CHI's departure

My dear freinds at ARC, as some of you already know, I have decided to leave ARC. This was a very difficult decision for me to make, but a number of things, most dominant of which was a strong need for change, brought me to this decision (see <irby, r,> for more details). I feel like I am deserting you all but am also convinced that there will never be a "good" time to leave. I have been preparing the group for this for the past several months by generally being unavailable. I will do everything within reason to minimize the hardship my leaving may cause. I expect to leave within the next few months but have not decided where I will next work and thus cannot be more specific. Fondest regards, Charles. 1

CHI 30-SEP-75 13:10 26596

CHI's departure

(J26596) 30-SEP-75 13:10;;;; Title: Author(s): Charles H. Irby/CHI;
Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC;
Clerk: CHI;

26596 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

JMB 30-SEP-75 13:13 26597

This old bug - in DNLS

I am still bothered by the response to the Clear (TTY window) command in DNLS: The tty-simulation window is not cleared, rather its contents are replaced by "Illegal window identifier encountered in DSPAREA." This happens to me every time I use the command.
....thanx, jeanne 1

JMB 30-SEP-75 13:13 26597

This old bug - in DNLS

(J26597) 30-SEP-75 13:13;;;; Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /FEEDBACK([ACTION]) ; Sub-Collections: SRI-ARC
FEEDBACK; Clerk: JMB;

26597 Distribution
Special Jhb Feedback,

RLL 30-SEP-75 15:50 26598

SRI-ARC

System Capabilities

Stanford Research Institute
Augmentation Research Center
333 Ravenswood Avenue
Menlo Park, California 94025
415-326-6200 x4119

RLL 30-SEP-75 15:50 26598

AKW System Capabilities: A handout

This is a first draft of a two page handout for stating our capabilities. Comments welcomed. Thanks Rob (RLL)

AKW System Capabilities: A handout

HANDOUT on Capabilities 2

For nearly 13 years the Augmentation Research Center (ARC) at Stanford Research Institute has had the objective to develop a computer augmented environment in which managers, researchers, programmers, and clerical personnel perform their daily tasks. Because this goal is so vast and will have such a large impact on people and organizations, we have established pragmatic strategies for its development and delivery. 2a

First, we have limited our efforts to develop techniques and tools for the basic or core activities of knowledge workers (our term for people who work with information and ideas). At the general level, these core activities are the reading, writing, and communicating of information. 2a1

Through these activities we have achieved an integrated environment in which numerous other facilities can be accessed. 2a2

Specific applications include: 2a3

collaborative dialogue among geographically distributed groups, 2a3a
project and organizational coordination and control, 2a3b
personal and organizational information management, 2a3c
document development, control and production. 2a3d

Second, these tools and techniques are most successfully transferred to the users by their developing skills and techniques through active participation in the evolution of this environment. 2a4

Third, we believe the ideas, suggestions, and needs of those who use these tools in their daily work are important contributions to the further development and delivery of this environment. 2a5

The last two strategies have resulted in the establishment of a subscribing community of users of our service. 2b

In pursuit of the first objective we currently have available the following capabilities in an integrated environment serving several hundred people in many organizations. 2c

1. Computer capture of text from online typing, previously typed cassettes, computer-generated magnetic tapes, and computer communications networks (e.g. ARPANET), which include computer-to-computer transfer of data. 2c1

2. Text manipulation and editing with a flexible, powerful, and intuitive two-dimensional online system. 2c2

3. Hardcopy output with extensive formatting controls (e.g., page layouts, type fonts). 2c3

This includes text output to a Computer Output to Microfilm (COM) device which can submit camera-ready copies for offset printing. 2c3a

4. Reading and searching of text with a variety of viewing formats. 2c4

This enables the user to read online documents in a more effective manner and locate particular passages with the aid of the computer. 2c4a

5. Structuring documents in an hierarchical manner. 2c5

This is basic to the way one reads in this environment, allows better organization of ones thoughts, and facilitates retrieval of information. 2c5a

6. Textual communication. 2c6

There is a facility to send mail to individuals or groups. Any mail sent using this subsystem receives a unique accession number, automatic delivery to specified individuals or groups, and permanent storage of the mail in what we call the Journal. The Journal represents the total collection of short messages, letters, documents, reports, etc. that have been submitted by any user of the system. 2c6a

In effect, the Journal becomes a permanent repository of all dialogue among users of the system. [Privacy considerations are available to restrict reading and cataloguing of items in the Journal. However, the general openness of the Journal has provided a rich source of historical information.] Communication of mail items to anyone known to the system is possible, even if the recipient is "located" on another computer across the country. 2c6b

7. Other facilities include a computer based calculator, computer programming support subsystem, user customization subsystem [to modify the system for each individual], and various special user programs. 2c7

As is mentioned above, our strategy is to include "real" workers in a growing community of system users. Thus, we have implemented

a "Utility" service for interested subscribers. Our clients use the service in their daily work. Having provided over 21 months of operationally stable and reliable service to many clients, we feel confident that this experiment in transferring advanced technology to managers, scientists, etc., will evolve with the help of others into the augmented environment in our objective. 2d

TITLE PAGE 3

AKW System Capabilities: A handout

(J26598) 30-SEP-75 15:50;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /ARC-LOG([INFO-ONLY]) DCE([INFO-ONLY]) JCN([INFO-ONLY]) JHB([INFO-ONLY]) NDM([INFO-ONLY]) KWAC([INFO-ONLY]) ; Sub-Collections: SRI-ARC ARC-LOG KWAC; Clerk: RLL;

26598 Distribution

James C. Norton, Log Augmentation, Douglas C. Engelbart, James C. Norton, James H. Bair, N. Dean Meyer, Joseph L. Ehardt, Marilynne A. Sims, Elizabeth F. Finney, Lawrence A. Crain, E. S. VonGehren, Glenn A. Sherwood, Kathey L. Mabrey, Jeanne M. Beck, David A. Potter, Robert N. Lieberman, Terry H. Proch, Ronald P. Uhlig, Susan Gail Roetter, Michael A. Placko, Stanley M. (Stan) Taylor, Elizabeth J. Feinler, Rudy L. Ruggles, Frank G. Brignoli, Robert M. Sheppard, Richard W. Watson, Douglas C. Engelbart, James C. Norton, James H. Bair, Duane L. Stone, Inez M. Mattiuz, Connie K. McLindon,

SRI-ARC

Utility Services

Stanford Research Institute
Augmentation Research Center
333 Ravenswood Avenue
Menlo Park, California 94025
415-326-6200 x4119

RLL 30-SEP-75 16:25 26599

AKW Services Provided: A Handout

This is a first cut at a two page handout giving our services.
Comments welcomed. Thanks Rob (RLL)

AKW Services Provided: A Handout

HANDOUT on Services Provided 2

The Augmentation Research Center (ARC) of Stanford Research Institute (SRI) has established a goal to foster the formation of an augmented knowledge workshop, that is, a working environment in which advanced tools and techniques are used to aid people in performing their daily work with information (knowledge). 2a

This objective is best achieved by selected participation by interested organizations (government and non-government) in a community of "augmented" users. The diversity and size of such a community will 2b

1. aid in the enhancement of the tools and techniques that the community uses, 2b1

2. accelerate the growth, introduction, and use of the workshop facilities and reduce the cost of them, 2b2

3. provide feedback on the ways a new technology can be transferred to ultimate users, 2b3

4. allow users to help users. 2b4

In order to provide an integrated set of services, ARC has developed methods, hardware, software, and skills to aid the worker in the core activities associated with handling and processing information. These services, tools, and tehniques are available to the organizations who participate in the "Augmented Knowledge Workshop." 2c

A subscription in this community provides both computer services and people services. 2d

The computer services includes the use of a large scale computer timesharing utility with all the Workshop computer systems currently available. 2d1

Basic to this computer service is the oN Line System (NLS) that provides facilities for reading, writing, and communicating information. 2d1a

The necessary online and offline storage facilites are included as well as the usual timesharing support services (e.g., attending computer operator). 2d1b

The people services include training, on-site courses, documentation, application consulting, methodology consulting, use consulting, and software and hardware consulting. 2d2

Specifically the computer service provides a minimum of 20 hours per day, seven days per week timesharing facility during the subscription period. 2e

Each subscription share entitles the organization to a specific number of concurrently "logged-in" users. 2e1

Additionally, each subscription share represents a percentage of the computer resources (currently 3%, central processing time) thus providing a standard of service and insulating each subsriber from one another. 2e2

There are two requirements for participating organizations. 2f

First, an identified transfer agent, called a workshop architect, must be mutally selected to become the focal point for our training, for the information flow between ARC and the organization, and for the organization's consulting to ARC on its problems and applications. At least fifty percent of the architect's time should be devoted to these activities. 2f1

Second, a verbal commitment to actively participate in the information flow through out the community of users. It is critical that users actively inform the entire community and ARC of their problems, their successes, their ideas, their methods, and their findings with respect to the services, techniques, tools in this augmented knowledge workshop. 2f2

TITLE PAGE 3

RLL 30-SEP-75 16:25 26599

AKW Services Provided: A Handout

(J26599) 30-SEP-75 16:25;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /ARC-LOG([INFO-ONLY]) DCE([INFO-ONLY]) JCN([INFO-ONLY]) NDM([INFO-ONLY]) JHB([INFO-ONLY]) KWAC([INFO-ONLY]) ; Sub-Collections: SRI-ARC ARC-LOG KWAC; Clerk: RLL;

26599 Distribution

James C. Norton, Log Augmentation, Douglas C. Engelbart, James C. Norton, N. Dean Meyer, James H. Bair, Joseph L. Ehardt, Marilynne A. Sims, Elizabeth F. Finney, Lawrence A. Crain, E. S. VonGehren, Glenn A. Sherwood, Kathey L. Mabrey, Jeanne M. Beck, David A. Potter, Robert N. Lieberman, Terry H. Proch, Ronald P. Uhlig, Susan Gail Roetter, Michael A. Placko, Stanley M. (Stan) Taylor, Elizabeth J. Feinler, Rudy L. Ruggles, Frank G. Brignoli, Robert M. Sheppard, Richard W. Watson, Douglas C. Engelbart, James C. Norton, James H. Bair, Duane L. Stone, Inez M. Mattiuz, Connie K. McLindon,

RLL 30-SEP-75 17:18 26600

Listing of Client Organizations using NLS: First Draft

Additions, corrections requested. Send to Lieberman (RLL) at BBNB.
Thanks.

DRAFT Listing of Client Organizations using the NLS system. 1

An asterisk (*) indicates those clients for which we have contracts. Other locations are using the system under one of these contracts.

