

Else, TYMNET -- 300 baud, perhaps \$5/hr extra

3a2b

Else, dialup or lease to Cupertino -- mucho cost

3a2c

Terminals:

3a3

Several typewriters

3a3a

One display

3a3b

(Basically, these need more explicit resolution -- JCN??)

3a4

Their eligibility to use ARPANET -- JCN ask Col. Ed Shalonka, or Al Blue...

3b

Len will be in Washington next week, looking for support. Gave

Visit Log: 14 Jun 73, Professors Lenard Troncale, Emilo Stanley, and John Biddle, from California State Polytechnic University, Pomona

him names and phone numers of Don Aufenkamp, Peter Lykos, and Ed Weiss of NSF, and Tom O'Sullivan in ARPA HRRO.

3c

Jim will try to learn about ANET-usage criteria by early in the week so that Len can call back.

3d

Consider our providing them with a letter of introduction, to help assure a sponsor that we value them as a client. DCE to do this.

3e

17213 Distribution

James C. Norton, Richard W. Watson, Bonnar Cox, David R. Brown, Duane
L. Stone, Michael D. Kudlick, Paul Rech,

DCE 14-JUN-73 18:18 17213

Visit Log: 14 Jun 73, Professors Lenard Troncale, Emilo Stanley, and John Biddle, from California State Polytechnic University, Pomona

(J17213) 14-JUN-73 18:18; Title: Author(s): Douglas C. Engelbart/DCE
; Distribution: /jcn rww bc drb dls mdk pr ; Sub-Collections:
SRI-ARC; Clerk: DCE ;

Visit Log: 13 Jun 73, Jan Aminoff and Ulf Johanson, L.M. Ericsson
Telephone Company, Sweden

Considerable interest, both in AKW as future for a company such as
tirs to use, and in the information-utility business level implied
for the future. No immediate results expected.

Visit Log: 13 Jun 73, Jan Aminoff and Ulf Johanson, L.M. Ericsson
Telephone Company, Sweden

I had previously met Jan in Washington, at the ICCC in Oct 72.

1

Jan Aminoff,
U.S. Technical Liaison Officer
The Ericsson Corporation
100 Park Avenue
New York, N.Y. 10017
(212) 685-4030

1a

Ulf Johanson
Research Associate
Transmission Division
L. M. Ericsson Company
S-12625 Stockholm, Sweden
(Telephone: Sweden (08) 7191440)

1b

They basically dropped by just to see the operations here. Some longer-term relevance to the communications work that their company may be doing.

2

I discussed at some length the AKW concept, the Utility, the trends in packet communication, and the way that "Workshop" kinds of activity would be impacting upon the communication business their company would see in the future. Mentioned Bell of Canada's interest in subscribing to the Utility. Also mentioned Kjell Samuelson's (at the the University of Stockholm) prospects for getting attached to the ARPANET, and his interest in collaborating with ARC. (Jan knows Kjell; almost seemed as though Jan and Ulf were wondering if their company could participate with Kjell, or help out with communications, or???).

3

In summary, we had a very intense and interesting interchange. I think that they both were interested beyond the mere show of advanced technique here. It doesn't seem too improbable that if their kind of interest were to become spread about their company a bit, that there might not be some sort of collaborative participation in the future.

3a

Gave them each a copy of:

4

D. C. Engelbart, AUGMENTING HUMAN INTELLECT: A CONCEPTUAL FRAMEWORK, summary report, October 1962, 134p. (XDOC -- 3906.)

4a

D. C. Engelbart and W. K. English. "A Research Center for Augmenting Human Intellect", AFIPS Proceedings, Fall Joint Computer Conference, 1968. Vol. 33, Part 1, p.395-420. Thompson Book Company, Washington, D.C. 1968. (XDOC -- 3954.)

4b

Visit Log: 13 Jun 73, Jan Aminoff and Ulf Johanson, L.M. Ericsson
Telephone Company, Sweden

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, 38p. (Journal -- 14724.)

4c

D. C. Engelbart, SRI-ARC SUMMARY for IPT CONTRACTOR-MEETING,
summary report of work done at ARC during 1972, 8p. (Journal --
13537.)

4d

D. C. Engelbart, COORDINATED INFORMATION SERVICES for a
DISCIPLINE- OR MISSION-ORIENTED COMMUNITY, paper presented at the
Second Annual Computer Communications Conference, San Jose,
California, 24 January 1973, 11p. (Journal -- 12445.)

4e

D. C. Engelbart, DESIGN CONSIDERATIONS FOR KNOWLEDGE WORKSHOP
TERMINALS, Paper at NCC, June '73 ARC Item (14851,)

4f

Augmentation Research Center, ONLINE TEAM ENVIRONMENT, Final
Report, RADC, 8 June 1972 (13041,)

4g

Marilyn Auerbach (who had met Jan at the ICCG last October, in
Washington) gave them a fairly long DNLS demonstration session.

5

17214 Distribution

Richard W. Watson, James C. Norton, Bonnar Cox, David R. Brown,
Michael D. Kudlick, Stephen W. Miller, Bonnar Cox, Marilyn F.
Auerbach,

Visit Log: 13 Jun 73, Jan Aminoff and Ulf Johanson, L.M. Ericsson
Telephone Company, Sweden

(J17214) 14-JUN-73 18:37; Title: Author(s): Douglas C. Engelbart/DCE
; Distribution: /rww jcn bc drb mdk swm bc mfa ;
Sub-Collections: SRI-ARC; Clerk: DCE ;

I find the plethora of 3-character TNLS messages quite objectionable. TNLS already was putting out too much garbage, especially when the system was slow: the constant strain of either waiting for slow computer responses or typing ahead and becoming disoriented (not to mention making non-undoable errors) makes TNLS quite unpleasant during the hours of heavy use. My personal feeling is that it should be possible and perhaps even the default that there should be NO computer feedback during specification of the command. (Cf. 940 QED)

1

17215 Distribution

Nps Np, Richard W. Watson, Charles H. Irby,

(J17215) 14-JUN-73 19:01; Title: Author(s): L. Peter Deutsch/LPD;
Distribution: /NP; Sub-Collections: NIC NP; Clerk: LPD;

more questions on control t

what does "FORK WAIT" mean in response to control t, better yet how do i find out all the responses to control t and the meanings with out bothering you? --jon.

1

17217 Distribution
James E. (Jim) White,

more questions on control t

(J17217) 14-JUN-73 20:44; Title: Author(s): Jonathan B. Postel/JBP;
Distribution: /JEW; Sub-Collections: NIC; Clerk: JBP;

sndmsg to ucla problem

the ucla-nmc server ftp does indeed have a maximum line length for transmissions on the telnet connection of 80 bytes. i will inquire into having this restriction removed but dont hold your breath.
--jon.

