RLL 25-NOV-74 13:06 24608

This is close to the actual words that were said in the video tape made fo ONR 1974. It differs because of improvements made after taping. Disciption of actions taking place are in square brackets; Actins to be performed at the display console are in double pound signs. Links refer to files in the LIEBERMAN directory(now archived). Some value might accrue by reading this script for those giving demonstrations of NLS, the philosophy might be of particular interest. Feel free to use any of this. Thank you.

(script) 1

(s1) opening scene 1a

[OUTPUT = full tasker,] 1a1

[SRI-ARC insignia - prefer a real one not a NLS one, (demo,020:wdg)] 1a2

Welcome to the Augmentation Research Center at Stanford Research Institute, 1a3

[Insignia fades away after above statement is completed,] 1a3a

[OUTPUT = full on speaker,] 1a3b

[CAMERA = on speaker standing at one end of the conference room] 1a3c

For the next few minutes we hope to convey the capabilities of a computer-augmented environment which has been under development here for over twelve years, 1a4

The objective of our effort ## J S ## is to increase the capabilities and improve the performance of individuals and groups whose prime function is to work with information, 1a5

[OUTPUT= split screen tasker on bottom, speaker on top,] 1a5a

[(demo,021:wdg) top/bottom video split with small bottom view of display screen with text "knowledge worker - works with information or knowledge". Put it up before this statement begins,] 1a5b

These ## J S ## knowledge workers may include administrators, managers, scientists, secretaries, students, technicians, and lawyers, ## six times viewspecs: bf ## 1a6

[OUTPUT = Full tasker,] 1a6a

[(demo,022:wdg) Faded in background to one side a listing of the various classes of people. Have first item up only (viewspec: gd). Then reveal item as they are spoken using viewspecs: bf repeatedly,] 1a6b

[Camera pulls back, Split disappears and tasker is superimposed on OUTPUT,] 1a6c

To facilitate their work, we have ## J S ## integrated various

tools and techniques to provide a useful, non-interferring, and flexible environment. 1a7

[OUTPUT = speaker on top ; tasker on bottom / split shot.] 1a7a

[(demo,030:wdg) Bottom window: "USEFUL, NON-INTERFERRING, AND FLEXIBLE"] 1a7b

This online computer environment ## J S ## is called NLS for "On Line System". 1a8

[(demo,023:wdg) Show at bottom 'NLS - Online System'.] 1a8a

[Speaker walks to Doug's office; camera follows with wide angle to get as much of the room as possible.] 1a8b

The three core ## J S ## capabilities which are aided are reading (which includes viewing and studying textual material); ## J S ## writing (which includes composing, editing, and printing text); ## J S ## and communicating (which includes distributing documents and messages, conferencing, and recording dialog). 1a9

[OUTPUT = superimposed: tasker and camera.] 1a9a

[Top/bottom split: small bottom window lists each of the three views below as they are spoken.] 1a9b

[(demo,043:wdg) reading - studying and viewing 1a9b1

(demo,049:wdg) Writing - composing, editing, and printing text. 1a9b2

(demo,050:wdg) Communicating - distributing documents and messages, conferencing, and recording dialog.] 1a9b3

To be ## J S ## useful, the environment must include a coherent set of interface devices ## viewspecs: bf ##, management methods## viewspecs: bf ##, and technology transfer procedures. Thus we are also involved in these areas. 1a10

[OUTPUT = superimposed: tasker and camera.] 1a10a

[(demo,0142:wdg) Bottom screen shows "interface devices, (demo,0143:wdg) management methods, and (demo,0144:wdg) technology transfer procedures". Key words appear as they are mentioned.] 1a10b

First, let's talk to our director and the originator of our Augmentation Rearch Center, Douglas Engelbart. 1a11

[CAMERA = zoom back and fad to black.] 1a11a

(s2) Doug's talk 1b

[CAMERA = wide angle interior shot of DCE office. DCE in front of tasker. He is typing at the console using the mouse and keyset.] 1b1

[CAMERA = zoom to DCE for close up.] 1b2

[Kept short and pungent so that the words are remembered as we look at display NLS later.] 1b3

[CAMERA = zoom back from DCE to long shot to initial view of office.] 1b4

(s3) Display workstation 1c

Now we will show you the environment in which we work at the Augmentation Research Center. 1c1

[CAMERA = On speaker who is facing camera in front of work station. Have a wide shot of station so that the entire (or most) workstation is seen.] 1c1a