2

ACRONYM	Name of Organization	Location	
AFDSC*	Air Force Data Service Center(Pentagon)	Washington, DC	4
AFDSDC*	Air Force Data Systems Design Center(Gunter)	Montgomery, AL	5
AFLC	AF Logistics Command(Wright-Pat)	Dayton, OH	6
AMC*	Army Materiel Command HQ	Alexandria, VA	7
ARMCOM	Armament Command (AMC)	Rock Island, IL	8
ARMCOM	Picatinny Weapons R & D Center (AMC)	Dover, NJ	9
ARPA*	Advanced Research Projects Agency	Rosslyn, VA	10
ASL	Albuquerque Seismological Laboratory	Albuquerque, NM	11
AVSCOM	Aviation Systems Command (AMC)	St. Louis, MO	12
BELL*	Bell Canada	Montreal, QU	13
BRL*	Ballistics Research Laboratory (Army)	Aberdeen, MD	14
ECOM	Electronics Command (AMC)	Fort Monmouth, NJ	15
ETS*	Educational Testing Service	Princeton, NJ	16
HUDSON*	Hudson Research Institute	Croton-on-Hudson,NY	17
MICOM	Missile Command (AMC)	Huntsville, AL	18
MIT*	Mass. Institute of Technology, Lincoln Lab	Cambridge, MA	19
NADC	Naval Air Development Center	Johnsville, PA	20
NCSL	Naval Coastal Systems Laboratory	Panama City, FL	21
NELC	Naval Electronics Laboratory Center	San Diego, CA	22
NRL	Naval Research Laboratory	Washington, DC	23
NSA*	National Security Agency	Fort Meade, MD	24
NSRDC*	Naval Ship Research and Development Center	Carderock, MD	25
NSWC-D	Naval Surface Weapons Center	Dahlgrin, VA	26
NSWC-WO	Naval Surface Weapons Center	White Oak, MD	27
NUC	Naval Undersea Center	San Diego, CA	28
NUSC	Naval Underwater Systems Center	New London, CO	29
NWC	Naval Weapons Center	China Lake, CA	30
RADC*	Rome Air Development Center	Rome, NY	31
SAC	Strategic Air Command (OFFUTT AFB)	Omaha, NE	32
SRI*	Stanford Research Institute	Menlo Park, CA	33
TROSCOM	Troop Support Command (AMC)	St. Louis, MO	34

RLL 30-SEP-75 17:18 26600

Listing of Client Organizations using NLS: First Draft

(J26600) 30-SEP-75 17:18;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /KWAC([ACTION]) ARC-LOG([INFO-ONLY]) SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC KWAC ARC-LOG; Clerk: RLL;

26600 Distribution

Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews,
Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters
Joseph L. Ehardt, Marilynne A. Sims, Elizabeth F. Finney, Lawrence A. Crain, E. S. VonGehren, Glenn A. Sherwood, Kathey L. Mabrey, Jeanne M. Beck, David A. Potter, Robert N. Lieberman, Terry H. Proch, Ronald P. Uhlig, Susan Gail Roetter, Michael A. Placko, Stanley M. (Stan) Taylor, Elizabeth J. Feinler, Rudy L. Ruggles, Frank G. Brignoli, Robert M. Sheppard, Richard W. Watson, Douglas C. Engelbart, James C. Norton, James H. Bair, Duane L. Stone, Inez M. Mattiuz, Connie K. McLindon, James C. Norton, Log Augmentation, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger

SGR 30-SEP-75 20:14 26602

Comment prompted by (33588,)

During the week before and after the Architect's meeting US people will be visiting each of the AMC remote sites and giving them an introduction to NLS. I'm working out the details of what to cover with JHB but thought you should know we're not teaching XED but NLS and this seems to meet with everyone's approval from AMC. 1

Comment prompted by (33588,)

(J26602) 30-SEP-75 20:14;;;; Title: Author(s): Susan Gail Roetter/SGR; Distribution: /DCE([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: SGR;

26602 Distribution
Douglas C. Engelbart,

DVN 30-SEP-75 23:24 26603

Re ETS Paper

I'm glad it turned out well. Proofs havent yet reached me, maybe because I have recently moved my office. In fact the directive (,Defaltfont;) is set to nine points. You may want to measure carefully before deciding between 10 and 11. If we send DDSI a tape tomorrow it will the same sort of time span before proof or camera-ready copy reaches you. If you make changes, you should start from my file (vanNouhuys,morgan,). It is open to copying. I will phone you first thing in the morning. 1

DVN 30-SEP-75 23:24 26603

Re ETS Paper

(J26603) 30-SEP-75 23:24;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /ROF([ACTION]) DMB([ACTION] dpcs notebook please) DAP([INFO-ONLY]) DPCS([INFO-ONLY] does anyone know of a large job going to DDSI in the next couple of days where this small paper could ride piggy back?) ; Sub-Collections: SRI-ARC DPCS; Clerk: DVN;

26603 Distribution

Richard O. Fortna, Delorse M. Brooks, David A. Potter, David A. Potter, Marilynne A. Sims, Delorse M. Brooks, Elizabeth F. Finney, Beverly Boli, Joseph L. Ehardt, James H. Bair, Robert N. Lieberman, Pat Whiting O'Keefe, James H. Bair, Robert Louis Belleville, Ann Weinberg, Thomas L. Humphrey, Jeanne M. Leavitt, Kirk E. Kelley, Duane L. Stone, Elizabeth J. Feinler, N. Dean Meyer, Dirk H. Van Nouhuys, Douglas C. Engelbart, James C. Norton, Richard W. Watson, Charles H. Irby,

DVN 1-OCT-75 00:10 26604

My Good Feelings and Wishes

I'll be sorry you aren't here with me, but I don't feel deserted or bad. Go easy on the guilt. It sounds to me like you are doing something good for yourself and may be for others. Of course that makes me glad. I feel relief, envy, and strong hope and expectation it will be worth your while. 1

DVN 1-OCT-75 00:10 26604

My Good Feelings and Wishes

(J26604) 1-OCT-75 00:10;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /CHI([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: DVN;

26604 Distribution
Charles H. Irby,

DVN 1-OCT-75 00:24 26605

Contact Report: Jim Sinclair of TRW Systems Group

Background: Earlier this year ARC had contact (journal,25384,) and (journal,25369,) with Herm Leon of a group with TRW Systems that does something in the area of man-machine interaction at McLean Virginia. This information came back to me via Ray Weil who is a close friend of mine involved in publications at TRW. Because the information had reached me through Ray I decided to pick up the trail in connection with DDPCS promotion, and called Leon whom I had also met years ago at TRW. 1

Contact: Jim Sinclair returned my call. He has apparently taken Leon's job. It is apparent that any interest in NLS is in an area loosely related to management information systems. I suggested Rob Lieberman was going to be in the Washington area in the next few weeks, should Rob call and investigate the possiblity of a visit. Sinclair encouraged such a call. Sinclair was familiar with some of Doug's old papers. In general he said they are operating a "test bed" for studies of things like human factors and experiments in command languages. They have recently upgraded their facility and acquired, among other things, an 11-70. One of their customers is DCA. It is a good time to approach them with new things. Sinclair also rembered talking last spring to two other people from SRI, not from ARC, maybe from ISG? I descirbed the functions of ISG and that sounded right, but none of the names I offered jogged his memory. He said he would look up the names and inform me. He would also like to talk to those peiple again if possible. 2

DVN 1-OCT-75 00:24 26605

Contact Report: Jim Sinclair of TRW Systems Group

(J26605) 1-OCT-75 00:24;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /RLL([ACTION]) KLM([ACTION] this is not for the docplan notebook, but would you give a copy to Dave and Norm anyway?) NRN([INFO-ONLY]) DRB([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: DVN;

26605 Distribution
Robert N. Lieberman, Kathey L. Mabrey, Norman R. Nielsen, David R. Brown,

RWW 1-OCT-75 12:20 26606

Some Funding and Contracting Arrangement Needs

Off and on over the past three years or so we have talked about some of the needs listed below, but never quite in the same context. Further with the large ARPA blanket type contracts, the need has never been critical, ARPA's withdrawal from this role now lends more urgency to establishing a more appropriate business environment for Development that recognizes the realities and difficulties associated with a long term commitment to the ongoing evolution of a large system. Besides active involvement in marketing over the next few months, I consider more planning in various dimensions an important aspect of my job, and creating the needed business environment is one important aspect of this area. 1

The situation as I see it is the following. As a system gets larger, the cost to add an incremental improvement increases in some non linear fashion. This phenomena results because of the increased number of parts that are impacted by each change and the number of people that must communicate with each other as system knowledge spreads. Its the old n squared problem in communications in varying forms. Clean modular design, well specified interfaces, good tools for system development can of course help keep the cost to change slope reasonably flat, butthe good design that does exist in NLS and the power of many of our tools we have much that could be done in these areas. And as we know from the work that went into the NLS 7 to NLS 8 conversion and the NLS 8 to NLS 9 conversion getting from here to there is generally more costly than we usually estimated based strictly on functional changes. 2

The question then becomes how to get the funding for the deeper type changes needed, for tool development etc. An analogy may be useful. If a system is thought of as a body then maybe one can think of new user or application features as new arms, legs, sense organs etc. It seems relatively easy to get people to see the need for these and to buy them. However, as you add them, there gets to be a need for a lzrger heart, more lung capacity, improved circulation, better nervous system etc., occassional reorganizations globally and locally. These can be costly and usually are required at certain points before the next user feature can be added and usually allow many more to be added after. 3

In other words the cost function for feature expansion has significant step functions as well as an increasingly steeper slope. The easy solution as each one of these occurs is to get the next feature buyer to pay for it. Buyers seem reluctant to do so, so the next solution is to find a sponser who will recognize the need for this level of system development and have a fairly large kitty for such purposes. Such sponsers are possible and we will look for both kinds, but realism inclines me to want to try to set up another type of arrangement also. 4

Some Funding and Contracting Arrangement Needs

What we need is a bank account that we can put dollars into from two types of taxes, taxes to Applications users, and taxes to applications developments. Then periodically we can withdraw funds for these purposes. These accounts could be accountable to the community of users and buyers of developments. 5

Another type of account needed is one where buyers who want to pool resources, commercial, government etc, can put money in an account for developments in a specific application area, can do so. When funds large enough to get started accumulate we can begin in that area. I am not a contracting wizard so am not sure how to make all this happen in the cost plus fixed fee type world, year by year type finacing that SRI is used to, but am sure having watched the new types of arrangements ARC and RADC have pioneered over the last couple of years that it can be done in these cases also. 6

Some Funding and Contracting Arrangement Needs

(J26606) 1-OCT-75 12:20;;;; Title: Author(s): Richard W. Watson/RWW; Distribution: /DCE([ACTION]) JCN([ACTION]) ARC-DEV([INFO-ONLY]) DLS([INFO-ONLY]) ; Sub-Collections: SRI-ARC ARC-DEV; Clerk: RWW;

26606 Distribution

Douglas C. Engelbart, James C. Norton, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Andy Poggio, David L. Retz, Jan A. Cornish, Larry L. Garlick, Delorse M. Brooks, Beverly Boli, James E. (Jim) White, Ann Weinberg, Kenneth E. (Ken) Victor, Dirk H. Van Nouhuys, Jonathan B. Postel, Elizabeth K. Michael, David S. Maynard, Karolyn J. Martin, Harvey G. Lehtman, Kirk E. Kelley, Charles H. Irby, Robert Louis Belleville, Don I. Andrews, Richard W. Watson, Douglas C. Engelbart, Duane L. Stone,

Documentation Weekly Report

Week ending 9/26/75 1

Bev 1a

This Week 1a1

Worked on proofing COM version of '73-74 Final Report. 1a1a

Went over documentation milestones in light of NSW funding changes. 1a1b

Continued to try to get Sec. Func. Guide through SRI printing. 1a1c

Next Week 1a2

Get Sec. Func. Guide out of printing. 1a2a

Continue to work on COM Final report. Send off to DDSI. 1a2b

Get back to work on xHelp,Base. 1a2c

Begin work on '74-75 Final Report. 1a2d

Kirk 1b

On Vacation 1b1

Documentation Weekly Report

(J26607) 1-OCT-75 14:51;;;; Title: Author(s): Beverly Boli/BEV;
Distribution: /SRI-ARC([INFO-ONLY]) DIRT([INFO-ONLY]) ;
Sub-Collections: SRI-ARC DIRT; Clerk: BEV;

26607 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, David C. Smith, Jonathan B. Postel, Priscilla A. Wold, Rita Hysmith, Pamela K. Allen, Delorse M. Brooks, Elizabeth F. Finney, Beverly Boli, Lawrence A. Crain, Kirk Sattley, Susan Gail Roetter, Robert N. Lieberman, Ann Weinberg, Kenneth E. (Ken) Victor, Douglas C. Engelbart, James H. Bair, Elizabeth K. Michael, Richard W. Watson, Elizabeth J. Feinler, Harvey G. Lehtman, Kirk E. Kelley, Laura E. Gould, Jeanne M. Beck, Dirk H. Van Nouhuys, James C. Norton Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