1

17218 Distribution
James E. (Jim) White,

JBP 14-JUN-73 19:35 17218

sndmsg to ucla problem

(J17218) 14-JUN-73 19:35; Title: Author(s): Jonathan B. Postel/JBP;
Distribution: /JEW; Sub-Collections: NIC; Clerk: JBP;

NDM 15-JUN-73 11:15 17219

For Jim and Vicki

TELL ME WHY

1

Tell me why the stars do shine
Tell me why the ivy twines
Tell me why the ocean's blue
And I will tell you just why I love you

2

Because God made the stars to shine
Because God made the ivy twine
Because God made the ocean blue
Because God made you - that's why I love you

3

Melanie Safka

4

17219 Distribution
James E. (Jim) White,

NDM 15-JUN-73 11:15 17219

For Jim and Vicki

(J17219) 15-JUN-73 11:15; Title: Author(s): N. Dean Meyer/NDM;
Distribution: /JEW; Sub-Collections: SRI-ARC; Clerk: NDM;
Origin: <MEYER>TELLMEWHY.NLS;1, 15-JUN-73 11:14 NDM ;

New Members to the SUR Steering Committee

I sent a message to you in may but received no reply so here I am again. Abhay Bhushan has requested that P.L. Miller, Barry Ritea, June Shoup, and J.J. Wolf be added to the SUR Steering Committee. He would like Jeff Barnett to be deleted from same. Since you are listed as coordinator I need your OK before I make these changes. Please let me know your decision on this as soon as possible. Thank you. Marcia Keeney.

17220 Distribution
Steve D. Crocker,

New Members to the SUR Steering Committee

(J17220) 15-JUN-73 11:25; Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /SDC2; Sub-Collections: SRI-ARC; Clerk: MLK;

test and paper proposal

Frank, I suggest that we write a paper on our experiences using the NLS system. Furthermore, we should draft it now before we forget the inconveniences and advantages of this system. I have started such a paper but it is at present very very very rough. Also just remembered that you will not get online journal mail unless your status is changed in the ident file. I will do that today, so this item will serve as a test for you. robert

1

17221 Distribution
Frank G. Brignoli,

test and paper proposal

(J17221) 15-JUN-73 11:50; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /FGB; Sub-Collections: NIC; Clerk: RLL;

New Members for the Network Graphics Group

Bob Thomas has requested that Elaine L. Thomas and T. H. Meyer of BBN be added to the Network Graphics Group. As coordinator of the NGG I need your OK before entering them as members. Can you let me know as soon as possible your decision. Thanks much. Marcia Keeney . P.S. You can send me a message (keeney@sri-arc), send a journal message or just call me at the NIC, whichever is easiest for you.

1

17222 Distribution
Albert Vezza,

New Members for the Network Graphics Group

(J17222) 15-JUN-73 11:54; - Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /AV; Sub-Collections: SRI-ARC; Clerk: MLK;

rl1 journal delivery note

Yes, we got (17129,) your thanks..Thank you also.. Faith in Journal
delivery restored?? Jim

1

17223 Distribution
Robert N. Lieberman,

rll journal delivery note

(J17223) 15-JUN-73 12:25; Title: Author(s): James C. Norton/JCN;
Distribution: /RLL; Sub-Collections: SRI-ARC; Clerk: JCN;

bug(?) - temp files deleted when anyone logs out under same directory

I have noticed that temporary files(e.g., message.copy;1;t) disappear after one logouts. However, it apparently does not need to be the same person that is , same job , that caused the creation of the temporary file. It need only be any job under the same directory name, at least it appears that way today when I wanted to copy a sndmsg but by the time i got into nls and attempted to convert it to nls form a fellow nsrdc-er logout and my mesage.copy;1;t file was no where to be found. This is a minor problem which might have been caused by my misunderstanding of execute insert assembler command to do the converting. robert - nsrdc-rll

1

17224 Distribution

Diane S. Kaye, Harvey G. Lehtman, Charles H. Irby, James C. Norton,
Frank G. Brignoli,

bug(?) - temp files deleted when anyone logs out under same directory

(J17224) 15-JUN-73 12:47; Title: Author(s): Robert N.
Lieberman/RLL; Distribution: /BUGS JCN FGB; Sub-Collections: NIC-BUGS;
Clerk: RLL;

Joe -- I just read over your proposals and the following comments are fairly random first reactions:

1

I believe that you will do well just to begin the task you have defined. I believe that it will take several years of intense work to derive reasonably complete models.

1a

The "Set of interface capabilities to allow for the automatic and semi-automatic transformation", referred to on page 5, has manifested itself in the Arpanet community as Protocols development.

1b

The protocols between IMPS and First level protocols between Hosts are discussed in some of the JCC Proceedings. They are only moderately interesting.

1b1

The Higher level protocols currently consist of TELNET, allowing remote terminal access of foreign sites, File Transfer, Remote Job Entry (used for Job SUBMISSION, rather than JCL-like control) and Graphics.

1b2

The protocols have been very slow in coming and are quite primitive. Clearly only first-pass efforts (tho the TELNET was recently revised and is beginning to be interesting).

1b3

If you are interested I can have copies of the protocols sent to you, using the same mechanism that produced this letter.

1b4

I use the Network Information Center (at SRI -- Engelbart's group) a lot and they have an Identification system which is used for passing messages around. You are now JBW and listed as an Independent (not affiliated with any of the groups the ID system knows about).

1b4a

At any rate, It is now easy to sent Network mail to you.

1b4b

People are only beginning to think about (and a few are attempting preliminary implementations) transparent service.

1b5

The "Help" capabilities you suggest in point 2 are also beginning to be thought about. The TENEX system, developed by BBN, have some immediate help capabilities that are quite nice. More sophisticated tools will be harder to come by.

1c

Point 3 (common communications system) seems to me to fall within Protocol development.

1d

Perhaps the most interesting aspect of Protocol development is that it requires the definition/specification of a "Virtual" entity (terminal, file, batch submission system, graphics stations, etc.)

1d1

This is also why the work goes so slowly.

1d2

A fairly complete model of the economics of Networks would seem like a significant win.

1e

Page 14: short vs. long term payoff: the Arpanet is quite expensive to join, but seems to allow the potential for extraordinary cost effectiveness, by using the best resource for a given task. So your suggestion is probably true.

1f

Page 19, usage of information media: current or ideal? I wonder whether anyone has a good idea of what a complete "user-support" system should look like?

1g

I believe "remoteness" has the rather nice effect of forcing computer centers to rely less on undocumented folklore and more on up-to-date documentation (hopefully online). It is incredible what centers have been able to get away with, by being the only shop around and by simply having their "experts" queried alot.

1h

It would be interesting to know the cost trade-off of keeping codumentation truly current, versus interrupting the expert a lot (and thb affecting his productivity).

1h1

Page 22: Unless using different systems is more transparent, there will be very little mobility between sites. It is too hard to learn to use them ($k \neq n$). This is very clearly reflected the Arpanet traffic measurements we have.

1i

You really expect to use only \$4K in computing?

1j

And lastly: It sound exciting. If I can be of assistance, let me know. And thank you for the proposal.