[His actions are slow enough so that the voice can explain, also the worker himself is visible (that is no close-ups except when he does perform a step).] 1c1b

I am now at one of our display workstations. 1c2

There are four components to this workstation. 1c3

1c3a

[Speaker turns to station; OUTPUT splits so lower third of screen is tasker.] 1c3a1

First, there is a display screen - similar to a TV set. It acts like a window through which we read and point to information in a document. 1c3b

[CAMERA = on display.] 1c3b1

[OUTPUT = Split bottom from tasker.] 1c3b2

[(demo,072:wdg) on tasker.] 1c3b3

Second ## J S ##, we have a standard teletypewriter keyboard. 1c3c

[CAMERA = on keyboard.] 1c3c1

[(demo,071:wdg) Now change to 'keyboard' view.] 1c3c2

[Pull back.] 1c3c3

Third ## J S ##, there is a specially built keyset, similar to five piano keys, which duplicates every character on the keyboard. 1c3d

1c3d1

[CAMERA = on keyset; then hand is positioned on it.] 1c3d1a

By playing chords on the keyset like on a piano you can efficiently send any character to the computer with one hand. 1c3d2

[(demo,070:wdg)] 1c3d2a

Fourth ## J S ##, there is a special device called a mouse which is electronically connected to the pointer on the display screen. 1c3e

[CAMERA = on mouse.] 1c3e1

[(demo,052:wdg) View is "MOUSE", "SIMPLE", "CONVENIENT", "RELIABLE".] 1c3e2

When the mouse moves across the desk top, the pointer or as we call it a bug moves in a like manner across the screen. 1c3e3

In this way we can quickly and precisely point to any character on the screen with one hand. It only takes a few minutes to adapt to using the mouse. 1c3e4

The buttons on the mouse act as command controls and shift keys for the keyset. 1c3e5

[Camera on mouse; fingers pressing buttons. Split screen: keyset and mouse on top.] 1c3e5a

[(demo,053:wdg) Screen is now of window displaying various

functions mentioned below, viewspecs: dg then bf repeatedly. (RETRIEVING, READING, COMPOSING, EDITING, SENDING, and ORGANIZING TEXTUAL INFORMATION) Each appears as it is mentioned. Mouse directs attention to it. This is done by using viewspecs to see more levels.] 1c4

[CAMERA = Zooms back to view entire workstation.] 1c5

[Hands and TV are the important points. Speaker need not be wholely seen.] 1c6

By ## J S ## interacting with these four components, I can communicate easily and efficiently to the computer system. 1c7

[OUTPUT = tasker is superimposed.] 1c7a

[TASKER = (demo,0xx:gd) The names of the four components.] 1c7b

The ## J S ## system will aid him in retrieving, reading, composing, editing, sending, and organizing textual information. 1c8

Let's now look more closely at our display window ## J S ##. 1c9

[Camera on speaker and workstation.] 1c9a

[Camera now zooms in to display screen. Then switch to direct taping from display.] 1c9b

[Mouse directs attention.] 1c9c

(s4) entering NLS 1d

The screen is divided into two parts. The upper 6 lines contains information about the current command and other useful feedback from the system ## J S ##. 1d1

[(demo,0120:wdg) Show view with arrows pointing upward and words 'feedback area'.] 1d1a

The lower part is our window to the document currently being viewed ## J S <CD> ##. 1d2

[(demo,0121:wdg) Show view with text area boxed.] 1d2a

You direct the system by typing commands. 1d3

The commands used are usually combinations of a verb and a

noun. The system, when ## D W ## it recognizes the command word, completes it and displays helpful prompting information. 1d4

[(demo,0124:wdg) Split video screen with bottom one having hand typing one letter commands, namely, d w, on the keyset. The top side will have examples of commands.] 1d4a

[Speaker turns from looking at display and faces camera.] 1d4b

In order to gain a better understanding on how these tools can be applied, let's briefly look at one office application. 1d5

(s5) Montage (not video taped) 1e

1e1

[Camera is on manager working at his desk (DCE's room). He is talking on the phone.] 1e1a

The next scenes are intended to give just a flavor of the overall activity of a manager preparing a planning proposal within our augmented environment. 1e2

[Manager finishes his phone conversation and turns to his display. He pretends to log on.] 1e2a

The scenario begins by the director notifying the appropriate people that the Planning Proposal for Fiscal Year 1976 is due on a certain date. 1e3