DAP 1-OCT-75 16:07 26608

RESPONSE TO COMMENTS BY DLS ON THE AGENDA

response to DLS <33586,>

RESPONSE TO COMMENTS BY DLS ON THE AGENDA

I have no objections to scheduling hard core stuff on Monday. Especially considering the fact that Bob said the meeting was to be held in a building that retains the atmosphere of a converted wharehouse (sic). I'll be arriving Sunday night anyway, and I agree completely with the need to get down to business immediately. 1

Along the same line, I too think that the whole morning is too much for introductory remarks. Let's keep them short. 2

I'll bring along a site report outlining NLS activities at ETS. This will be an update of the ETS Application Description circulated by JHB in August <33201,>. 3

I'll also bring along one or two products I think are of particular interest. 4

Discussion of costing arrangements is critical. 5

I'd like a DPCS session -- but will Dirk be able to make it to Boston? 6

RESPONSE TO COMMENTS BY DLS ON THE AGENDA

(J26608) 1-OCT-75 16:07;;;; Title: Author(s): David A. Potter/DAP;
Distribution: /KWAC([ACTION]) ; Sub-Collections: NIC KWAC; Clerk:
DAP; Origin: < POTTER, COMMENTS.NLS;1, >, 1-OCT-75 16:05 DAP
;;;;####;

26608 Distribution

Joseph L. Ehardt, Marilynne A. Sims, Elizabeth F. Finney, Lawrence A. Crain, E. S. VonGehren, Glenn A. Sherwood, Kathey L. Mabrey, Jeanne M. Beck, David A. Potter, Robert N. Lieberman, Terry H. Proch, Ronald P. Uhlig, Susan Gail Roetter, Michael A. Placko, Stanley M. (Stan) Taylor, Elizabeth J. Feinler, Rudy L. Ruggles, Frank G. Brignoli, Robert M. Sheppard, Richard W. Watson, Douglas C. Engelbart, James C. Norton, James H. Bair, Duane L. Stone, Inez M. Mattiuz, Connie K. McLindon,

Arguments for a USER LANGUAGE

User subsystems and programs should be written in a user language instead of L10 for several compelling reasons: 1

First, NLS is full of primitive entities (link, statement, file, content pattern) as well as primitive relations (statement A is the successor of statement B, link C points to statement D). Certainly, the user of DNLS and TNLS must learn these entites and relations, Yet L10 hardly deals AS A LANGUAGE with primitive entities at all; the user-turned-programmer can not find any of them enshrined in L10, other than the entities, string and text pointer. Rather, there exists a huge "library" of procedures to mainipulatate these entities (at a lower level, "data structures"). Thus: 1a

Secondly, to write a user program it is currently not sufficient to know L10. The user-turned-programmer must all of a sudden become conversant with innumerable procedures in order to mainipulate (at a lower level "program in terms of") these basic entities and operations and relations. Note, that most these procedures enjoy varying degrees of support against bugs and system changes. 1b

Thirdly, L10 is too loose (a virtue in an implementation language): many of the bugs I find I commit would be impossible in a typed-language. That is, the program would not compile until all parameters were passed the correct ("expected") type. Currently, such compile-time errors are rudely mapped onto run-time errors which the user must ferret out "gracefully" with (N)DDT. 1c

I envision programs written in this typed, user-language be pre-prossesed into L10 or other implementation language programs. Of course, syntax errors would be far more common than currently in L10 programs, and thus a better means of sending diagnostic messages to the user would have to be found. For instance, they could be inserted as substatements to the offending source statement as comments. 2

Example: 3

Below is a brief example of what a little procedure might look like in this language. Each editing command corresponds to a "primitive" operation in the NLS world. There would be a built-in for each major editing command, JUMPLINK is an example. Note the use of NLS file structure instead of semicolons and BEGIN, ENDs. While not central to the idea of a user language, it would benice to have the user-language be an good example !! expects an entity of type LINK and RETURNS(or more abstractly "has") a value of type STATEMENT. 3a

```
(example) PROCEDURE ( a : LINK, b : LINK, p : PATTERN, q :
STATEMENT ) : STATEMENT ;                                          3a1

   LOCAL:                                                          3a1a

      sam, joe: TEXTPOINTER                                        3a1a1

      susan: PATTERN                                               3a1a2

      tom: STATEMENT                                               3a1a3

   susan _ "*sam"                                                  3a1b

   p _ p, susan                                                    3a1c

   tom _ IF FIND p IN q THEN JUMPLINK a ELSE JUMPLINK b ;           3a1d

   RETURN( tom ) ;                                                 3a1e
```

Arguments for a USER LANGUAGE

(J26609) 1-OCT-75 16:51;;;; Title: Author(s): Jan A. Cornish/JAC3;
Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC;
Clerk: JAC3;

26609 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

NSW Project Status Report 1

Introduction 2

This is the monthly report on SRIs National Software Works contract efforts. This report indicates the status of each of the items in the contract statement of work (SOW), and of the reports required. 2a

Satement of Work 3

4.1 The contractor shall install and maintain the VM ELF operating System on the PDP-11 at AFDSDC. 3a

DONE -- The PDP-11 at AFDSCS has been using ELF operationally since 18-Aug-75. 3a1

4.2 The contractor shall install and maintain the FE software on the ISIC PDP-10X at Information Sciences Institute Marina del Rey CA and the PDP-11 at AFDSDC. The FE software includes the CLI, CML and L10. The CLI shall run on both the PDP-10X and the PDP-11. The CML and L10 compiliers shall run on the PDP-10X within the NLS environment. 3b

IN PROGRESS -- The Tenex version of the the CLI was debugged for new tools 15-Aug-75 and for old tools 1-Sep-75, the PDP-11 version of the CLI is in coding now. The CML compiler is working at ISIC as is the L10 compiler. 3b1

4.3 Using the software items in 4.1 and 4.2 the contractor shall provide the software necessary to support 20 simultaneous users, employing a mix of the following classes of terminal: 3c

4.3.1 Half duplex line at a time (only on PDP-10X from a TIP), 3d

NOT STARTED -- 3d1

4.3.2 Full duplex character at a time, 3e

IN PROGRESS -- Works now for both new and old tools on Tenex. 3e1

4.3.3 Two dimensional CRT terminal using the line processor, 3f

IN PROGRESS -- Display code is currently being debugged for the Tenex version of the frontend. 3f1

4.3.4 Defered Execution (DEX) cassette tape recorders (cassette program only on the PDP-10X). 3g

IN PROGRESS -- The Cassette program is currently being revised. 3g1

4.4 [task deleted 16-Sep-75] 3h

4.5 Using the software in items 4.1 thru 4.4 the contractor shall install and maintain the following NLS subsystems as tools within the NSW environment: 3i

4.5.1 Base 3j

IN PROGRESS -- The combination of Base for NLS 9.0, the CLI and a communication using the MSG protocol now works in a character at a time mode. The interface to the WM file system is in coding, but testing is not yet possible due to unavailability of the WM file system. If the WM file system becomes available by 1-Oct-75 we expect to have base integrated into NSW 31-Oct-75. 3j1

4.5.2 Sendmail 3k

NOT STARTED -- 3k1

4.5.3 Help 3l

IN PROGRESS -- Work has been initiated to convert the help subsystem from nls 8.5 to nls 9.0. 3l1

4.5.4 Graphics 3m

IN PROGRESS -- The graphics subsystem program and features have been debugged, but have yet to be integrated into nls 9.0 and nsw. Currently in a user acceptance testing phase. 3m1

4.5.5 Output Processor 3n

IN PROGRESS -- A limited hyphenation capability is under development, and the interface to George Lithograph for graphics proofs is being debugged. 3n1

4.5.6 Programs 3o

IN PROGRESS -- A few commands now work with nls 9.0 and the L10 compiler including the "compile file" command. 3o1

4.5.7 User Options 3p

NOT STARTED -- 3p1

4.5.8 and Caculator 3q

NOT STARTED -- 3q1

The frontend of these tools shall run on the ISIC PDP-10X and PDP-11. The backend of the tools shall run on the ISIC PDP-10X. 3r

4.6 The contractor shall provide the NLS Identification subsystem data elements to Computer Associatates Wakefield MA, along with interface specifications necessary to allow the use of the WM identification subsystem by the Sendmail tool. The contractor shall identify any additional WM features necessary to allow the send mail tool to operate across multiple hosts. 3s

IN PROGRESS -- The report is in draft stage and should be delivered by 15-Oct-75. 3s1

4.7 The contractor shall modify the Output Processor subsystems as necessary to provide the following documentation production capabilities: 3t

4.7.1 Preperation of documents containing mixed text and line drawings. 3u

IN PROGRESS -- The line drawing program and features have been debugged, but have yet to be integrated into nls 9.0 and nsw. Currently in a user acceptance testing phase. 3u1

4.7.2 Page-by-page formatting and proofing of the above on the Tektronix CRT. 3v

IN PROGRESS -- The page proofing program and features have been debugged, but have yet to be integrated into nls 9.0 and nsw. Currently in a user acceptance testing phase. Based on user feedback certain modifications are under way. 3v1

4.7.3 Output of the above on magnetic tape in a format compatible with the Singer 6000 and Comp 80 Computer Output to Microfilm (COM) devices. 3w

IN PROGRESS -- We have been able to text only documents using either of these devices since 1-Aug-75, we have not yet run

mixed text and graphics thru these devices but we have produced draft pages using the Tektronix copy printer. 3w1

4.8 The contractor shall provide on site services at AFDSDC, Gunter AFS AL to assist in applying the NLS tools to AFDSDC documentation and programming problems. 3x

IN PROGRESS -- We have a staff member who spends approximately half time at AFDSDC and is otherwise in daily contact with AFDSDC NSW users. 3x1

4.9 The contractor shall design and fabricate an advanced development model of a work station to support creation and editing of line drawings and text on commercially available CRTs. The contractor shall use the Digital Equipment Corp. (DEC) LSI-11 family of modules to implement the design. 3y

IN PROGRESS -- The phase one mouse interface is complete. The LSI-11 processor has not yet arrived. 3y1

4.10 Reliability - The contractor shall perform a relibility analysis and prediction of the system per MIL-HDBK-217B, dated Sep 74. The results of this analysis shall be submitted to the Government as part of the Interim Report. 3z

NOT STARTED -- NOTE: It is our understanding that this applies only to the advanced development model in item 4.9. (We would appreciate a copy of the specification.) 3z1

4.11 All computer programs developed under this effort shall be delivered to the Government. 3a@

NOT STARTED -- The software, of course is well under way, but the documentation for delivery to the Government has not yet begun. 3a@1

Contractually Required Reports 4

Milestones 1-Aug-75 4a

DONE -- 24-Jul-75 (26183,) 4a1

Identification System 15-Aug-75 4b

IN PROGRESS -- expected 15-Oct-75 4b1

Milestones 1-Sep-75 4c

SRI-ARCs Monthly Report on NSW Status

Milestones 1-Jul-75 4w

SRI-ARCs Monthly Report on NSW Status

(J26610) 1-OCT-75 17:04;;;; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /DLS([INFO-ONLY]) REM([INFO-ONLY]) WEC([INFO-ONLY]) ARC-DEV([INFO-ONLY]) ; Sub-Collections: SRI-ARC ARC-DEV; Obsoletes Document(s): ; Clerk: JBP; Origin: < POSTEL, MONTHLY.NLS;6, >, 1-OCT-75 16:58 JBP ;;;; ####;

26610 Distribution

Duane L. Stone, Robert E. Millstein, William E. Carlson, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Andy Poggio, David L. Retz, Jan A. Cornish, Larry L. Garlick, Delorse M. Brooks, Beverly Boli, James E. (Jim) White, Ann Weinberg, Kenneth E. (Ken) Victor, Dirk H. Van Nouhuys, Jonathan B. Postel, Elizabeth K. Michael, David S. Maynard, Karolyn J. Martin, Harvey G. Lehtman, Kirk E. Kelley, Charles H. Irby, Robert Louis Belleville, Don I. Andrews, Richard W. Watson, Douglas C. Engelbart,