-- Dave Crocker

1k

17225 Distribution
Joe B. Wyatt,

(J17225) 15-JUN-73 13:34; Author(s): David H. Crocker/DHC;
Distribution: /JBW; Sub-Collections: NIC; Clerk: DHC;

Remarks on USING Draft

Jake--

A few comments on the USING meeting notes draft. Most are trivial, but not all.

1

Trivia:

2

Under attendees, Padlipsky is spelled with a "y" and the man from Harvard was Joe Wyatt.

2a

Category 1, item 6 - you should explain more clearly that HELP is to be a common executive level command for all systems though the function it accesses may vary from site to site.

2b

Cat. 1, item 7 - NUP is the New Users Packet.

2c

Categories 11 and 12 - usage doesn't have an "e" in it.

2d

The Recommendations need an introductory explanation of the context in which they were developed; i.e. that they came out of the above discussions, and are not a complete or comprehensive list. They were noted rather informally, and when they are better defined we will release a position paper to the net. (I don't want this committee or its effort to appear shabby or haphazard to network users. Our credibility is very important.)

2e

Non-trivial:

3

I don't like your discussion of the Tobacco Institute. First of all, the name Network Users Institute is inappropriate. We are the network users group; the Tobacco Institute is a server society. In fact I suggest Server Society as a better name. The point of the society is for servers to help each other with common tasks (such as documentation) that are too big for each to handle by himself. This eventually works in the users' interest, because the servers (in the network free market economy) are dependent on the users for their livelihood. There should be cooperation between the Server Society and USING, but the groups are not the same people. They are on opposite sides of the product. Also don't use the analogy of the Tobacco Institute--smoking is not popular these days.

3a

The second recommendation should be accordingly changed; i.e. the name, and leave out lobbying for user interests. The rest is correct.

3a1

Category 8, items 1 and 2 - These two items should be combined into one and rewritten to de-emphasize (actually eliminate) any references to standardization, and to emphasize instead the use of

Remarks on USING Draft

a command language PROTOCOL which each system can interact with - that is, translation, not standardization.

3b

Then users could learn one language rather than 20...if they so desired.

3b1

cat. 8, item 5 - leave out entirely. we are not espousing any one design over another. No references to anyone's system should be made at this point. We don't have a design yet, so how can it be most like someone else's. In addition there are other aspects of UULP that are not supported anyway.

3c

Similarly in item 6 you should leave out the reference to Padlipsky and UULP.

3c1

These are just a few things. On the whole the draft was pretty faithful to the meeting. You took wonderful copious notes (I hadn't remembered a few things that you had caught). I thank you again for writing this up. --Nancy

4

Remarks on USING Draft

(J17226) 15-JUN-73 14:33; Title: Author(s): Nancy J. Neigus/NJN;
Distribution: /JAKE; Sub-Collections: NIC; Clerk: NJN;

USING Meeting Comments

Brief Note to clarify procedures: please send you comments about preliminary draft of our USING meeting to me, rather than Jake. I will be producing the final draft (for an RFC, probably) with Nancy.

Thanks.
--dave

17227 Distribution

Leroy (Lee) C. Richardson, Frank G. Brignoli, Elizabeth J. (Jake) Feinler, Michael D. Kudlick, James E. (Jim) White, Michael A. Padlipsky, Kenneth L. Bowles, A. Wayne Hathaway, Jean Iseli, David H. Crocker, Nancy J. Neigus, Stephen M. Wolfe, Ronald M. Stoughton, Jim O. Calvin, Steve D. Crocker, Edward P. Schelonka,

USING Meeting Comments

(J17227) 15-JUN-73 14:50; Title: Author(s): David H. Crocker/DHC;
Distribution: /USING SDC2 EPS; Sub-Collections: NIC USING; Clerk: DHC;

17226 Distribution

Elizabeth J. (Jake) Feinler,

Request from Stan Fralick

Stan Fralick has requested that Arlin Torbett and Dave Brandin of SRI be added to the Packet Radio Group distribution list. If you have any objection please let me know as soon as possible so that I can pass the word on to Stan. Thank you. Marcia Keeney.

1

17228 Distribution
Robert E. Kahn,

Request from Stan Fralick

(J17228) 15-JUN-73 16:20; Title: Author(s): Marcia Lynn Keeney/MLK;
Distribution: /REK2; Sub-Collections: SRI-ARC; Clerk: MLK;

From Jim and Vicki

Dean,

1

I just got your poem. You've made my day. It's been getting pretty hectic the last week or two. Lots to get done. Vicki had to fly home unexpectedly to Indiana last Tuesday to attend her Grandmother's funeral. I'm rushing to finish Network Journal submission before I leave. Thanks for that breath of fresh air. I'd like you to meet Vicki when we get back in July.

Thank you.

Jim (and Vicki, too)

2

17229 Distribution
N. Dean Meyer,

From Jim and Vicki

(J17229) 15-JUN-73 17:30; Title: Author(s): James E. (Jim)
White/JEW; Distribution: /NDM; Sub-Collections: SRI-ARC; Clerk: JEW;
Origin: <WHITE>NDMMMSG.NLS;2, 15-JUN-73 17:28 JEW ;

** - 73 01:22 17230

Be still, and know that I an God.

17230 Distribution
James E. (Jim) White,

(J17230) 16-JUN-73 01:22; Author(s): James E. (Jim) White/JEW ;
Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW; .SNF=HIRM;

**73 11:49 17231

Father, here we go.

Once more.

17231 Distribution

James E. (Jim) White,

(J17231) 16-JUN-73 11:49; Author(s): James E. (Jim) White/JEW ;
Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW; .SNF=HIRM;

**73 12:46 17232

Mark-- You're the ginny (spelling?) pig

for FTP Journal submission checkout.

Seems to wrk fine. Regards. --Jim

17232 Distribution
Mark C. Krilanovich,

(J17232) 16-JUN-73 12:46; Author(s): James E. (Jim) White/JEW ;
Distribution: /MCK ; Sub-Collections: SRI-ARC; Clerk: JEW; .SNF=HIRM;

Proposed Extensions to Sort and Merge Commands

This note proposes nearly identical extensions to two NLS commands, "sort" and "merge".

OVERVIEW

The proposed sort/merge extensions are upwards compatible with the present commands.

They provide three additional capabilities:

1) Allow the user to specify filename instead of specifying plex 1;

2) Allow the user to specify two files to be merged at plex 1 level;

3) Allow the user to optionally specify key fields to be used in comparing any two statements, both for the sort command and the merge command.

The optional key fields replace the default key field for each single use of the sort or merge commands. That is, each use of these commands will either invoke the default key field as at present, or allow optional key fields to be selected instead.

For each optional key field specified, the user must specify whether it is to be compared in ascending or descending sequence.