[Our manager reads his Journal mail. The first level view of the branch marked 'Journal' is seen. Full view is then seen with pertinent message (from the director) at the top.] 1e3a

Our manager has been assigned coordinator and is responsible for preparing the document. 1e4

[Allow time for audience reading.] 1e4a

He reviews last year's proposal. 1e5

[Jump to referenced document. It is last Year's proposal. First three levels are seen, Jump to "Augmented Sys..." section with all levels seen, Jump to return and then to "Funding" section with all levels. Jump to initial view.] 1e5a

An outline is formulated based on last year's Planning Proposal. It is a copy of the headings from FY75 Proposal. 1e6

[Split tasker screen vertically. Outline of last year's proposal is seen in one window. It is then copied to a new file named 'FY76' which is in the other half of the window.] 1e6a

[Create file called "FY76-planning". Copy FY75 to FY76 with filter "ebbb".] 1e6b

Appropiate changes would then be made to this new outline. 1e7

[Change 75 to 76 in new file.] 1e7a

A short message is composed requesting help from various people and announcing a meeting to be held on this document. 1e8

[Delete edge. Jump to (ROBERT, message:t).] 1e8a

[By viewspecs "rf" reveal the five lines of message. Switch to manager typing at console before this scene.] 1e8b

[message will read: 1e8c

Please submit contributions to FY76 planning proposal to me (JCN). The current version of this document will be (FY76-PLANNING,). 1e8c1

A meeting will be held next Wednesday at 9:00 A.M. in the conference room. Please confirm your attendance via the mail. 1e8c2

Jim] 1e8c3

Several people read this message. Some down the hall, some remotely located, some are on travel. 1e9

[Brief scene of several people reading message. Try to convey that some of the people are geographically distributed.] 1e9a

[One person at the Tasker, one at the line processor, one at a CRT, another person at the tasker (in an office), and one at a TI.] 1e9b

Text is written by several staff members and sent back to the coordinator. 1e10

[Scenes of several people writing text, Some typing it in, typist typing some, Dex system shown, Display and TI terminals used.] 1e10a

Information is received, extracted, and organized. 1e11

[Mail is received in journal branch of Jim initial file. It is moved to special branch of his initial file called 'Input'. There it is sorted by author name.] 1e11a

[Parts of what is in the 'input' branch are copied into proposal file (FY76,)] 1e11a1

[Various editing done on document.] 1e11b

Conversations and meetings are held among several people. 1e12

[People talking. People at a meeting. People on phone. People reading hardcopy.] 1e12a

The first draft of the document is edited. 1e13

[People are seen editing from hardcopy as well as the display.] 1e13a

A review of the paper is made. 1e14

[Manager is seen reading document at the display (maybe hardcopy).] 1e14a

Document is approved. 1e15

A limited distribution is made. 1e16

[Printer is seen doing its thing.] 1e16a

[Stack of hardcopies are seen. Pages are flipped to see format.] 1e16b

Eventually, a final draft goes to printer. 1e17

[User is seen at terminal, the picture of tape spinning. Finally, some scene to indicate the COM process.] 1e17a

The published copies are distributed. 1e18

[A high quality report is shown in bulk.] 1e18a

(s6) Specific scenarios for demonstrating functions of NLS 1f

1f1

[View is of user at his display station. He is looking at the camera.] 1f1a

[Be sure viewspecs are set: (:wgd).] 1f1b

Having seen an overview of one application, let us look at some of the many capabilities that we have developed. 1f2

[Speaker turns and looks at screen.] 1f2a

[(demo,076:wdg) Split video: (viewspecs: wdg) right side see speaker talking in front of display, left side of display screen with words "reading", "writing", and "communicating" appearing as spoken. Use viewspes bf to reveal words.] 1f2b

To repeat, the three core functions that NLS aids are reading, writing and communicating. 1f3

[Tasker is superimposed.] 1f3a

[(demo,0125:wdg) On screen appears "Reading with different views".] 1f3b

(s7) Reading 1g

(s7-1)Viewing 1g1

First I will talk about how you can read with different views. ## J S :bbb ## 1g1a

[OUTPUT = Full tasker.] 1g1a1

[(demo,091:wgd) Jump to successor: "outline". Be sure viewspec 'd' is on. viewspecs: (:wdg)] 1g1a2

Most staff papers or technical documents can easily be visualized as hierarchical in structure. 1g1b