1-oct-75 NSW Frontend Status

FE group reorgainization: 1

Since CHI is leaving ARC, DIA will be taking over the coordination of the FE group and the interface to the outside world for that group. Andy is now very strong on the CLI and will be taking over the CML compiler also. Don will continue work on the Display interface code and will probably work on the CLI also. Dave Smith will be doing the semantic help and user profile processes and generally learning more about how the whole thing works. Dave Retz will assist part-time with operating system issues/changes. 1a

CHI: 2

Debugging revised version of CLI that is to use small data context per user. Many interruptions lately have slowed progress here, but things are coming along fairly well. Must merge CHI changes with ANDY changes to get a version to run on PDP-11 before CHI leaves. We should shoot for a merged CLI in two to three weeks to allow sufficient time to debug 11 code. Andy should work with Dave Retz to get dummy version of CLI-11 loaded into appropriately configured ELF system. CHI should write section for last report on FE work. This will be five to ten page doc with appendices of existing material. 2a

ANDY: 3

Debugging loader for compacted grammars, changing CLI to interpret compacted grammars. I see no difficulty in merging changes with those of CHI by above deadline. I am learning tree-meta and will be getting together with DIA to discuss CML compiler. As soon as CLI changes are complete and debugged, will begin work to load it on the 11. This will include work on the cross-net loader. Also will get together with DSM and LLG to discuss changes necessary for good FE/BE interaction. 3a

DIA: 4

NOw finishing up coding of display package for 10 and 11 FE. Debugging of part of this code to begin in 2-3 days on 10. Also generally trying to find out what is going on with the FE and get up to speed for coordination. Interfacing with DSM while he works on DSPGEN in NLS backend. 4a

DAV: 5

Debugging the current HELP system and putting it in the new system as a tool. The goal is to get just the current features up first; I don't have too good a feeling for how big a job that is as yet. After HELP, I will write the user profile tool, which people seem

to feel will involve only a couple of days. Finally, we can begin to examine and implement some more elaborate and useful HELP features. 5a

1-oct-75 NSW Frontend Status

(J26611) 1-OCT-75 16:55;;;; Title: Author(s): Charles H. Irby/CHI;
Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC;
Clerk: CHI; Origin: < NSW-SOURCES, 1-OCT-FE-STATUS.NLS;4, >,
1-OCT-75 14:28 DAV ;;;;####;

26611 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

How to make a PYG out of yourself

Dave Smith will present his thesis work Monday at 3pm in the conference room. Come one, come all. 1

The thesis is titled "PYGMALION, A Creative Programming Environment." The work was done at Xerox PARC using their new ALTO computer and the Smalltalk language. The emphasis was on developing articulate visual communication between man and machine. The main innovations are: 2

(a) a dynamic representation for programs, an emphasis on DOING rather than TELLING; 2a

(b) an iconic representation for parameters and data structures requiring less translation from mental representations; 2b

(c) a "remembering" editor for icons; 2c

(d) descriptions in terms of the CONCRETE, which PYGMALION turns into the ABSTRACT. 2d

Every operation on icons has visual semantics in addition to the usual mechanical ones. Therefore the display becomes a visual metaphor for computing. The programmer need deal with operations only on the display level; the corresponding machine semantics are managed automatically. 3

Some time will be spent exploring ways to apply these concepts to the AKW environment. One obvious possibility is to create an iconic representation for each NSW process. The user would see on his display screen a concrete, visual image of each process, sub-process, communication link, etc., as well as a visual description of the effect of each operation. The need for articulate communication is going to become more acute as the number and complexity of tools available in the AKW increases. 4

DAV 1-OCT-75 17:55 26612

How to make a PYG out of yourself

(J26612) 1-OCT-75 17:55;;;; Title: Author(s): David C. Smith/DAV; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections: SRI-ARC; Clerk: DAV;

26612 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

DAV 1-OCT-75 21:18 26613

HELP group membership

Please add JHB to the HELP group. Thanks. 1

DAV 1-OCT-75 21:18 26613

HELP group membership

(J26613) 1-OCT-75 21:18;;;; Title: Author(s): David C. Smith/DAV; Distribution: /MLK([ACTION]) ; Sub-Collections: SRI-ARC; Clerk: DAV;

26613 Distribution
Marcia L. Keeney,

JBP 2-OCT-75 00:40 26614

IS PLUTONIUM BETTER THAN INTELLIGENCE ?

There is a good deal of enthusiam about the possibility that we may have an oppertunity to work with General Electric on a system to help them produce documents. Great. What are these documents about? How to run atomic reactors. Personally i am not convinced that atomic reactors are a good thing (i strongly urge everyone to read "Curve of Binding Energy"). But if atomic reactors are buily i do want their operating manuals to be complete and up to date. i other words i have mixed feelings about seeking this business. --jon. 1

JBP 2-OCT-75 00:40 26614

IS PLUTONIUM BETTER THAN INTELLIGENCE ?

(J26614) 2-OCT-75 00:40;;;; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JBP;