MERGE

Syntax: "mer" <Merge>

((('b <... Branch> / 'p <... Plex>) <at> SEL <into> SEL) /

('g <... Group> <from> SEL <(to)> SEL <into> SEL <(to)> SEL) /

('f <...File> <file1> [OPTION FILENAME] CA <into file2> [OPTION FILENAME] CA))

[OPTION <keyfield:>

((TextSpec1 SEL) / (TextSpec2 SEL SEL) <Ascending?> YES/NO)

<Finished?> (NO %repeat at <keyfield:>% / YES)]

Confirmation;

Semantics

Proposed Extensions to Sort and Merge Commands

"Merge File" merges plex 1 of file1 into plex 1 of file2.
File1 is unchanged after the merge is completed.

3b1

The default for file1 is the file pointed to by the current
bug position when CA is input; similarly for file2 default.

3b1a

If OPTION for <keyfield:> is not typed, then the default key
field is invoked.

3b2

The default is however many characters in a statement that
are needed to distinguish one statement from another. The
comparisons are made in ascending order, as at present.

3b2a

If OPTION for <keyfield:> is typed, then the user proceeds to
define the field or fields he wants to use in the merge key,
starting with the most major field and proceeding through any
number of (or up to some maximum number of) successively minor
key fields. The default key field is not invoked.

3b3

NOTE: We may want to decide that the maximum number of key
fields allowable is "one", to simplify things. This should
be done uniformly for both sort and merge.

3b3a

In defining each key field, the user is specifying relative
character positions within each statement: this is information
for an L-10 user program that must be compiled for him and then
used by the merge process. Key fields should be allowed to
overlap.

3b4

The choice for "ascending" decides whether or not that key
field is to be compared in ascending or descending sequence
with the same key field in other statements.

3b4a

As is common in merging, if the comparison of the first N
key fields results in two statements being "equal", then the
choice of which statement comes first depends on the result
of the comparison of the next minor key field, if any. If
there are no more minor keyfields when the result is
"equal", then the choice of which statement comes first can
be arbitrary.

3b4b

SORT

4

Syntax: "so" <Sort>

4a

((('b <... Branch> / 'p <... Plex>) <at> SEL) /

4a1

('g <... Group> <from> SEL <(to)> SEL) /

4a2

Proposed Extensions to Sort and Merge Commands

```

('f <...File> [OPTION FILENAME] CA ))           4a3
[OPTION <keyfield:>                               4a4
((TextSpec1 SEL) / (TextSpec2 SEL SEL) <Ascending?> YES/NO ) 4a5
<Finished?> (NO %repeat at <keyfield:>% / YES) ] 4a6
Confirmation;                                     4a7

```

Semantics

"Sort File" is the same as Sort Plex 1 of the selected file. 4b1

The default file is the file pointed to by the current bug position when CA is input. 4b1a

If OPTION FILENAME is provided, then that file should be opened, sorted, and closed. 4b1b

If OPTION for <keyfield:> is not typed, then the default key field is invoked. 4b2

The default is however many characters in a statement that are needed to distinguish one statement from another. The comparisons are made in ascending order, as at present. 4b2a

If OPTION for <keyfield:> is typed, then the user proceeds to define the field or fields he wants to use in the sort key, starting with the most major field and proceeding through any number of (or up to some maximum number of) successively minor key fields. The default key field is not invoked. 4b3

NOTE: We may want to decide that the maximum number of key fields allowable is "one", to simplify things. This should be done uniformly for both sort and merge. 4b3a

In defining each key field, the user is specifying relative character positions within each statement: this is information for an L-10 user program that must be compiled for him and then used by the sort process. Key fields should be allowed to overlap. 4b4

The choice for "ascending" decides whether or not that keyfield is to be compared in ascending or descending sequence with the same key field in other statements. 4b4a

As is common in sorting, if the comparison of the first N key fields results in two statements being "equal", then the

Proposed Extensions to Sort and Merge Commands

choice of which statement comes first depends on the result of the comparison of the next minor key field, if any. If there are no more minor key fields when the result is "equal", then the choice of which statement comes first can be arbitrary.

4b4b

17234 Distribution

Douglas C. Engelbart, James C. Norton, Richard W. Watson, Charles H. Irby, Charles F. Dornbush, J. D. Hopper, Dirk H. Van Nouhuys, Marilyn F. Auerbach, Diane S. Kaye, Elizabeth K. Michael, James E. (Jim) White, Jeanne B. North,

Proposed Extensions to Sort and Merge Commands

(J17234) 16-JUN-73 15:20; Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /DCE JCN RWW CHI CFD JDH DVN MFA DSK EKM JEW JBN;
Sub-Collections: SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>SORT.NLS;7, 16-JUN-73 15:16 MDK ;

On Site Idents: Meeting with Vint Cerf

Jake ... For the record, here is my recollection of what transpired at the meeting with Vint Cerf on SiteIdents. I've made no mention of the problem of "associates", because I left in the middle of that discussion.

SITENAMES

The character set would be alphanumeric, plus the dash.

No other characters are allowed. Alphabetic characters would be upper case only, but lower case would be accepted and converted to upper case.

The sitename could be from 1 to 48 alphanumeric characters, and may include dashes. Discretion would be used in selecting long sitemames.

The site ident would not be constrained to conform to any context, hierarchical or otherwise, with one exception (see Multiple Networks).

Sitename SYNONYMS would be allowed, though kept to a reasonable minimum number. Sitename CHANGES would also be allowed, and similarly constrained in number.

The choice of a sitename for any new site, or of a sitename synonym for an existing site, would be a negotiated procedure. The negotiation would take place between the responsible person at that site and the NIC.

MULTIPLE NETWORKS

The exception to the rule of no context dependence in sitemames is that when specifying a site on a network other than the one the user is using, then that sitename would be preceded by the network name in parentheses. For example, "(TYMNET)TYMSHARE".

Alternately, there may be a command "CONNECT TO networkname" which would change the default setting for that terminal session.

This is similar to the use of directory name and filename in Tenex.

That is, the default sitename is always taken unless otherwise specified.

"TYMSHARE" would mean that Tymshare site which is on the ARPA

On Site Idents: Meeting with Vint Cerf

network, if the user specifying "TYMSHARE" was on the ARPA network when he specified it.

3b2

If the user was on TYMNET when he specified "TYMSHARE", then he would be referring to the site named TYMSHARE on the TYMNET network.

3b3

The network name would be from 1 to 24 alphanumeric characters, and may include dashes.

3c

The network you were on would not be responsible for "knowing" the SITENAMES of sites on other networks. The network would, however be responsible for knowing the NETWORK names of all networks, and for knowing the sitenames of all sites on YOUR network.

3d

RESPONSIBILITIES

4

There would be a central service (at the NIC) where up to date identifications of sites would be kept.

4a

These sitenames would be machine-readable (in a file) as well as person-readable.

4a1

The machine-readable file would be available at all times via FTP to any site that wished to obtain it as an update to its existing information. The NIC would not be responsible for DISTRIBUTING the machine-readable sitename file; only for making it available via FTP in a well-advertised format.

4a2

The person-readable sitename file would be published and distributed by the NIC on a periodic basis, probably monthly.

4a3

ARPA would designate RML as being responsible for directing any new site to the NIC for acquisition of a unique sitename. There would be no other mechanism for obtaining a sitename.