[(demo,091:gwdbbb) change viewspecs: (:gwdbbbf)] 1g1b1

[Three levels of outline are seen, that is, to the 4th level: all lines.] 1g1b2

In other words ## viewspecs: dbf ##, each chapter heading is at the highest level. 1g1c

[(demo,091:egb) Chapter headings appear. One level only. Viewspecs: (:ebf)] 1g1c1

Section ## viewspecs: bf ## headings are found under each of the chapters and ## viewspecs: bf ## subsection headings at the level beneath them. 1g1d

[(demo,091:egbb) Next level appears.] 1g1d1

[(demo,091:egbbb) Another level appears.] 1g1d2

Moreover ## viewspecs: bf ##, the text itself can be logically ordered with the more detail paragraphs indented ## viewspecs: bf ## under the general paragraphs. ## viewspecs: bf ## 1g1e

[(demo,091:egbbbb) General paragraph appears.(demo,091:egbbbbb) Detail paragraph appears immediately afterwards. (demo,091:egbbbbbb) Then the example level. Use viewspec (:bf) to reveal next levels.] 1g1e1

This tree-like ordering of a document clarifies the relationships within the paper. ## J L ## 1g1f

[(fy75-proposal,1:gxbb) Jump on link in 'example' statement. While last sentence is spoken, the FY75-Planning Proposal appears. Three levels are viewed at the start, then one more level and another level. Mouse is used to direct eye flow. Make sure links in reference section are seen.] 1g1f1

Furthermore, it enables different readers to locate quickly the parts relevant to them ## VIEWSPECS : bf ##. 1g1g

This stucture also provides a way for you to stop at a certain level of detail without losing the overall flow of the document ## VIEWSPECS : bf ##. 1g1h

As I have been talking, I have quickly and efficiently changed the view in my display window. 1g1i

It is the hierarchical ordering of the file that enables us to look at a paper in a variety of ways ## J N E "U" ##. 1g1j

This viewing capability is helpful to managers coordinating a large report, researchers looking for a relevant passage, programmers reading structured code, or just about anyone who reads in their work. 1g1k

[(demo,0126:wdg) Show view of list of typical users and uses.] 1g1k1

Let's look at a message ## J L ##. 1g11

[Jump to Initial file (ROBERT,journal:web) statement journal with viewspecs web.] 1g111

We can look at one I received recently ## VIEWSPECS: bf ##. 1g1m

[Jump to (ROBERT,journal:webb).] 1g1m1

[The window shows a message from D. C. Engelbart stating the deadline for the planning proposal document. It is exactly what appeared briefly before.] 1g1m2

[Message: 1g1m3

15 NOV 74 13:10 EST; DCE 1g1m3a

From: D. C. Engelbart, director
To: J. C. Norton, assistant director
SRI-ARC Project managers
Subj: Program Proposal for FY76, request for
Ref: (FY75 Planning Proposal --
Proposals,FY75-Proposal,1:dgebb) 1g1m3a1

(1) The Planning Proposal for Fiscal Year 1976 is due on 15 January 1975. 1g1m3a1a

(2) J. Norton is assigned coordinator of this task. 1g1m3a1b

(3) Last year's proposal should be used as a guide.] 1g1m3a1c

Suppose I want to locate a reference, I need only show two levels of my message. 1g1n

This also allows me to see the top levels of several messages. 1g1o

Now having seen a view of short a message, I will look at a lengthy paper, for example, the Planning Proposal referenced in this message ## J L ##. 1g1p

[Jump on link to FY75-proposal.] 1g1p1

[Three levels are initially seen with all lines/levels.] 1g1p2

For this large report, I look at successive levels until I find the subsection of interest to me ## VIEWSPECS: bf ##. 1g1q

[Then show additional levels via viewspecs (:bf) until paragraph level appears.] 1g1q1

There is another way of looking at a paper -- by controlling the number of paragraph lines you wish displayed ## J "SUMMARY" ##. 1g1r

[Then jump to the level above the paragraph level with all lines and current level only, (FY75-proposal,05:gwebb).] 1g1r1

For example, here's one line, two lines, three lines, and finally all lines of this paragraph. 1g1s

[Viewspecs:tf;rf;rf;rf.] 1g1s1

[One line is shown; then 2 lines, then 3 lines, then 4 lines.] 1g1s2

Note that just one version of the document is stored online and that the different pictures in the window are the result of the user changing the depth and lines to be displayed. 1g1t