26614 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

```
FILE querysys % (l10,) (programs,querysys,rel,) %                    1

   REF tda;                                                          1a

   (qport) PROCEDURE(qflg); % Query language initialization. %       1b


      % This is the entry point into the query language. %           1b1

      % note that the flag qflg is not used! Originally used for
      diferentiating between "query" and "NIC Resource Query %      1b2

      % If global flag nlparse is FALSE we came from Exec directly
      and exit will be by execute quit; if nlparse is TRUE we came
      from nls and exit will do a jump file return.%
                                                                    1b3
      LOCAL STRING com[100], filename[50];                          1b4

      ON SIGNAL ELSE                                                1b5

         BEGIN                                                      1b5a

         crlf();                                                    1b5b

         typeas($"Error exit from query");                          1b5c

         IF NOT nlparse THEN %ceq()% RETURN                         1b5d

         ELSE                                                       1b5e

            BEGIN                                                   1b5e1

            ququit();     %Jump file return%                        1b5e2

            %GOTO STATE;%                                           1b5e3

            RETURN;                                                 1b5e4

            END;                                                    1b5e5

         END;                                                       1b5f

      crlf();                                                       1b6

      qustart($filename, $com);                                     1b7

      RETURN;                                                       1b8
```

```
    END.                                                              1b9

(qustart) PROCEDURE(filename, com); % Query parser. %                 1c

    % This parser accepts a Bring command and the name of one of
    four basic files. Interrogation of a file continues with the
    Show command. Quit causes exit back to EXEC or TNLS. A question
    mark will give command language description to user.%
                                                                      1c1
    LOCAL wkstid, loaded, param1, resptr[10];                         1c2
    LOCAL STRING apndir[50], tempsr[50];                              1c3
    REF filename, com, param1;                                        1c4
                                                                      1c5
    % Set up default directory string %                               1c6
       !JSYS gjinf;                                                   1c6a
       gdname(r2,$tempsr);                                            1c6b
       *tempsr* _ '<,*tempsr*,'>;                                     1c6c
    *apndir* _ "<NETINFO>";                                           1c7
    *filename* _ "<NETINFO>HELP-TOP";                                 1c8
    loaded _ FALSE;                                                   1c9
    crlf();                                                           1c10
    % load first "help" file %                                        1c11
       wkstid _ quloadit( &filename, $apndir);                        1c11a
    LOOP % parsing loop %                                             1c12
       BEGIN                                                          1c12a
       echon();                                                       1c12b
       ON SIGNAL                                                      1c12c
          = ofilerr;                                                  1c12c1
```

```
        BEGIN                                                          1c12c1a

        IF NOT (FIND SF(*filename*) ['<]) THEN % no directory
        name %                                                         1c12c1b

           BEGIN                                                       1c12c1b1

           *apndir* _ *tempsr*;  % append user directory %             1c12c1b2

           ON SIGNAL ELSE GO TO realerr;                               1c12c1b3

           wkstid _ quloadit( &filename, $apndir); % Try with
           different directory name %                                  1c12c1b4

           END;                                                        1c12c1b5

        (realerr);                                                     1c12c1c

        IF sysmsg THEN                                                 1c12c1d

           BEGIN                                                       1c12c1d1

           typeas(MESSAGE); % there WAS a dir, or failed twice
           %                                                           1c12c1d2

           crlf();                                                     1c12c1d3

           typeas($"File not found");                                  1c12c1d4

           sysmsg _ 0;                                                 1c12c1d5

           END;                                                        1c12c1d6

        *apndir* _ "<NETINFO>"; % restore default directory %          1c12c1e

        REPEAT LOOP;                                                   1c12c1f

        END;                                                           1c12c1g

     =statesig; REPEAT LOOP;                                           1c12c2

     ELSE;                                                             1c12c3

  crlf();                                                              1c12d

  typeas($"=");                                                        1c12e

  CASE inpcuc() OF                                                     1c12f
```

```
    ='S: % Show command %                                          1c12f1
       BEGIN                                                       1c12f1a
       echo($"how ");                                              1c12f1b
       quinlit(&com);                                              1c12f1c
       deblank(&com);                                              1c12f1d
       IF loaded THEN % file is present and loaded %               1c12f1e
          q1(wkstid, &com)                                         1c12f1e1
       ELSE                                                        1c12f1f
          BEGIN                                                    1c12f1f1
          typeas($"You have not specified a file yet,");           1c12f1f2
          END;                                                     1c12f1f3
       END;                                                        1c12f1g
    ='B: % Bring (file name) %                                     1c12f2
       BEGIN                                                       1c12f2a
       echo($"ring ");                                             1c12f2b
       quinlit(&com);              % read filename %                1c12f2c
       deblank(&com);                                              1c12f2d
       *filename* _ *com*;                                         1c12f2e
       loaded _ TRUE;                                              1c12f2f
       wkstid _  quloadit( &filename, sapndir);                    1c12f2g
       END;                                                        1c12f2h
    ='A: % Abbreviations %                                         1c12f3
       BEGIN                                                       1c12f3a
       echo($"bbreviations of hostnames");                         1c12f3b
       CASE inpcuc() OF                                            1c12f3c
```

```
        = CA, = EOL:                                              1c12f3c1
          BEGIN                                                   1c12f3c1a
          *filename* _  "<NETINFO>HELP-HOST";                     1c12f3c1b
          *apndir* _ "<NETINFO>";                                 1c12f3c1c
          loaded _ TRUE;                                          1c12f3c1d
          wkstid _ quloadit( &filename, $apndir );                1c12f3c1e
          END;                                                    1c12f3c1f
        ENDCASE REPEAT LOOP;                                      1c12f3c2
      END;                                                        1c12f3d
    ='C: % Computers %                                            1c12f4
      BEGIN                                                       1c12f4a
      echo(s"omputers");                                          1c12f4b
      CASE inpcuc() OF                                            1c12f4c
        = CA, = EOL:                                              1c12f4c1
          BEGIN                                                   1c12f4c1a
          *filename* _  "<NETINFO>HELP-COMPUTERS";                1c12f4c1b
          loaded _ TRUE;                                          1c12f4c1c
          wkstid _  quloadit( &filename, $apndir);                1c12f4c1d
          END;                                                    1c12f4c1e
        ENDCASE REPEAT LOOP;                                      1c12f4c2
      END;                                                        1c12f4d
    ='D: % Documentation %                                        1c12f5
      BEGIN                                                       1c12f5a
      echo(s"ocumentation");                                      1c12f5b
      CASE inpcuc() OF                                            1c12f5c
```

```
        = CA, = EOL;                                          1c12f5c1
          BEGIN                                               1c12f5c1a
          *filename* _  "<NETINFO>HELP-DOC";                  1c12f5c1b
          loaded _ TRUE;                                      1c12f5c1c
          wkstid _  quloadit( &filename, sapndir);            1c12f5c1d
          END;                                                1c12f5c1e
        ENDCASE REPEAT LOOP;                                  1c12f5c2
      END;                                                    1c12f5d
    ='H; % help, then back to previous file if any %          1c12f6
      BEGIN                                                   1c12f6a
      echo($"elp");                                           1c12f6b
      CASE inpcuc() OF                                        1c12f6c
        = CA, = EOL;                                          1c12f6c1
          BEGIN                                               1c12f6c1a
          crlf();                                             1c12f6c1b
          wkstid _ quloadit( $"<NETINFO>HELP-Q", sapndir
          );                                                  1c12f6c1c
          IF loaded THEN                                      1c12f6c1d
            BEGIN                                             1c12f6c1d1
            typeas($" Please wait ");                         1c12f6c1d2
            wkstid _ quloadit( &filename, sapndir );          1c12f6c1d3
            END;                                              1c12f6c1d4
          END;                                                1c12f6c1e
        ENDCASE REPEAT LOOP;                                  1c12f6c2
      END;                                                    1c12f6d
```

```
='I: % Ident file display %                                    1c12f7
   BEGIN                                                       1c12f7a
   echo(s"dent File");                                         1c12f7b
   CASE inpcuc() OF                                            1c12f7c
      = CA, = EOL:                                             1c12f7c1
         BEGIN                                                 1c12f7c1a
         *filename* _  "<IDENTFILE>IDENTS.MASTER";             1c12f7c1b
         loaded _ TRUE;                                        1c12f7c1c
         wkstid _ quloadit( &filename, $apndir );              1c12f7c1d
         END;                                                  1c12f7c1e
      ENDCASE REPEAT LOOP;                                     1c12f7c2
   END;                                                        1c12f7d
='L: % Liaison %                                               1c12f8
   BEGIN                                                       1c12f8a
   echo(s"iaison");                                            1c12f8b
   CASE inpcuc() OF                                            1c12f8c
      = CA, = EOL:                                             1c12f8c1
         BEGIN                                                 1c12f8c1a
         *filename* _  "<NETINFO>HELP-LIAISON";                1c12f8c1b
         loaded _ TRUE;                                        1c12f8c1c
         wkstid _  quloadit( &filename, $apndir);              1c12f8c1d
         END;                                                  1c12f8c1e
      ENDCASE REPEAT LOOP;                                     1c12f8c2
   END;                                                        1c12f8d
='N: % News %                                                  1c12f9
```

```
        BEGIN                                                   1c12f9a
        echo($"ews");                                           1c12f9b
        CASE inpcuc() OF                                        1c12f9c
           = CA, = EOL:                                         1c12f9c1
              BEGIN                                             1c12f9c1a
              *filename* _  "<NETINFO>HELP-NEWS";               1c12f9c1b
              *apndir* _ "<NETINFO>";                           1c12f9c1c
              loaded _ TRUE;                                    1c12f9c1d
              wkstid _ quloadit( &filename, $apndir );          1c12f9c1e
              END;                                              1c12f9c1f
           ENDCASE REPEAT LOOP;                                 1c12f9c2
        END;                                                    1c12f9d
      ='P: % Procedures %                                       1c12f10
        BEGIN                                                   1c12f10a
        echo($"rocedures");                                     1c12f10b
        CASE inpcuc() OF                                        1c12f10c
           = CA, = EOL:                                         1c12f10c1
              BEGIN                                             1c12f10c1a
              *filename* _  "<NETINFO>HELP-PROCEDURES";         1c12f10c1b
              *apndir* _ "<NETINFO>";                           1c12f10c1c
              loaded _ TRUE;                                    1c12f10c1d
              wkstid _ quloadit( &filename, $apndir );          1c12f10c1e
              END;                                              1c12f10c1f
           ENDCASE REPEAT LOOP;                                 1c12f10c2
        END;                                                    1c12f10d
```

```
='R: % Resource notebook display %                                  1c12f11
   BEGIN                                                            1c12f11a
   echo($"esource Handbook");                                       1c12f11b
   CASE inpcuc() OF                                                 1c12f11c
      = CA, = EOL:                                                  1c12f11c1
         BEGIN                                                      1c12f11c1a
         *filename* _  "<NETINFO>HELP-HANDBOOK";                    1c12f11c1b
         *apndir* _ "<NETINFO>";                                    1c12f11c1c
         loaded _ TRUE;                                             1c12f11c1d
         wkstid _ quloadit( &filename, $apndir );                   1c12f11c1e
         END;                                                       1c12f11c1f
      ENDCASE REPEAT LOOP;                                          1c12f11c2
   END;                                                             1c12f11d
='T: % Start over -- TOP command %                                  1c12f12
   BEGIN                                                            1c12f12a
   echo($"op -- start over");                                       1c12f12b
   CASE inpcuc() OF                                                 1c12f12c
      = CA, = EOL:                                                  1c12f12c1
         BEGIN                                                      1c12f12c1a
         *filename* _  "<NETINFO>HELP-TOP";                         1c12f12c1b
         loaded _ FALSE;                                            1c12f12c1c
         wkstid _  quloadit( &filename, $apndir);                   1c12f12c1d
         END;                                                       1c12f12c1e
      ENDCASE REPEAT LOOP;                                          1c12f12c2
   END;                                                             1c12f12d
```

```
='?: % help, then back to previous file if any %                    1c12f13
   BEGIN                                                            1c12f13a
   CASE inpcuc() OF                                                 1c12f13b
      = CA, = EOL:                                                  1c12f13b1
         BEGIN                                                      1c12f13b1a
         crlf();                                                    1c12f13b1b
         wkstid _ quloadit( $"<NETINFO>HELP-Q", $apndir
         );                                                         1c12f13b1c
         IF loaded THEN                                             1c12f13b1d
            BEGIN                                                   1c12f13b1d1
            typeas($" Please wait ");                               1c12f13b1d2
            wkstid _ quloadit( &filename, $apndir );                1c12f13b1d3
            END;                                                    1c12f13b1d4
         END;                                                       1c12f13b1e
      ENDCASE REPEAT LOOP;                                          1c12f13b2
   END;                                                             1c12f13c
%='V:  viewspecs  not needed (show and bring both force
viewspecs)%                                                         1c12f14
   %BEGIN%                                                          1c12f14a
   %echo($"iewspecs: Type ");%                                      1c12f14b
   %getvsp(); gets string from keyboard%                            1c12f14c
   %tresiev(tda,dacsp); take care of relative levels%               1c12f14d
   %&param1 _ xviewspecs(sresptr,1);                                1c12f14e
   cspupdate _ lda();                                               1c12f14f
   cspvs _ param1;                                                  1c12f14g
   cspvs[1] _ param1[1] ;                                           1c12f14h
```

```
    dpset(dspyes,[cspupdate],dacsp,endfil,endfil);          1c12f14i
    cmdfinish();                                            1c12f14j
    END;%                                                   1c12f14k
='Q: % quit %                                               1c12f15
    BEGIN                                                   1c12f15a
    echo($"uit ");                                          1c12f15b
    CASE inpcuc() OF                                        1c12f15c
      = CA, = EOL:                                          1c12f15c1
        BEGIN                                               1c12f15c1a
        IF NOT nlparse THEN %ceq()% RETURN                  1c12f15c1b
        ELSE                                                1c12f15c1c
          BEGIN                                             1c12f15c1c1
          %Jump file return%                                1c12f15c1c2
          ququit();                                         1c12f15c1c3
          %GOTO oldgps;%                                    1c12f15c1c4
          RETURN;                                           1c12f15c1c5
          END;                                              1c12f15c1c6
        END;                                                1c12f15c1d
      ENDCASE REPEAT LOOP;                                  1c12f15c2
    END;                                                    1c12f15d
ENDCASE                                                     1c12f16
    BEGIN                                                   1c12f16a
    crlf();                                                 1c12f16b
    typeas($"Not recognized");                              1c12f16c
    END;                                                    1c12f16d
```

```
      END;                                                          1c12g
    END.
                                                                    1c13
(quloadit) PROCEDURE( filename, apndir );                           1d
    LOCAL fileno, wkstid;                                           1d1
    LOCAL STRING sname[100];                                        1d2
    REF filename, apndir;                                           1d3
    *sname* _ *filename*;                                           1d4
    IF NOT (FIND SF(*sname*) ['<]) THEN % filename has no directory
    %                                                               1d5
       *sname* _ *apndir*, *filename*;                              1d5a
    %Xlf($sname, &tda);                                             1d6
    sysmsg _ 0;                                                     1d7
    freflnt();                                                      1d8
    fileno _ tda,dacsp,stfile;%                                     1d9
    % --- new code ---%                                            1d10
       fileno _ cloafil($sname);                                    1d10a
       curmkr _ orgstid;                                            1d10b
       curmkr,stfile _ fileno;                                      1d10c
       curmkr[1] _ 1;                                               1d10d
    *apndir* _ "<NETINFO>";                                         1d11
    crlf();                                                         1d12
    typeas($"--------");                                            1d13
    feedlt(&tda,$"BW");                                             1d14
    wkstid _ origin;                                                1d15
    wkstid,stfile _ fileno;                                         1d16
```

```
    IF (wkstid _ getsub(wkstid)).stpsid = origin THEN                    1d17
       BEGIN                                                             1d17a
       typeas($"File is empty");                                         1d17b
       END                                                               1d17c
    ELSE                                                                 1d18
       BEGIN                                                             1d18a
       feedlt(&tda, $"esb");                                             1d18b
       printg(&tda,wkstid, wkstid, brnchv,0);                            1d18c
       END;                                                              1d18d
    crlf();                                                              1d19
    typeas($"--------");                                                 1d20
    RETURN( wkstid );                                                    1d21
    END,                                                                 1d22

(q1) PROCEDURE (orstid, com); %converts "show" to appropriate
jump%                                                                    1e

    % given the string typed by the user, find a statement by that
    name in the current file.%                                           1e1
    LOCAL prvstid, wkstid;                                               1e2
    LOCAL TEXT POINTER z1, z2, z3, z4;                                   1e3
    LOCAL STRING com1[100], erout[100];                                  1e4
    REF com;                                                             1e5
    %Initialize stids %                                                  1e6
       wkstid _ prvstid _ orstid;                                        1e6a
    feedlt(&tda, $"Bw"); % Don't indent; all lines, all levels %         1e7
```

```
*erout* _ NULL;                                                    1e8
IF NOT (FIND SF(*com*) ^z1 [':] ^z2 _z2 ^z3 [ENDCHR] ^z4) THEN
   % User has typed a command like: show xyz CR %
                                                                   1e9
   BEGIN                                                           1e9a
   wkstid _ namingrp(prvstid, prvstid, &com, 1000);                1e9b
   IF wkstid # endfil THEN                                         1e9c
      BEGIN                                                        1e9c1
      quprout( wkstid );                                           1e9c2
      RETURN;                                                      1e9c3
      END                                                          1e9c4
   ELSE                                                            1e9d
      BEGIN                                                        1e9d1
      wkstid _ namingrp(orstid, endfil, &com, 1000);               1e9d2
      IF wkstid # endfil THEN                                      1e9d3
         BEGIN                                                     1e9d3a
         quprout( wkstid );                                        1e9d3b
         RETURN;                                                   1e9d3c
         END;                                                      1e9d3d
      crlf();                                                      1e9d4
      *erout* _ *com*," not found.";                               1e9d5
      typeas(serout);                                              1e9d6
      RETURN;                                                      1e9d7
      END;                                                         1e9d8
   END                                                             1e9e
```

```
ELSE                                                                1e10

   % User has typed: show xyz:abc CR
   which means: Find a branch named abc anywhere within the
   branch named xyz. %
                                                                    1e10a

   BEGIN                                                            1e10b

   *com1* _ z3 z4;                                                  1e10c

   *com* _ z1 z2;                                                   1e10d

   wkstid _ namingrp(orstid, endfil, &com, 1000);                   1e10e

   IF wkstid = endfil THEN                                          1e10f

      BEGIN                                                         1e10f1

      crlf();                                                       1e10f2

      *erout* _ *com*," not found.";                                1e10f3

      typeas($erout);                                               1e10f4

      RETURN;                                                       1e10f5

      END;                                                          1e10f6

   prvstid _ wkstid;                                                1e10g

   wkstid _ namingrp(prvstid, prvstid, $com1,1000);                 1e10h

   IF wkstid # endfil THEN                                          1e10i

      BEGIN                                                         1e10i1

      quprout( wkstid );                                            1e10i2

      RETURN;                                                       1e10i3

      END                                                           1e10i4

   ELSE                                                             1e10j

      BEGIN                                                         1e10j1

      crlf();                                                       1e10j2
```

```
            *erout* _ *com1*, " not found under ", *com*, '.;          1e10j3
            typeas($erout);                                            1e10j4
            RETURN;                                                    1e10j5
            END;                                                       1e10j6
         END;                                                          1e10k
      END.
                                                                       1e11
   (quprout) PROCEDURE (stid);                                         1f
      feedlt(&tda, $"esb");                                            1f1
      qubing(stid);                                                    1f2
      printg(&tda,stid, stid, brnchv,0);                               1f3
      RETURN;                                                          1f4
      END.
                                                                       1f5
   (qubing) PROCEDURE (stid); % process embedded viewspecs.%           1g

      % When a statement name is followed by a string such as (uv:)
      this procedure recognizes uv as viewspecs and turns them on.%
                                                                       1g1
      LOCAL STRING vstrng[10];                                         1g2
      LOCAL char;                                                      1g3
      *vstrng* _ NULL;                                                 1g4
      s2work _ stid;                                                   1g5
      s2work[1] _ fchtxt(getsdb(stid));                                1g6
      fechc1(forward,$s2work);                                         1g7
      IF (char _ READC($s2work)) # '( THEN RETURN;                     1g8
      IF (char _ READC($s2work)) # ': THEN RETURN;                     1g9
```

```
    LOOP                                                          1g10
      BEGIN                                                       1g10a
      char _ READC(ss2work);                                      1g10b
      IF char # ' ) THEN *vstrng* _ *vstrng*,char                 1g10c
      ELSE                                                        1g10d
        BEGIN                                                     1g10d1
        feedlt(&tda, $vstrng);                                    1g10d2
        RETURN;                                                   1g10d3
        END;                                                      1g10d4
      END;                                                        1g10e
    END.
                                                                  1g11
(ququit) PROCEDURE; % Quit and restore nls context. %             1h

    % This procedure is called by the parser when the quit command
    is encountered and entry was from nls.%
                                                                  1h1
    LOCAL STRING str[100];                                        1h2
    %gadjf($bi, $popls, $str, 1, &tda);%                          1h3
    %mvcbi();%                                                    1h4
    %dismes(2,$"Ququit Called");%                                 1h5
    RETURN;                                                       1h6
    END.                                                          1h7
                                                                  1h8
(quinlit) PROCEDURE(com); %read a string, handle special
characters.%                                                      1i

    % Uses inpcuc iteratively until it finds CA or EOL (in which
```

```
case it returns TRUE), Handles CD and BC normally, Question
mark forces the string 'H into com, This can be used as
third-level help but no current file takes advantage of it,
Feature could be taken out without effect on other procedures,%
                                                                  1i1
LOCAL char;                                                       1i2
REF com;                                                          1i3
LOOP                                                              1i4
   BEGIN                                                          1i4a
   *com* _ NULL;                                                  1i4b
   LOOP                                                           1i4c
      BEGIN                                                       1i4c1
      char _ inpcuc();                                            1i4c2
      CASE char OF                                                1i4c3
         =BC: IF com.L > empty THEN                               1i4c3a
            BEGIN                                                 1i4c3a1
            todco(*com*[com.L]);                                  1i4c3a2
            bkc(&com);                                            1i4c3a3
            END;                                                  1i4c3a4
         =CD; SIGNAL(statesig, 0);                                1i4c3b
         =CA: RETURN(TRUE);                                       1i4c3c
         =EOL: RETURN(TRUE);                                      1i4c3d
         ='?;                                                     1i4c3e
            BEGIN                                                 1i4c3e1
            *com* _'H ;                                           1i4c3e2
            RETURN(TRUE);                                         1i4c3e3
            END;                                                  1i4c3e4
```

```
            ENDCASE *com* _ *com*, char;                                    1i4c3f
          END;                                                              1i4c4
        END;                                                                1i4d
      END.                                                                  1i5
  (deblank) PROCEDURE (string); %deblank the string%                        1j
      % Eliminate leading blanks for show and bring command. %              1j1
      LOCAL TEXT POINTER z1, z2;                                            1j2
      REF string;                                                           1j3
      IF FIND $F(*string*) ^z1 $NP ^z2 THEN                                 1j4
        ST z1 z2 _ NULL;                                                    1j4a
      RETURN;                                                               1j5
      END.                                                                  1j6
  %----- things below have been added from oldnls sources ----%             1k
FINISH of query                                                             2
```