4b

The NIC would have final authority on issuance and maintenance of sitenames, but the selection of a given choice of sitename would be a negotiable procedure between the NIC and the site, in order to be sure to honor a site's desires.

4b1

Existing sites would go directly to the NIC for changes or synonyms to their sitenames, using the same negotiating mechanism as for new site names.

4b2

17235 Distribution

Elizabeth J. (Jake) Feinler, James E. (Jim) White, Jeanne B. North,
Richard W. Watson,

On Site Idents: Meeting with Vint Cerf

(J17235) 16-JUN-73 15:59; Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /JAKE JEW(fyi) JBN(fyi) RWW(fyi); Sub-Collections:
SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>SITEIDENTS.NLS;2, 16-JUN-73 15:56 MDK ;

Site Idents: Notes on the Meeting with Vint Cerf

I may have goofed and sent this twice. Sorry if that's the case.

Site Idents: Notes on the Meeting with Vint Cerf

Jake ... For the record, here is my recollection of what transpired at the meeting with Vint Cerf on SiteIdents. I've made no mention of the problem of "associates", because I left in the middle of that discussion.

1

SITENAMES

2

The character set would be alphanumeric, plus the dash.

2a

No other characters are allowed. Alphabetic characters would be upper case only, but lower case would be accepted and converted to upper case.

2a1

The sitename could be from 1 to 48 alphanumeric characters, and may include dashes. Discretion would be used in selecting long sitemames.

2a2

The site ident would not be constrained to conform to any context, hierarchical or otherwise, with one exception (see Multiple Networks).

2b

Sitename SYNONYMS would be allowed, though kept to a reasonable minimum number. Sitename CHANGES would also be allowed, and similarly constrained in number.

2c

The choice of a sitename for any new site, or of a sitename synonym for an existing site, would be a negotiated procedure. The negotiation would take place between the responsible person at that site and the NIC.

2d

MULTIPLE NETWORKS

3

The exception to the rule of no context dependence in sitemames is that when specifying a site on a network other than the one the user is using, then that sitename would be preceded by the network name in parentheses. For example, "(TYMNET)TYMSHARE".

3a

Alternately, there may be a command "CONNECT TO networkname" which would change the default setting for that terminal session.

3a1

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3b

That is, the default sitename is always taken unless otherwise specified.

3b1

"TYMSHARE" would mean that Tymshare site which is on the ARPA

Site Idents: Notes on the Meeting with Vint Cerf

network, if the user specifying "TYMSHARE" was on the ARPA network when he specified it.

3b2

If the user was on TYMNET when he specified "TYMSHARE", then he would be referring to the site named TYMSHARE on the TYMNET network.

3b3

The network name would be from 1 to 24 alphanumeric characters, and may include dashes.

3c

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3d

RESPONSIBILITIES

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The person-readable sitename file would be published and distributed by the NIC on a periodic basis, probably monthly.

4a3

ARPA would designate RML as being responsible for directing any new site to the NIC for acquisition of a unique sitename. There would be no other mechanism for obtaining a sitename.

4b

The NIC would have final authority on issuance and maintenance of sitenames, but the selection of a given choice of sitename would be a negotiable procedure between the NIC and the site, in order to be sure to honor a site's desires.

4b1

Existing sites would go directly to the NIC for changes or synonyms to their sitenames, using the same negotiating mechanism as for new site names.

4b2

17236 Distribution

Elizabeth J. (Jake) Feinler, James E. (Jim) White, Jeanne B. North,
Richard W. Watson,

Site Idents: Notes on the Meeting with Vint Cerf

(J17236) 16-JUN-73 16:30; Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /JAKE JEW(fyi) JBN(fyi) RWW(fyi); Sub-Collections:
SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>SITEIDENTS.NLS;2, 16-JUN-73 15:56 MDK ;

ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS

This is submitted for your review and comments. Please transmit any responses to RWW DCW and JCN via the Journal. I will be away from ARC until 6/25, but will pick up again there.

INTRODUCTION

1

In December 1972, Paul Rech presented a proposal for a group allocation system (see -- 13580,3d5) that was directed toward the problem of assuring a better balance of computer system resource allocation among the varied groups that use our ARC PDP-10 system.

1a

This was proposed in response to requests from many people for a better way to handle the building demand for our limited system resources.

1a1

In addition, the coming of the Workshop Utility was seen to require such a system to permit us to deliver guaranteed service to future Utility users as well.

1a2

After many discussions with people involved as users, and as designers and implementers of the system, the initial group allocation mechanisms have now been implemented.

1b

We have been running for the past several weeks under the allocation system, but with only three groups identified: NIC users, RADG users, and Local (ARC and Xerox) users.

1c

This was done to permit operational testing of the system's basic elements such as the groupstat command, and the offquota job management and express login features.

1c1

In this limited testing environment, the system appears to function as designed. Therefore, we are now ready to specify and operate with user groups that more closely match the resource allocation goals of ARC and its other users.

1c2

Documentation on how the group allocation system works is contained in (16824,1) and is offered to users for reference when they use the "OFFQUOTA" command at the EXEC level.

1d

TIMING AND FUTURE ADJUSTMENTS

2

We are planning to put the following group allocations and individual assignments into operation on TUESDAY, JUNE 26. If you have any questions or comments on this plan, please let DCW, RWW and JCN all know (via the Journal) before MONDAY, JUNE 25.

2a

We expect this new allocation system to affect users in many ways.

2b

ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS

At times it will limit some users to less "random" system access than they have been accustomed to getting.

2b1

It will bring users in the same group closer together to work out acceptable intra-group negotiations to divide their resources.

2b2

It will result in many users who have previously been kept off of a full system (at times when they felt they needed and deserved access) now being able to get "their fair share" of system time without having to be first in line in the morning--or just lucky. WE ARE ADMITTEDLY EXPERIMENTING AT FIRST TO DETERMINE WHAT "FAIR SHARE" MEANS.

2b3

Perhaps most important, it will make more clear the fact that our computer system is a valuable resource that must be effectively used, recognition of this value resulting (hopefully) in better use.

2b4

Effective use of our computer resources is not just filling the system up with users. It is keeping the system at full load (65-70% of CPU for users) with reasonable response to users (load average in 5-6 range) with a BALANCE OF USERS and their TASKS that permits a balanced advancement toward the overall goals of the ARC and Network users. This, obviously, is what the group allocation system is supposed to facilitate.

2c

Administration of the allocation settings and individual group assignments is the responsibility of ARC Operations, under the direction of Jim Norton. At least at the beginning, Smokey Wallace will be part of the discussions and handling of adjustments when any are proposed.

2d

Our approach will be: to keep open to any comments or suggestions about the system and to be as fair and responsive as we can to users needs.