(s7-2)Jumping 1g2

1g2a

[User is faded in. He is at the console.] 1g2a1

"Speaker facing camera.] 1g2a2

We've been looking at various ways you can view textual material. Just as important is the capability of moving within or between papers. 1g2b

With the aid of the mouse and a rich set of commands, you can quickly go to any part of a document. 1g2c

In fact that is just what I have been doing. We call this jumping. 1g2d

[He turns to the display and the scene shifts to the screen. Either a fade out shot to screen or abrupt one.] 1g2d1

[(demo,0127:wdg) On screen is the title "Reading by Moving the Window".] 1g2d2

[Mouse is seen moving about.] 1g2d3

You ## J L ## need only position the pointer on the screen by moving the mouse and command the system to change the view so that the designated point is at the top of the window ## VIEWSPECS : bhf ##. 1g2e

[Jump to (demo,091:ebg), see the chapter outline-one level.] 1g2e1

[Show another level: section headings with viewspecs bf.] 1g2e2

I will move Chapter 2 ## J "Chapter 2" ## to the top of the window, and now Chapter 3 ## J "Chapter 2" ##. 1g2f

[(demo,013:wdh) Jump to Chapter 2 with viewspec h, then (demo,014:wdh) Chapter 3.] 1g2f1

Having this high level view of the document you can point to any chapter using the mouse and command the system to move to that chapter while specifying the depth you wish to see. In this case I will move to Chapter 4 and show two more levels ## J "Chapter 4" :bb ##. 1g2g

[(demo,015:wdhbb) User jumps to Chapter 4 of the document, changes viewspecs to see two more levels. Jump (:bb)] 1g2g1

[Full tasker at end of this statement.] 1g2g2

Any level may be brought to the top of the window by jumping. ## J "4.2.1" :w ## 1g2h

[(demo,0107:wh) Jump to section 4.2.1 with all levels and lines.] 1g2h1

Here we see subsection 4.2.1. with all levels shown. 1g2i

In addition to just pointing to a spot, you can move to points in a paper not currently visible. 1g2j

One of the most useful is the capability of returning to your previous position and view ## J R <ca> <ca> ##; in this case Chapter 4. 1g2k

[(demo,015:wdhbb) Jump return.] 1g2k1

In fact the recent history of positions within the document is saved and I can return to any one of these ## J R <ca> ##. 1g2l

The first 15 or so characters of each position can be previewed in the feedback area of the screen where my bug is now pointing ## <sp> <sp> ##. 1g2m

[Show jump return ring by spacing on jump return command.] 1g2m1

[(demo,013:wdh) One stops at chapter 2 with reference section seen.] 1g2m2

The selection can be made and the view returned to that position ## <ca> ##. 1g2n

[Complete jump return.] 1g2n1

The concept of moving about a document is fairly simple but extremely useful. However, it is just as easy to move between any online document or, usually within 15 minutes, any paper in our tape archival system. 1g2o

Let me look in the reference section for another paper. 1g2p

[(demo,092:wdbg) Jump to reference section and show one more level.] 1g2p1

Now I give a command and point to the reference ## J L ##. 1g2q

[Jump on link to (Trip-report-RADC,).] 1g2q1

At this point I can jump and use view controls to look more closely at the topics, say, in the Remarks section of this paper ## "remarks" :b ##. 1g2r

[Jump to remarks with one more level.] 1g2r1

While reading ## VIEWSPECS : bf ## this trip report I might come to a reference which I would like to read. 1g2s

[Show one more level and make sure link is seen to (FY75-proposal,).] 1g2s1

[Bring up split from bottom.] 1g2s2

Again, I simply point to the reference citation and the system retrieves it ## J L ##. 1g2t

[Jump on link to FY75-proposal.] 1g2t1

In this case I jumped to the first position in the paper called FY75-proposal with three levels of text displayed. 1g2u

As with previous positions within a document, a separate history of previous papers are stored so that you can return to them swiftly. ## <sp> SH F R <ca> ## 1g2v

[Show file return stack.] 1g2v1

Here is the list of files I have read with the most recent one first. 1g2w

[Move mouse to direct attention to each file.] 1g2w1

Now if I wish to return to the previous document I can easily tell the system to do so. 1g2x

In this case we have returned to the Trip report. Notice that we are returned to the very position and view from which we left it. 1g2y

The facility which I have been using to move to specific points within or between documents is called a link. ## J N E "1" ## This simplifies the referencing of papers. 1g2z

[(demo,098:wdg) Screen shows "LINK; file location, address within file, and view specifications"] 1g2z1