NIC/Query program

(J26615) 2-OCT-75 07:50;;;; Title: Author(s): Elizabeth J. Feinler/JAKE; Distribution: /GAS2([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JAKE; Origin: < NICPROG, QUERYSYS.NLS;2, >, 22-AUG-75 18:38 JAKE ;;;;####;

26615 Distribution
Glenn A. Sherwood,

RWW 2-OCT-75 12:14 26616

Weekly Development Meeting Series to begin next week

Starting next week, I plan to have a weekly meeting of Dev . Content will be seminars, planning discussions, design discussions, feeling discussions or what ever, These will last an hour, Dave Smiths Seminar Mon will start the series, We can pick a permanent time at next Mondays session, Anybody from ARC is welcome, Dick 1

RWW 2-OCT-75 12:14 26616

Weekly Development Meeting Series to begin next week

(J26616) 2-OCT-75 12:14;;;; Title: Author(s): Richard W. Watson/RWW; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: RWW;

26616 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

BEV 2-OCT-75 12:17 26617

Format Review for 74 Final Report

Doug--In response to your query about checking the format for the 74 Final Report: I have sent part of the report (the introductory sections and first chapter) down to DDSI for proofs. I thought this would be enough for you all to get a good idea of the format. The proofs should be back in about a week, and I will distribute them to Doug, Dick, and Jim at that time. Bev 1

BEV 2-OCT-75 12:17 26617

Format Review for 74 Final Report

(J26617) 2-OCT-75 12:17;;;; Title: Author(s): Beverly Boli/BEV;
Distribution: /RWW([ACTION]) DCE([ACTION]) JCN([ACTION]) ;
Sub-Collections: SRI-ARC; Clerk: BEV;

26617 Distribution
Richard W. Watson, Douglas C. Engelbart, James C. Norton,

PWO DVN 2-OCT-75 12:48 26618

Request for help for SRI Washington Office

Rita, could you give Maria Scott at SRI Wash, a call - I think she could use some help on checking out her hardware and getting to office 1 when the watts line is not available. 1

PWO DVN 2-OCT-75 12:48 26618

Request for help for SRI Washington Office

(J26618) 2-OCT-75 12:48;;;; Title: Author(s): Pat Whiting O'Keefe, Dirk H. Van Nouhuys/PWO DVN; Distribution: /RH([ACTION]) FEEDBACK([INFO-ONLY]) MCS([INFO-ONLY]) ; Sub-Collections: NIC SRI-ARC FEEDBACK; Clerk: DVN;

26618 Distribution
Rita Hysmith, Special Jhb Feedback, Maria C, Scott,

DVN 2-OCT-75 13:09 26619

Appropriate Behavior Towards L-10

It is extraordinarilly hard to lear at L-10, but if you are to paw it, it seems right to lear it first. 1

Appropriate Behavior Towards L-10

(J26619) 2-OCT-75 13:09;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /RA3Y([ACTION]) PAW3([INFO-ONLY]) NDM([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: DVN;

26619 Distribution
Raymond R. Panko, Patte A. Wood, N. Dean Meyer,

DVN 2-OCT-75 14:23 26620

Request for DPCS Subcollection Catalog

Jeff, do you think you could run title word and author catalogs of the DPCS subcollection say from Oct 1 '75 back 18 months or so to have for the KWAC meeting? 1

DVN 2-OCT-75 14:23 26620

Request for DPCS Subcollection Catalog

(J26620) 2-OCT-75 14:23;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /JCP([ACTION]) DPCS([INFO-ONLY]) ; Sub-Collections: SRI-ARC DPCS; Clerk: DVN;

26620 Distribution

Jeffrey C. Peters, David A. Potter, Marilynne A. Sims, Delorse M. Brooks, Elizabeth F. Finney, Beverly Boli, Joseph L. Ehardt, James H. Bair, Robert N. Lieberman, Pat Whiting O'Keefe, James H. Bair, Robert Louis Belleville, Ann Weinberg, Thomas L. Humphrey, Jeanne M. Leavitt, Kirk E. Kelley, Duane L. Stone, Elizabeth J. Feinler, N. Dean Meyer, Dirk H. Van Nouhuys, Douglas C. Engelbart, James C. Norton, Richard W. Watson, Charles H. Irby,

AKW System Design Note 3

Like the AKW framework as a whole, the AKW protocol must be layered to permit staged agreement and implementation by the many contractors involved (a lesson learned from our DPS experience). The following is an attempt (by the AKW "think" group) to specify the lowest and most fundamental level of the protocol. 1

This level is intentionally very simple, and no controversial ideas or features are (we hope) reflected here; nevertheless, wide implementation would have a major positive impact upon the course of resource sharing within the ARPANET in general and the AKW in particular. 2

This specification is a simplified version of the lowest level of DPS, and closely resembles the message formats proposed to Compass for MSG by CHI. 3

LEVEL ONE AKW PROTOCOL 4

1) two uni-directional, eight-bit Network connections will be established via standard ICP to a per-host AKW contact socket. 4a

2) the PCPB8 transmission format will prevail on each connection. 4b

2) any of the following messages may traverse either connection ("[x]" is shorthand for "x or EMPTY"): 4c

Invokes function in receiving process. 4c1

```
LIST (invoke, function,    arguments, tid)
      INDEX 1 uc CHARSTR   [LIST]     [INDEX]
```
4c1a

Invokes the indicated FUNCTION in the receiving process, using the ARGUMENTS provided. If a "transaction identifier" TID has been assigned by the sender and specified in the message, then an acknowledgment message specifying the same TID must eventually follow. 4c1b

Acknowledges function previously invoked by receiving process. 4c2

```
LIST (acknowledge, outcome, results, tid)
      INDEX 2      [INDEX]  [LIST]   INDEX
```
4c2a

Acknowledges the previously-invoked function that was assigned transaction identifier TID by the receiving process and performed by the sending process, and return its RESULTS. If an OUTCOME is specified, it is interpreted as an error number and the first and only result is then required to be a CHARSTR diagnostic message. 4c2b

Reports protocol violation, 4c3

LIST (error, number, diagnostic)
INDEX 3 INDEX CHARSTR) 4c3a

Reports a protocol violation committed by the receiving process by specifying its error NUMBER and a DIAGNOSTIC message. Invoking a non-existent function or specifying inappropriate arguments should be reported via the acknowledgment message, not via the error message. 4c3b

3) the following AKW-wide functions are defined: 4d

Initializes host process, 4d1

INIT (program, user, password, account)
CHARSTR CHARSTR CHARSTR CHARSTR) 4d1a

Initializes the process that contains it. This must be the first function invoked after establishment of Network connections, and identifies the PROGRAM containing the additional functions to be called. It also identifies the invoking process via USER name, PASSWORD, and ACCOUNT. 4d1b