2d1

ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS

JON 17-JUN-73 14:35 17248

| | |
|---------------|--------------------|
| JBN | Jeanne North |
| JDC | Judy Cooke |
| MDK | Mike Kudlick |
| MLK | Marcia Keeney |
| (FACILITY) | |
| EKV | Ed Van De Riet |
| JCP | Jeff Peters |
| JR | Jake Ratliff |
| MAB2 | Mark Beach |
| MEH | Martin Hardy |
| (PROGRAMMERS) | |
| CFD | Chuck Dornbush |
| CHI | Charles Irby |
| DCW | Don Wallace |
| DIA | Don Andrews |
| DSK | Diane Kaye |
| EKM | Elizabeth Michael |
| HGL | Harvey Lehtman |
| JDH | Dave Hopper |
| JEW | Jim White |
| KEV | Ken Victor |
| WHP | Bill Paxton |
| WLB | Walt Bass |
| WRF | Bill Ferguson |
| (XEROX) | |
| CMG | Chuck Geschke |
| EHS | Ed Satterthwaite |
| JGM | Jim Mitchell |
| LPD | Peter Deutsch |
| RES | Dick Sweet |
| (RADC) | |
| DAL | Dave Luther |
| DFB | Dean Bergstrom |
| DLD2 | David Daughtry |
| DLS | Duane Stone |
| DVA | Donald Van Alstine |
| EJK | Ed Kennedy |
| FJT | Frank Tomaini |
| FPS | Frank Sliwa |
| FSL | Frank LaMonica |
| GAB | George Borden |
| JHB | Jim Bair |
| JLM | John McNamara |
| JPC | Joe Cavano |
| JRS | Josephine Stellato |
| JWJ | John Johnson |
| MAW | Mike Wingfield |
| MDP | Marcelle Petell |
| RAL | Ray Liuczi |

ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS

INITIAL ALLOCATIONS

The Groups:

| | | |
|-------------|---|-----|
| STAFF | ARC Management and other staff | 3a |
| PSO | People Support Operation | 3a1 |
| NIC STAFF | Network Information Center -- ARC Staff | 3a2 |
| FACILITY | ARC Hardware and Operators | 3a3 |
| PROGRAMMERS | ARC TENEX and NLS Programmers | 3a4 |
| XEROX | Collaborating Xerox Staff | 3a5 |
| RADC | Rome Air Development Center | 3a6 |
| NIC USERS | NIC users less ARC Staff | 3a7 |
| OVERHEAD | ARC Overhead Processes | 3a8 |

INITIAL GROUP ALLOCATIONS:

| | | | | |
|-------------|-------|---------|----------------------|-----|
| Groups | 5am-8 | 8am-2pm | 2-5am (Pacific Time) | |
| STAFF | 1 | 2 | 3 | 3a9 |
| PSO | 1 | 2 | 2 | 3b |
| NIC STAFF | 1 | 1 | 1 | 3b1 |
| FACILITY | 0 | 0 | 1 | 3b2 |
| PROGRAMMERS | 1 | 5 | 7 | 3b3 |
| XEROX | 0 | 1 | 1 | 3b4 |
| RADC | 5 | 2 | 0 | 3b5 |
| NIC USERS | 7 | 4 | 2 | 3b6 |
| OVERHEAD | 4 | 4 | 4 | 3b7 |
| | -- | -- | -- | 3b8 |
| Totals: | 20 | 21 | 21 | 3b9 |

It important to note that these are the "guaranteed" allocations to groups. Much of the time, individual groups will have more users logged in than these allocated slots indicate, due to the OFFQUOTA and EXPRESS (elog) features of the allocation system. Again, see (16824,1) for details.

(STAFF)

| | |
|-----|-------------------|
| DCE | Doug Engelbart |
| DVN | Dirk van Nieuhuys |
| JCN | Jim Norton |
| NDM | Dean Meyer |
| PR | Paul Rech |
| RWW | Dick Watson |
| SRL | Susan Lee |

(PSO)

| | |
|------|---------------|
| BAH | Beau Hardeman |
| KFB | Kay Byrd |
| KIRK | Kirk Kelley |
| LLL | Linda Lane |
| MEJ | Mil Jernigan |

(NIC STAFF)

| | |
|-----|-----------------|
| CBG | Carol Guilbault |
| EJF | Jake Feinler |

ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS

| | |
|------|-------------------|
| RBP | Roger Panara |
| RG2 | Richard Galicchia |
| RED2 | Robert Doane |
| RFI | Rocco Iuorno |
| RHT2 | Richard Thayer |
| TFL | Tom Lawrence |
| TJB2 | Tom Bucciero |
| WER | William Rzepka |
| WPB | William Bethke |

(OVERHEAD)

BACKGROUND

CAT

DOCB

DOCUMENTATION

NETINFO

NIC-WORK

OPERATOR

PRINTER

SYSTEM

(NIC USERS)

Individual assignments to the NIC group are made by ARC
operating System people coordinating with the NIC staff.

ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS

RELATED DOCUMENTS:

User Allocation by Group Accounts (Final Version) PR
28 Dec 72 (13580,1:xbznC)

.. about: Group Allocation System Design Logic DCW
25- May 73 (WALLACE,GROUP-ALLOCATION.DESIGN,1:xbznC)

.. about: Group Allocation System Description MFA
25- May 73 (16824,1:xbznC)

Group Allocation Review Team Meeting EKM
30 May 73 (16917,1:xbznC)

17248 Distribution

Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews, Duane L. Stone, James H. Bair, James G. Mitchell, 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, Augmentation Research Handbook, Kirk E. Kelley, N. Dean Meyer, Kay F. Byrd, James E. (Jim) White, Diane S. Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Linda L. Lane, Marilyn F. Auerbach, Walt Bass, 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, William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

ARC SYSTEM USE GROUP ALLOCATIONS AND ASSIGNMENTS

(J17248) 17-JUN-73 14:35; Title: Author(s): James C. Norton/JCN ;
Distribution: /SRI-ARC DLS JHB JGM ; Sub-Collections: SRI-ARC;
Clerk: JCN ;
Origin: <NORTON>ALLOCATIONS.NLS;1, 17-JUN-73 14:16 JCN ;

Request for BAH to Run GET-NIC Program on A-SOURCE Files Monday
Night, 18 June 1973

TO: BAH INFO TO: JBN MDK RWW JCN

FROM: MEJ

SUBJECT: Request for You to Run GET-NIC Program on the A-Source Data
Base on Monday night, June 18, 1973.

The A-SOURCE Catalog data base files are updated and ready for you to
run the GET-NIC Program on them to produce the NICSOURCE files for
use in making the 1 June 1973 NIC Catalog. There are 33 of these
files in the <NIC-WORK> directory. They have been marked for ARCHIVE,
but "Don't Delete".