[Full tasker.] 1g2z2

A link is a special textual entity that provides access and viewing information of a document. By this entity, one is pointed to a particular document and, if desired, a particular point within it. Furthermore, additional information can be given to specify the initial view of the document ## J S ##. 1g2a@

[(demo,099:wdg) While the above is spoken, the screen shows examples of links.] 1g2a@1

Defaults, as show in the last two examples, are used to allow simple links to be specified. 1g2aa

The idea ## J L "Knowledge,," ## is to accommodate the knowledge worker as he reads a reference and decides to "jump" to it. This, in turn, may lead him to other references. 1g2ab

[Pause, the tasker is faded to black.] 1g2ab1

(s8) Composition of text 1h

Now we will demonstrate the second of the basic functional areas in which NLS system aids. 1h1

[Speaker facing camera, sitting at workstation.] 1h1a

[(demo,0128:wdg). Have tasker ready.] 1h1b

1h2

That is, of course, the composing, editing, and publishing of textual material. 1h3

[Fade tasker in.] 1h3a

[Speaker turns to tasker.] 1h3b

We ## J S ## have facilities for short messages and lengthy reports; ## VIEWSPECS : bf ## for informal memos and formal letters; ## VIEWSPECS : bf ## and draft printouts and high quality publishable ones. 1h4

[(demo,0129:wdg) (demo,0129:wdbg) (demo,0129:wdbbg) Screen is faded in. As the words "short messages ... " are spoken, they also appear on screen.] 1h4a

To begin, there are several ways you can input text into the system. 1h5

[Speake turns to camera as he is faded in.] 1h5a

The method depends upon your personal tastes and capabilities as well as the availability and costs of the hardware. 1h6

[Camera goes to black.] 1h6a

(s8-1)Inserting 1h7

For those who type, almost any of the telecommunications terminals can be used. Standing models [video switches to Terminette.], portable models [video switches to TI.], TV-like CRT's [video switches to a CRT, say a Datapoint.], and display workstations like this one [video returns to speaker in front of display.]. All can be used to directly work with any part of the system. 1h7a

Furthermore, computer readable cassette tapes can be used.

These can be prepared from computer terminals like this one in our secretary's office, 1h7b

[Video of TI with cassette box next to it.] 1h7b1

Because these cassettes can be prepared offline, that is, without using the computer, more efficient use can be made of typists in bulk loading text and of the computer system in distributing the work load, 1h7c

[Scene of typists bulk loading text onto cassette.] 1h7c1

Other offline computer readable mediums can be used such as paper tapes, 1h7d

[Picture of paper tape reader/punch. Maybe teletype version.] 1h7d1

Also, computer generated magnetic tape can be read into the system, 1h7e

[Video of tape deck with tape on it spinning.] 1h7e1

Finally, our system can accept any text transmitted via the ARPA network. This, in effect, allows computer to computer transfer of text. 1h7f

[Video of ARPANET geographical map.] 1h7f1

(S9) Editing 1i

Once inserted into our system I can manipulate and manage the text. 1i1

[Speaker facing camera.] 1i1a

One of our integrated tools is a powerful text editor. The combination of the display workstation and the editing system provides an easy, visual, and effective way of correcting text. 1i2

[Speaker turns to tasker and video fades in the screen.] 1i2a

[File called (ERRORS,work:w1) is seen from beginning of message.] 1i2b

In most text editors, the addressing of particular characters, words, or sections of text is unnatural and often complex. The mouse enables you to simply point to a character or word with one hand while the other hand specifies commands, 1i3

[Full tasker,] 113a

[Motion is made with hands while above is said,] 113b

[The preceding effects the jump to paragraph (1). Make sure viewspec 1 is on,] 113c

For example in paragraph (1) ## J " (1)" ##, I will delete the second occurance of the word 'fiscal'. 114

[Split or superimposition is maintained,] 114a

[Delete the word fiscal,] 114b

As you can see another advantage of this display is the immediate updating of the screen to reflect the editing change. 115

Next in paragraph (2) I will move the word 'proposal' to paragraph (3). I only type the command, point the word, and then to the destination position to make the move. 116

[Do as speaker says. Namely, show hand at keyset, then mouse, then move word,] 116a

The set of such editing commands is rich and mnemonic. To illustrate, I can quickly delete paragraph (4) and replace the character 5. 117