On Tenex systems, PROGRAM will be a filename, with default directory (e.g. <AKW>) and default extension "SAV". 4d1b1

4d1c

AKW System Design Note 3

(J26621) 2-OCT-75 16:03;;;; Title: Author(s): James E. (Jim) White/JEW; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JEW; Origin: < JWHITE, AKWNOTE,NLS;4, >, 2-OCT-75 16:01 JEW ;;;;####;

26621 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

A Readable Foreman Spec

A more readable version of the 25-AUG-75 FOREMAN spec, ref (26323,)

A Readable Foreman Spec

1, Introduction 1

This is a rough draft of the Foreman specification [received from Warshall at BBNB 25-AUG-75 15:30]. It was produced in response to the known requirements of NLS. It is often lacking detail, but it should be sufficient to guide the NLS installers. An updated version will appear as soon as Rick Schantz and I have an opportunity to discuss the implementation of a TENEX Foreman. 1a

2, Arguments 2

ident = ? 2a

There clearly must exist a mechanism for differentiating between instances of the same tool. Ident may be an explicit code for such differentiation, or it may be implicit (if a Foreman can be so constructed). Since it is desirable to have a uniform tool builder interface, this issue will have to wait until we have had an opportunity to speak to several TBH people. In the function descriptions below, ident is given as an explicit argument. 2a1

qhelp = see WM-PROCEDURES.TXT 2b

entry-name = see WM-PROCEDURES.TXT 2c

output-attcode = see WM-PROCEDURES.TXT 2d

input-attcode = see WM-PROCEDURES.TXT 2e

qset = see WM-PROCEDURES.TXT 2f

filespec = see WM-PROCEDURES.TXT 2g

version-number = 2h

INTEGER Version-number is used as in TENEX to differentiate between different versions of a file with the same filespec. That is, the LND is maintained with a list of local file names for each filespec. Version number indexes that list. 2h1

qdisp = 2i

BOOLEAN Qdisp is T if DELIVER is supposed to make a copy of a file being put in the NSW file system, thereby leaving file being DELIVERed in the tool's workspace. If Idisp is F, then the WM may put the file in the NSW file system by renaming, thereby removing the file from the tool's workspace. 2i1

qreplace - BOOLEAN 2j

If Qreplace is T, then the WM will attempt to replace a previous copy of the file being DELIVERed. Otherwise, the WM will inform the tool/user that a previous copy exists and request further instructions. 2j1

success/failure-code - INTEGER 2k

A success/failure-code is always returned. Details will be forthcoming. It is not given as an explicit result in the definitions below. 2k1

semaphore-value 2l

Semaphore-value is the value associated with the semaphore attribute. See CATALOGUE-ENTRY.TXT. 2l1

qimmediate - BOOLEAN 2m

If qimmediate is T, then CREATE guarantees the immediate existence of the new file (e.g., in TENEX; the sequence open, close, open occurs). 2m1

3. Foreman Functions 3

These are described in functional notation since the exact details of call and return will surely be vastly different from TBH to TBH. 3a

3.1 Files, no movement 3b

1) DELETE(ident, filespec, qhelp) 3b1

-> NSW-filename 3b1a

DELETE verifies that filespec designates a unique file to which the user has DELETE access. This access is blocked by a set semaphore. If any assistance is required it is obtained via a HELP return (if qhelp is T) or by a direct FE HELP call (otherwise). Once a unique file has been found, it is put on the delete list. It will no longer be accessible to OPEN, COPY, RENAME, EXPORT, etc., but the actual file catalogue entry and file copies are not immediately deleted. The NSW-file-name of the deleted file is returned. This return could be a HELP return, requiring confirmation before the actual delete occurs. Alternately, since the file does not immediately disappear, UNDELETE could be supported. I invite comments. 3b1b

3b1c

2) RENAME(ident, filespec, entry-name, qhelp) 3b2

-> old-NSW-filename, new-NSW-filename 3b2a

RENAME verifies that filespec designates a unique file to which the user has DELETE access. This access is blocked by a set semaphore. If any assistance is required it is attained via HELP return or direct FE call as above. RENAME forms a new NSW-filename using entry-name and the tool-supplied attributes of the old file. It verifies ENTER access and unambiguity. As usual assistance is sought should there by any difficulty. The NSW catalogue is then altered to reflect the NSW name-part and both old and new NSW-filenames are returned. 3b2b

3) SETSEMAPHORE(ident, filespec, qhelp) 3b3

-> NSW-filename 3b3a

The WM verifies that the tool can use SETSEMAPHORE, that filespec designates a unique file to which the user has DELETE access, and that the semaphore is not already set. Assistance is obtained via HELP return or direct FE call as above. If all is well, the semaphore is set and the NSW-filename is returned. 3b3b

4) UNSETSEMAPHORE(ident, filespec, qhelp) 3b4

-> NSW-filename 3b4a

The WM verifies that filespec designates a unique file to which the user has DELETE access. Assistance is obtained as usual. If all is well, the semaphore is unset and the NSW-filename returned. 3b4b

5) READSEMAPHORE(ident, filespec, qhelp) 3b5

-> semaphore-value 3b5a

The WM verifies that filespec designates a unique file. Assistance is obtained as usual. The value of the semaphore attribute in the catalogue entry is returned. 3b5b

3.2 Files, movement 3c

1) COPY(ident, filespec, entry-name, qhelp) 3c1

-> src-NSW-filename, dst-NSW-filename 3c1a

COPy verifies appropriate accesses, etc,, and creates a new NSW catalogue entry and a new copy of the source file. 3c1b

2) OPEN(input-attcode, filespec, qset, qhelp) 3c2

OPEN is used by tools to obtain copies of NSW files. The WM verifies that there is a unique file designated by filespec to which the user has COPY access and which has the attributes implied by input-attcode. Assistance is obtained as usual. Should the user also have DELETE access to the file, then the semaphore is set if either the I/A tool descriptor indicates that it should be or if qset is T. In this event (the user having DELETE access) access is blocked unless the user indicates that he is willing to use an older version of the file if the semaphore is already set and the user cannot get it unset. In any event, if the semaphore is set, the user is informed. The WM makes a copy of the file into the workspace used by the tool, performing whatever conversions are necessary and possible. The LND is updated to reflect the opening of the new file. If the user spcified a new filespec in the course of identifying a unique file, then the LND entry is referenced by the new filespec - not the one supplied as an argument of OPEN. 3c2a

3) DELIVER(ident, output-attcode, entry-name, qdisp, qreplace, qhelp) 3c3

-> NSW-filename 3c3a

DELIVER is used by tools to insert files into the NSW file system. ENTER access and unambiguity are verified with assistance sought as usual. An entry is made in the NSW file catalogue and NSW copy is made of the file referenced by local filename. The original file is removed from/left in the tool's workspace according to qdisp. The LND is updated appropriately. 3c3b

[EXPORT, IMPORT, TRANSPORT were not spcifically requested for NLS, but they will presumably be callable through the Foreman as will any other future tool-callable WM procedure.] 3c3c

3.3 LND manipulation 3d

1) CREATE(ident, filespec, version-number, qimmediate) 3d1

A new LND entry is made if version-number is 1; otherwise an

existing LND entry is modified. A new local file is opened and referenced by the LND entry. 3d1a

2) CLOSE(ident, filespec, version-number) 3d2

The file identified by filespec, version-number is closed and the LND updated appropriately. 3d2a

3) LNDRENAME(ident, old-filespec, old-version-number, new-filespec, new-version-number) 3d3

4) LNDDELETE(ident, filespec,version-number) 3d4

5) LNDCOPY(ident, old-filespec, old-version-number, new-entry-name, new-version-number) 3d5

These three functions perform the obvious LND manipulations. The exact disposition of deleted version numbers is not yet decided. Comments are invited. 3d6

A Readable Foreman Spec

(J26622) 2-OCT-75 16:30;;;; Title: Author(s): Larry L. Garlick/LLG; Distribution: /CHI([INFO-ONLY]) DSM([INFO-ONLY]) HGL([INFO-ONLY]) JBP([INFO-ONLY]) KEV([INFO-ONLY]) EKM([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: LLG;

26622 Distribution
Charles H. Irby, David S. Maynard, Harvey G. Lehtman, Jonathan B. Postel, Kenneth E. (Ken) Victor, Elizabeth K. Michael,

Weekly Status Report: 3-OCT-75

Weekly Status Report: 3-OCT-75 1

JIM WHITE 1a

Major Responsibility: DPS Wrapup and AKW Framework Design 1a1

Accomplished Last Week 1a2

- Accepted with thanks and incorporated the critiques of RWW, RLL, BEV, JBP, and JAKE into the beginnings of a second draft of the DPS paper. 1a2a

- Began major reorganization of DPS paper, placing primary emphasis on core ideas and relegating other material to an appendix. 1a2b

- Met with RWW, DCE, CHI, JBP, DAV, and KEV re AKW system design; wrote and distributed second (26548,) and third design notes. 1a2c

Scheduled Next Week 1a3

- Complete and distribute second draft of DPS paper for ARC review. 1a3a

- Continue AKW system design exploration. 1a3b

Weekly Status Report: 3-OCT-75

(J26623) 2-OCT-75 16:31;;;; Title: Author(s): James E. (Jim) White/JEW; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JEW; Origin: < JWHITE, SISMSG,NLS;3, >, 2-OCT-75 16:29 JEW ;;;;####;

26623 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

RLL 2-OCT-75 16:47 26624

Request for leads in Wash area/ RLL to Wash week of 20 OCT

See <bbnb,arc-log,alog,> for databaase of contact reports for the last nine months. See <bbnb,arc-log,names,> for database of people related to our marketing effort.

RLL 2-OCT-75 16:47 26624

Request for leads in Wash area/ RLL to Wash week of 20 OCT

I will be in the Washington, DC area the week of 20 Oct 75. If anyone has any organization or person that seems suitable for me to contact re utility service prospects, please let me know. Names, phone numbers are welcomed. Thanks Rob. 1

RLL 2-OCT-75 16:47 26624

Request for leads in Wash area/ RLL to Wash week of 20 OCT

(J26624) 2-OCT-75 16:47;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections: SRI-ARC; Clerk: RLL;

26624 Distribution

Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, Israel A. Torres, Jan H. Kremers, Susan K. Ocken, Raphael Rom, David C. Smith, Buddie J. Pine, Andy Poggio, David L. Retz, Laura J. Metzger, Karolyn J. Martin, Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Ann Weinberg, Adrian C. McGinnis, Robert S. Ratner, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White

DAP 3-OCT-75 10:14 26625

Word Processing at ETS

ETS is about to get involved in a study of word processing and document production. This is an appeal for advice, for the sharing of whatever knowledge KWAC possesses.