These A-SOURCE files include all entries, both NIC and non-NIC input
through 31 May 1973. They have been proofread, and are in order.
Following is a list of them:

A-SOURCE-0001-0499
A-SOURCE-0500-0999
A-SOURCE-1000-1499
A-SOURCE-1500-1999
A-SOURCE-2000-2499
A-SOURCE-2500-2999
A-SOURCE-3000-3499
A-SOURCE-3500-3999
A-SOURCE-4000-4499
A-SOURCE-4500-4999
A-SOURCE-5000-5499
A-SOURCE-5500-5999
A-SOURCE-6000-6499
A-SOURCE-6500-6999
A-SOURCE-7000-7499
A-SOURCE-7500-7999
A-SOURCE-8000-8499
A-SOURCE-8500-8999
A-SOURCE-9000-9499
A-SOURCE-9500-9999
A-SOURCE-10000-10499
A-SOURCE-10500-10999
A-SOURCE-11000-11499
A-SOURCE-11500-11999
A-SOURCE-12000-12499
A-SOURCE-12500-12999
A-SOURCE-13000-13499
A-SOURCE-13500-13999
A-SOURCE-14000-14499
A-SOURCE-14500-14999
A-SOURCE-15000-15499

Request for BAH to Run GET-NIC Program on A-SOURCE Files Monday
Night, 18 June 1973

A-SOURCE-15500-15999

A-SOURCE-16000-16499

6

The new NICSOURCE files you will create from these A-SOURCE data base files will be the basis of the NIC Catalog making process for about the next year, therefore, please be sure that the NICSOURCE files are not deleted. If the A-SOURCE files have been archived by Monday night satisfactorily, you may delete them if you need room on the disk. I will check into this Monday morning and let you know.

7

17249 Distribution

Beauregard A. Hardeman, Jeanne B. North, Michael D. Kudlick, James C.
Norton, Richard W. Watson,

MEJ 17-JUN-73 16:39 17249

Request for BAH to Run GET-NIC Program on A-SOURCE Files Monday
Night, 18 June 1973

(J17249) 17-JUN-73 16:39; Title: Author(s): Mil E. Jernigan/MEJ;
Distribution: /BAH JBN MDK JCN RWW; Sub-Collections: SRI-ARC; Clerk:
MEJ;
Origin: <NIC-WORK>HARDEMAN-MSG.NLS;1, 17-JUN-73 16:35 MEJ ;

Quarterly Management Report 4: RADC/ARPA Project 1868

| | |
|--|-------|
| ARPA Order Number: - Program: - | 1 |
| Title: Network Information Center and Augmentation System Development | 1a |
| Contractor: Augmentation Research Center, Stanford Research Institute | 1b |
| Date of Contract: 10 May 1972 | 1c |
| Amount of Contract: \$2,270,000 | 1d |
| Contract Number: F30602-72-C-0313 | 1e |
| Principal Investigator: Dr. Douglas C. Engelbart, phone (415) 326-6200, ext. 2220 | 1f |
| Contract Expiration Date: 10 February 1974 | 1g |
| I RESEARCH PROGRAM AND PLAN | 2 |
| As per our proposal and contract, work is progressing in the following areas: | 2a |
| Developing Service Functions for: | 2a1 |
| External users - the Network Information Center (NIC) | 2a1a |
| Internal users - prototype systems such as: | 2a1b |
| Dialog Support System (DSS) | 2a1b1 |
| Documentation Production and Control System (DPCS) | 2a1b2 |
| Software Engineering Augmentation System (SEAS) | 2a1b3 |
| System Developers' Handbook System (SDHS) | 2a1b4 |
| Developing service delivery and marketing principles and practices | 2a2 |
| Providing operational marketing and delivery of services within the ARC and NIC customer markets | 2a3 |
| II MAJOR ACCOMPLISHMENTS | 3 |
| Network Information Center (NIC) | 3a |
| Some of the work reported below under Software Development | |

Quarterly Management Report 4: RADC/ARPA Project 1868

and Dialog Support System --- namely, that work related to improvements in the Journal system and the NIC/QUERY system --- was jointly sponsored by the NIC.

3a1

Other NIC work is related to improvements in NIC service, as follows:

3a2

1) We are undertaking a study to determine the feasibility of using the University of California Santa Barbara (UCSB) 360/75 system to process the NIC's formatted reports: Catalog Listings and Indexes, Journal Indexes, and Directories.

3a2a

Storage of the main files would be at UCSB. Updates to these files would be sent via Network FTP from the NIC to UCSB and formatted output would be produced there. Files for on-line querying would be transmitted back to the NIC for residence and use on the NIC's computer system.

3a2a1

2) In parallel with the above study to transfer some of the computer processing to UCSB, we are undertaking a study to determine the uses and frequency needs of the NIC reports mentioned above.

3a2b

The study is being implemented by a questionnaire distributed through the ARPANET News for June 1973.

3a2b1

3) We are carrying on a study to determine the costs of operating the NIC.

3a2c

It appears that the NIC is significantly understaffed to cover adequately its current scope of services for a clientele whose size and range of needs have grown far beyond those planned for two years ago when our budget was last set. These studies are j3c3 to determine what changes are needed.

3a2c1

We intend to compare the NIC's costs for various operations with those of similar operations at other institutions, drawing as many parallels as are justifiable.

3a2c2

4) We are planning to expand the capabilities of the NIC/QUERY language, in order to provide for a more general file format capability.

3a2d

Selected users are cooperating to provide feedback

about features they would like to have in the
NIC/QUERY system.

3a2d1

5) The problem of assigning and maintaining unique
identifications of sites, hosts, and organizations on
the ARPA Network is being coordinated through the NIC,
with the assistance of ARPA and RML.

3a2e

The intention is to maintain these identities in the
NIC's files, for access by anyone on the Net. Access
would be on-line through the NIC's "ident" system.
It would also be possible for a user process to
obtain a site-ident data base via FTP. A report on
these plans is forthcoming in the immediate future.

3a2e1

Dialog Support System (DSS)

3b

In a major extension of the DSS we have modified the
Journal to deliver messages and citations through the Net
to users at their own sites.

3b1

We have modified the Ident System so that it allows a User
to record as part of his ident his desire for delivery at
his own site instead of or in addition to delivery online
at ARC or via hard copy. We have made a place in the Ident
System to record his address at another site for Network
Delivery.

3b2

We have speeded up Journal delivery to 0 - 60 minutes
during the middle of the day.

3b3

Journal Delivery now is activated every few minutes. If
there is mail to deliver it will first test to determine
whether the system load and the free disk space will
allow it to deliver without degrading the response for
other users. If the load average is too high or the
available disk space too low, it will dismiss itself for
a few minutes and try again.

3b3a

We are designing and planning for Multi-site Journal and
Ident systems.

3b4

Software Development

3c

During the past quarter we have been pursuing the tasks
connected with development of a Modular Programming System
as described (14165,) and other software development
described in (14164,).

3c1

Quarterly Management Report 4: RADC/ARPA Project 1868

The first phase of the calculator has been completed. It allows arithmetic operations on numbers input or addressed in NLS files, and includes storage registers and printout of recorded operations.

3c2

We have taken delivery of two low-cost, alpha-numeric terminals and work is progressing on providing DNLS from such a class of terminals.

3c3

A major proposal for removing a number of inconsistencies in the NLS command language has been reviewed and can move to the implementation-documentation phase.