[Do as speaker says,] 117a

[Delete word "fiscal" in para 2, 117b

move word "proposal" para 2 to para 3 after "year's" 117c

delete statement "(4)" 117d

replace character "5" by "4"] 117e

[Speaker is faded in; he turns his head and speaks the next paragraph,] 117f

[Have link to next error example,] 117g

Because of the hierarchical organization of NLS files, I can manipulate various structural entities in the same way I can with textual ones ## J L ##. These structural entities maybe headings, paragraphs, entire subsections, or a whole chapter. 118

[Jump to (ERRORS,work-fy,2d:dbbb1),] 118a

[Speaker turns to screen as video fades to screen after above is said,] 118b

For example, I can move the entire Programming Management Research Section ## M B "prog,," "to end of branch" ## to follow the Technology Transfer Research Section. 119

[Move Programming Management Research Section to follow the Technology Transfer Research Section,] 119a

Or a group of paragraphs can be copied, ## J "program management section" ;bb ## I will copy the paragraphs 1 through 3 from the Summary section to the Background section. 1110

[Copy a group,] 1110a

Since ## J L "good,,," ## good writing depends upon good organization as well as grammar and spelling, these NLS capabilities become important tools to enable the creation of clearer reports in less time. 1111

[(demo,0132;wdg) On screen the words 'clearer reports in less time',] 1111a

[At end of statement camera fades in speaker sitting in front of workstation,] 1111b

Our ## J S ## aim is to have the writer/editor concentrate on the text content and not on the tools. 1112

[Speaker turns to face the camera,] 1112a

Unless these aids are simple and effective, the system will be either a toy or a hinderance to people trying to work. 1113

We will now demonstrate another feature of display NLS which is rather useful. 1114

[Speaker turns to tasker. Camera fades to black,] 1114a

(s9-1) Split windows 1115

[(demo,0100;wg) Have the 'split screen' header on screen. Fade it in,] 1115a

I can split the display screen into more than one window -- either vertically or horizontally ## J L ##. 1115b

[Jump to (fy75-proposal,1;w) on the screen,] 1115b1

[Display is split vertically. First level view of Planning Proposal is on the right. (fy75-proposal,04:eb) The full view will be on the left.] 1i15b2

First, let me try a vertical split ## <sp> SP V ##. 1i15c

For each window different views of the same document or different documents may be seen. 1i15d

For example, the left window has the full view beginning at top of the paper ## J " Aug.., sys.," :eb (bug on right) ## while the right window has a two level view beginning at one of the subsections. 1i15e

Now ## J N E "s" :le ## I will display a different file in the right window. 1i15f

[Right window displays RADC trip report. Use jump to name external 's'. (trip-report-radc,1a:el)] 1i15f1

There maybe more than two windows, each with a different file. Character size and view specifications are also distinct for each window. 1i15g

[Speaker is faded in background here. Keep superimposition.] 1i15g1

I'll split the screen horizontonally on the left and load a portion of the message seen earlier ## <sp> SP H ## ## J L ##. 1i15h

[Window is split horizontonally on left. Message from DCE is loaded in lower window. Use jump link located after "DOCUMENT statement".] 1i15h1

Two levels of the message from Engelbart are seen in the bottom left window. 1i15i

I will now move the right window off the screen. ## M <sp>B ## 1i15j

[Move right window off to the right.] 1i15j1

Split screens are extremely useful ## J N E "P" ## when merging information from several documents. For a programmer, it enables him ## J S :o ## to look at the design specifications in one window and the coding in the other. 1i15k

[Speaker is faded out at beginning of this statement, Full tasker.] 1i15k1

[Demo file loaded with top part "SPECIFICATIONS" and the bottom part "CODE", top = (demo,0133:wg) bottom = (demo,0134:wgo) Use jump to name external 'p', After top is loaded jump to successor with viewspec 'o' on.] 1i15k2

For ## J S :p ## the manager, a work proposal ## J S :o ## can be compared to a work status report. 1i151

[Split screen, with top having "WORK PROPOSAL" and bottom "WORK STATUS REPORT", (demo,0135:gw) and (demo,0136:gow). Use jump to successor after top one is up on screen.] 1i1511

Finally split screens are invaluable for editing a paper based on a second or third paper. 1i15m

(s10) Output Processor 1j

The capability to produce well formatted documents is provided by a subsystem called the output processor. 1j1

[Have output processor user guide on screen. It looks like we have to have the hardcopy version.] 1j1a