Word Processing at ETS

Almost everyone at ETS is engaged in word processing of one sort or another. In a real sense, all this means is that we deal in knowledge, ideas committed to paper or some other medium. The question with which we are faced is not whether or not to get involved in some new thing called word processing, but rather how most efficiently to handle our current word processing needs. If recent technological advances in automated word processing can reduce the time and cost of our word processing, or improve our productivity, we should use these tools in our daily work; if not, we should abandon them until such time as they meet these criteria. 1

The problem, of course, is that we don't know the extent to which currently available tools actually meet our needs. Although several different approaches to automated word processing are currently in use at ETS (NLS is only one of these), we know little about their relative merits in relation to our needs; moreover, I am not aware of any coordinated effort to fill this gap in our knowledge. The growth in the use of NLS is a case in point, for it has occurred not as a result of any real decision to systematically explore what such a tool can do for ETS, but rather as a result of one individual's conviction that it represents a tool of tremendous power and potential. 2

The same could be said of other approaches. ATS, for example, is used in the preparation of the Standards Manual; Publications is leasing automated text editing and composition equipment; and I periodically hear informally that others are experimenting with other methods. Even those in the vast majority who are basically unaware of the availability of automated approaches to word processing are in a sense a part of this same haphazard experiment, for the processes they use to get ideas down on paper have no more been subjected to systematic study on an organizational level than have any of the automated techniques. 3

ETS is about to begin at my urging a study of word processing and document production throughout the organization. The study will be conducted by our Office of Management Services, a sort of a centralized internal consulting group. They do know what word processing is, and they have some notion of the range of power represented by the currently available tools. In addition, we have some limited knowledge (as described above) of the various things currently going on in this area at ETS. 4

This study will have two primary objectives: 5

1. Needs assessment -- In what word processing activities do we currently engage? Furthermore, what might we do if our word processing tools were more powerful? 5a

2. Evaluation -- What are the comparative strengths and weaknesses of current approaches to word processing, both automated and conventional, in relation to our needs? This should include but not be limited to criteria of cost-effectiveness. 5b

I don't expect KWAC to be able to help us much in the area of needs assessment. If we don't know what we're doing and what we need, I can hardly hope that you do. But I do think -- hope -- suspect -- that our community represents a wealth of knowledge vis-a-vis the state of the art, e.g., 6

What tools are currently available? NLS is not the only system around; it's probably not the best one for all of our diverse needs (although it hopefully is for some). 6a

Which tools are best for which purposes? In your experience, what applications represent efficient use of a system like NLS, and what needs are better met by other approaches? 6b

I'd very much appreciate any hints, advice, or knowledge you can provide. I think we're headed in the right direction, but I have limited confidence in our ability to get far. As Pat O'Keefe indicated in <1journal, 33626,>, the number of available tools has grown at a pace that can best be termed chaotic. If you can help with suggestions on how to get a handle on the available tools and their capablilties, we'd be well on our way. 7

Word Processing at ETS

(J26625) 3-OCT-75 10:14;;;; Title: Author(s): David A. Potter/DAP;
Distribution: /KWAC([ACTION]) ; Sub-Collections: NIC KWAC; Clerk:
DAP; Origin: < POTTER, KWACMAIL,NLS;1, >, 3-OCT-75 10:10 DAP
;;;;####;

26625 Distribution

Joseph L. Ehardt, Marilynne A. Sims, Elizabeth F. Finney, Lawrence A. Crain, E. S. VonGehren, Glenn A. Sherwood, Kathey L. Mabrey, Jeanne M. Beck, David A. Potter, Robert N. Lieberman, Terry H. Proch, Ronald P. Uhlig, Susan Gail Roetter, Michael A. Placko, Stanley M. (Stan) Taylor, Elizabeth J. Feinler, Rudy L. Ruggles, Frank G. Brignoli, Robert M. Sheppard, Richard W. Watson, Douglas C. Engelbart, James C. Norton, James H. Bair, Duane L. Stone, Inez M. Mattiuz, Connie K. McLindon,

SGR 3-OCT-75 12:35 26626

Test Message - This will be over 1000 but under 2000 to see what happens

This message will be over 1000 characters but under 2000 characters to see how it is delivered - in its entirety or as a citation, word word word word word word word word word wor dword word word word woed wrod weod wrod wrod wrod wro wr word word word word word wrod wrod wrod wrod wro wrod wrod wrod wrod wrod wrod wordword word word wrod word wrod wrod word word word word wrod wrod word word word word word word word word word word word word wrod rowd word word word word word word word word word word word word word word word word word word word word word word word word word word wordword word word word word wod wrod wrod wrod word word word word word word word word word word wrod wrod word wrod word word word word word word word wrod word word word word word word word word word word word word word word word word word word word wor dword word word word word word word word word word word word word word word test test test test test test test test test test test test test test test test test test test test test test test test test testt test test test test test test test test test tes test test test test test test test test test test test testt test test test test test test testtest test test test test test test test test test 1

SGR 3-OCT-75 12:35 26626

Test Message - This will be over 1000 but under 2000 to see what happens

(J26626) 3-OCT-75 12:35;;;; Title: Author(s): Susan Gail Roetter/SGR; Distribution: /US([INFO-ONLY]) ; Sub-Collections: SRI-ARC US; Clerk: SGR;

26626 Distribution
Susan Gail Roetter, Priscilla A. Wold, Jeanne M. Beck, Pamela K. Allen, Rita Hysmith, Sandy L. Johnson,

SGR 3-OCT-75 16:41 26627

Description of how NLS is expected to be taught at remote AMC sites

The Basic Course (32609,) will be necessary to accompany this description. Any suggested changes should be brought to my attention by Monday afternoon. It should also be noted that the journal delivery for all AMC users has been changed to both network and online.

Description of how NLS is expected to be taught at remote AMC sites

The following is a list of modifications to the normal mode of teaching the Basic Course (32609,) that will be used when teaching remote AMC users NLS over the next couple of weeks. It should be noted that most of the omissions are because these users all received TENEX and MSG training during the recent past. In addition to the following, default viewspecs need to be changed for each person (each ident associated with each directory) to be my. 1

p.3 Definitions for the Course Outline - These will be deemphasized as much as possible 1a

p.4 Login will not be taught and Goto Tenex will be taught instead of Quit Nls 1b

p.5 Show Directory will not be taught 1c

p.6 Insert Text only at the end of a statement 1d

p.7 Omit Delete File and all (2)'s (cover Move and Copy Statement if time allows) 1e

p.8 Cover Interrogate with emphasis on submitting Files (sndmsg should be used for messages); add the Show Record command for the purpose of 1) finding out who authored an item, 2) who was on the distribution or who to distribute it to and 3) to find out someone's directory name 1f

p.9 Skip page and instead teach reading mail by MSG (shouldn't involve teaching - they should already know it) with Print Branch #####, for citations; discuss the information in a citation and why it appears rather than the message 1g

p.10-11 Omit 1h

p.12 Reiterate the use of FEEDBACK and note the SRI-ARC phone numbers - omit all else except CTRL-C for use in emergencies 1i

Point them to the command summary at the end of the course as a reference for what they should know. 1j

Leave some Primers in case anyone feels like delving in any further. 1k

SGR 3-OCT-75 16:41 26627

Description of how NLS is expected to be taught at remote AMC sites

(J26627) 3-OCT-75 16:41;;;; Title: Author(s): Susan Gail Roetter/SGR; Distribution: /ARC-APP([ACTION]) ESV([ACTION]) ; Sub-Collections: SRI-ARC ARC-APP; Clerk: SGR; Origin: < ROETTER, AMC-CCURSE,NLS;2, >, 3-OCT-75 16:36 SGR ;;;;####;

26627 Distribution

Israel A. Torres, Buddie J. Pine, Laura J. Metzger, Priscilla A. Wold, Pamela K. Allen, Jeffrey C. Peters, Marcia L. Keeney, Jeanne M. Beck, Rodney A. Bondurant, Douglas C. Engelbart, Jeanne M. Leavitt, Susan Gail Roetter, Raymond R. Panko, Adrian C. McGinnis, James C. Norton, J. D. Hopper, Elizabeth J. Feinler, James H. Bair, Robert N. Lieberman, N. Dean Meyer, Sandy L. Johnson, Martin E. Hardy, E. S. VonGehren,

G E Nuclear Engineering Division Proposal Outline and Responsibilities

G E Nuclear Engineering Division Proposal Outline and Responsibilities

G E Nuclear Engineering Division Proposal Outline and Responsibilities

DVN 3-OCT-75 16:26 26628

G E Nuclear Engineering Division Proposal Outline and Responsibilities

(J26628) 3-OCT-75 16:26;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /RLB2([ACTION]) RWW([ACTION]) SGR([ACTION]) RA3Y([ACTION]) DOCPLAN([INFO-ONLY]) ; Sub-Collections: SRI-ARC DOCPLAN; Clerk: DVN; Origin: < VANNOUHUYS, TREE,NLS;3, >, 3-OCT-75 16:22 DVN ;;;;
Here is a skeleton G E proposal to synchronize our heads, I gave one cpy to RWW and one to RLB2, then I chatted with Dick briefly and RLB2 and I added the responsiblities,####;

26628 Distribution
Robert Louis Belleville, Richard W. Watson, Susan Gail Roetter, Raymond R. Panko, Joseph L. Ehardt, Raymond R. Panko, James H. Bair, David R. Brown, Glenn A. Sherwood, N. Dean Meyer, Kathey L. Mabrey, Norman R. Nielsen, Thomas L. Humphrey, Robert Louis Belleville, Elizabeth K. Michael, Richard W. Watson, James C. Norton, Robert N. Lieberman, Pat Whiting O'Keefe, Douglas C. Engelbart, Dirk H. Van Nouhuys,

It turns out that adding right justification to line printer output is not a budget item anywhere. It is my job to try to find ways to make things like that happen and maybe I will, but in the mean time I see the following more-or-less unsatisfactory options: 1

Go to COM where it is all pretty easy. You could set up the paragraph title surrounded by whitespace so that the typist types in just the word and a special character, or maybe two, and a program later keyes on the special character and sets up the spacing by inserting 's as appropriate. 1a

Have a typist justify it by hand online with spaces and carriage returns as a typist probably justifies it now on a typewriter. 1b

Not justify on the right (You will find ragged right fashionable on things like corporate annual reports these days). 1c

In either of these two cases the spacing around the paragraph heading could be handled by a program as noted for COM. 1d

Mix NLS with RUNOFF as you did. 1e

I recommend COM if you can stand the turn-around time. 1f

The NSF Editorial Processing Center proposal and the proposal we are now writing to G.E. (33556,) both call for output to a double-raster electrostatic printer. If you could get access to one, that would be a solution that could make use of the COM right justification. But that is six months away at best if ever. 1g

2

Format of ETS Newsletter

(J26629) 3-OCT-75 19:09;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /DAP([ACTION]) DMB([ACTION] dpcs notebook please) DPCS([INFO-ONLY]) ; Sub-Collections: SRI-ARC DPCS; Clerk: DVN; Origin: < VANNOUHUYS, POT,NLS;1, >, 3-OCT-75 18:52 DVN ;;;;####;

26629 Distribution

David A. Potter, Delorse M. Brooks, David A. Potter, Marilynne A. Sims, Delorse M. Brooks, Elizabeth F. Finney, Beverly Boli, Joseph L. Ehardt, James H. Bair, Robert N. Lieberman, Pat Whiting O'Keefe, James H. Bair, Robert Louis Belleville, Ann Weinberg, Thomas L. Humphrey, Jeanne M. Leavitt, Kirk E. Kelley, Duane L. Stone, Elizabeth J. Feinler, N. Dean Meyer, Dirk H. Van Nouhuys, Douglas C. Engelbart, James C. Norton, Richard W. Watson, Charles H. Irby,

BEV 3-OCT-75 21:18 26630

Documentation Weekly Report

'74 Final Report to Com;Xhelp, Base progressing; Sec. Func. Guide stuck for a week.

Documentation Weekly Report

Week ending 10/3/75 1

Bev 1a

This Week 1a1

Finished first pass at COM version of '74 Final Report, Sample chapters off to DDSI. 1a1a

Completed first pass of rewrite/edit of Xhelp,Base. Ready for Kirk to look at. 1a1b

Secretarial Functions Guide got stuck in SRI printing waiting for binders. 1a1c

Next Week 1a2

Begin work on Xhelp, Core. 1a2a

Start gathering stuff for last Final Report. 1a2b

Review COM proofs of '74 Final Report. 1a2c

Kirk 1b

On Vacation 1b1

BEV 3-OCT-75 21:18 26630

Documentation Weekly Report

(J26630) 3-OCT-75 21:18;;;; Title: Author(s): Beverly Boli/BEV;
Sub-Collections: SRI-ARC; Clerk: BEV;