3c4

An allocation system has been implemented that limits users' access to the system according to work groups during hours of peak load.

3c5

We have made a number of improvements to the programs that support DNLS on Imlac terminals locally and on the ARPANET.

3c6

Preparation for Workshop Utility

3d

We have met with Tymshare people on several occasions to discuss the subcontract to be made between SRI and Tymshare and details of the operation of the Utility service.

3d1

Tymshare is in the process of ordering the paging box (at their risk) in order to help meet the September 1 Utility service startup target date.

3d1a

We are in the process of interviewing prospective staff for some of the ARC portions of the Utility service. When they are hired, we will commence their training. Some Utility positions will be filled by present ARC staff whose replacements must also be hired and trained.

3d2

We are about to commence testing, through use on the SRI-ARC PDP-10 system, the group allocation system that will permit us to deliver "guaranteed" amounts of system access to Utility subscribers.

3d3

We have started training of initial clerical users at the ARPA IPT office. Other training of Network (NIC) users has increased, with courses run remotely at Mitre, BBN, and Illinois. Some of those new users may also be part of the user group for the Utility.

3d4

Quarterly Management Report 4: RADC/ARPA Project 1868

III PROBLEMS ENCOUNTERED

4

Limited computer system resources are still a problem. We have not been able to obtain added resources at other Network sites due to heavy loads elsewhere (BBN, USC-ISI). We are hoping that the group allocation system will help us to maintain NIC service, ARC operations and system development service, as well as train some Utility users prior to the startup of the Utility. It will be difficult.

4a

Small debugging and procedural problems with the vendor continue to slow down our efforts to provide flexible and reliable computer output to microfilm and publication grade photo-typesetting.

4b

IV FISCAL STATUS

5

Estimated expenditures and commitments to date are: \$1,442,295 excluding computer lease commitments. Funds required to complete the work within funding limitations are: \$827,705. We are in the process of evaluating current project costs relative to total estimated contract costs. Certain NIC costs have been higher than estimated. When our study is completed, we will notify RADC technical and contracts people of our position. Estimated date of completion of work: February 10, 1974.

5a

V ACTION REQUIRED BY THE GOVERNMENT

6

Provision of the remaining incremental project funding of \$817,484 as near to July 1 as possible to cover current costs.

6a

VI Next Quarter Plans

7

Serious preparations for offering NLS as a Workshop Utility will continue. These involve recruiting and training: a Utility Manager, a Training Specialist, a Documentation Specialist, Software Support, a Workshop Coordinator, and a Community Coordinator.

7a

Tasks undertaken recently -- such as creating a capability to support DNLS from low cost displays, command language cleanup, more and better HELP facilities -- will continue. The Group Allocation system for guaranteeing fair distribution of resources to Utility subscribers will begin operation on ARC's system. The calculator will be released for operational use. DEX II will be released for trial use.

7b

DSS:

7c

Quarterly Management Report 4: RADC/ARPA Project 1868

The Journal system will be improved to allow:

7c1

entry and delivery of items to the Journal through the network without explicit entry into NLS,

7c1a

designation of items as Action items or Copies for Your Information,

7c1b

and use of Ident system by the Network as a server process.

7c1c

A significant effort to look into provision for classes of privacy among Journal items will begin.

7c2

NLS Foundations:

7d

A new table-driven command parsing system will be implemented. The new system will make it easier to improve HELP facilities, simplify command language changes, easily allow alternative command recognition schemes, and simplify insertion of Phase II use measurement facilities.

7d1

Ongoing thinking and planning for design of the Modular Programming system will continue. A cleanup and documentation of NLS source code will begin.

7d2

NIC will:

7e

extend the Query system based on experience to date;

7e1

give courses at several network sites in NLS use and NIC services;

7e2

continue to collect and organize network resource information and other NIC data bases;

7e3

and complete an analysis of NIC costs and of the disposition of NIC clerical support time.

7e4

Approved by:

D. C. Engelbart, Principal Investigator

8

Quarterly Management Report 4: RADC/ARPA Project 1868

(J17250) 29-JUN-73 16:13; Title: Author(s): Stanford Research
Institute /ESRI-ARC; Distribution: /ESRI-ARC DLS PK2 JCN RWW DCE JSP BC;
Sub-Collections: SRI-ARC; Clerk: DVN;
Origin: <VANNOUHUYS>QMR.NLS;7, 29-JUN-73 09:51 DVN ;

Down The Ruddy Moad of Life We Go

We shall build a test file that's fairly hefty in size, and one tat possesses a fair amount of structure.

We shall, for example, proceed to indent some text as a new statement which the system will surely handle properly if it's able.

Still further into the depths of depression goes this intrepid test file.

And further still alongte rudd moad of life.

Until we meet our final reward: a gold mine in the sky.

17256 Distribution
James E. (Jim) White,

Down The Ruddy Moad of Life We Go

(J17256) 18-JUN-73 01:02; Title: Author(s): James E. (Jim) White/JEW
; Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW;
.SNF=HIRM;

Mail courtesy of Net Journal Submission

This piece of mail comes to you

direct from FTP.

Fondest regards.

17257 Distribution
James E. (Jim) White,

Mail courtesy of Net Journal Submission

(J17257) 18-JUN-73 02:00; Title: Author(s): James E. (Jim) White/JEW
; Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW;
.SNF=HIRM;

Now is the time...

for all good me (this line is text)

17258 Distribution
James E. (Jim) White,

Now is the time...

(J17258) 18-JUN-73 02:02; Title: Author(s): James E. (Jim)
White/JEW ; Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW;
.SNF=HIRM;

NOw is thetime to go home.

this is a one-liner.

17259 Distribution
James E. (Jim) White,

Now is the time to go home.

(J17259) 18-JUN-73 02:26; Title: Author(s): James E. (Jim)
White/JEW ; Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW;
.SNF=HIRM;

Just one more?

abc

17260 Distribution
James E. (Jim) White,

Just one more?

(J17260) 18-JUN-73 02:28; Title: Author(s): James E. (Jim)
White/JEW ; Distribution: /JEW ; Sub-Collections: SRI-ARC; Clerk: JEW;
.SNF=HIRM;

jean, is there any documentation available on the datacomputer -
cca-tenex? if so how can i get it. mike leavitt.

1

17261 Distribution
Jean Iseli,

(J17261) 18-JUN-73 06:58; Author(s): M. R. Leavitt/MRL;
Distribution: /JI; Sub-Collections: NIC; Clerk: MRL;

Dumdum memo

Trying out the first statement in NLS.

1

Starkle, starkle, little twink,

2

What the hell you are I think.

3

17262 Distribution

Bonnie Nash-webber, Joseph J. Passafiume,

Dumdum memo

(J17262) 18-JUN-73 07:11; Title: Author(s): J. J. Wolf/JJW;
Distribution: /BN2 JJP2; Sub-Collections: NIC; Clerk: JJW;
Origin: <BBN-TENEX>MEMOJ.NLS;1, 18-JUN-73 07:08 JJW ;