[Cover of users' guide.] 1j1b

This users' guide has been prepared using this system. 1j2

[Turn to page 31.] 1j2a

By using special commands within the text, you can specify line, paragraph, and page formatting; pagination and header information; and for computer output to microfilm devices you can specify font and style directives. 1j3

[Show back of users' guide for style and size examples. Use two different pages.] 1j3a

Here is a copy of a paper by Dr. Engelbart produced by computer output to microfilm process. 1j4

[Show DCE paper that is highly formatted.] 1j4a

(S11) Communicating 1k

[Speaker facing camera.] 1k1

We have now talked about reading and writing of text. In a sense the next area, communicating, includes these other core areas. 1k2

[Speaker turns to tasker and camera fades tasker in.] 1k2a

[Screen has 'COMMUNICATIONS' (demo,0439;gwd).] 1k2b

(s11-1) Ident system 1k3

To facilitate communications, ## J S ## each person is assigned an "ident" which uniquely identifies him and is usually a person's initials ## G I ##. 1k3a

[Goto ident subsystem; show status of RLL.] 1k3a1

In ## S "RLL" ## my case it is RLL. Information such as address, phone number, and method of document delivery is kept. When I wish to send a message or document to one or more people, I only give the "ident". 1k3b

If ## S ",LIEB,,," ## I don't know an "ident", I can find it by giving the person's last name or just the first part of his last name; for example, LIEB. 1k3c

[Type ,LIEB,,,] 1k3c1

The system will list all persons whose last name begins with the letters "LIEB". 1k3d

Here, there are two such people. 1k3e

Groups of people can also be assigned "Idents". ## S "SRI-ARC" ## There is no limit to the number of groups of which you can be a member. 1k3f

[Show status of SRI-ARC.] 1k3f1

In this case we see the list of people who belong to the SRI-ARC group. 1k3g

Other examples of useful groupings are all project leaders or an entire project group ## J S ##. 1k3h

(s11-2) Journal delivery 1k4

[full tasker to speaker.] 1k4a

[Speaker just turns head towards camera.] 1k4b

Our communications capability includes sending, receiving, cataloguing, and storing of information. 1k4c

[Fade to tasker.] 1k4c1

[(demo,0139:wdgp) Have tasker view showing 'JOURNAL DELIVERY' (demo,0139:wgdp) .] 1k4c2

First let us look at receiving of items ##J L ##. 1k4d

[Speaker turns to tasker screen.] 1k4d1

[Jump to link to load ROBERT.] 1k4d2

Each ## J "JOURNAL" :w ## user of NLS has a special file which contains his mail box. 1k4e

[Jump to Journal (:w).] 1k4e1

Except for short messages, the system will deliver into this mail box only a reference to the item. ## J S ## Here is the second mail item in my box. 1k4f

[jump to successor with all levels/lines.] 1k4f1

As you can see, in addition to the author, date, time, and title there is unique and permanent number assigned to each mail item. ## J L ## 1k4g

[Use mouse to point to components mentioned.] 1k4g1

[Jump Link 'indexes:teb'.] 1k4g2

An index of these numbers is produced ## VIEWSPECS : bf ## as well as indexes based on author and words in title. ## VIEWSPECS : bf ## These constitute a set of catalogues for the total collection of documents. 1k4h

[(:bf) then (:bf)] 1k4h1

[Show catalog of indexes. (ROBERT,INDEXES:wgteb)] 1k4h2

Any item, except those marked private, can be located in these specially prepared index files. 1k4i

For example I will jump to the number index ## J L "Number,," ##. 1k4j

[Jump to one of the index files, (catalog, barcjnincnl, 2:wthCy)] 1k4j1

This cataloguing of all mail provides a rich collection of online dialog on a variety of subjects. 1k4k

For each item, subcollections can be designated at submittal time for gathering dialog from one subject or from one group of people. 1k4l

The mail, whether a short message or long document, is stored centrally to save space. 1k4m

Items designated private will have restricted access. 1k4n

For those who maintain their own indexes, NLS is well suited to an hierarchical organization of their catalog ## J L ##. 1k4o

[Jump to link 'ROBERT,mail:ebbg',] 1k4o1

Many people arrange the mail they receive according to subject for greater ease in retrieval. 1k4p

[Show initial file, ROBERT, at branch MAIL with three levels seen. Jump to (ROBERT,mail:ebbg)] 1k4p1

I've subdivided my mail into active and inactive with subject headings below them. 1k4q

However this arrangement is up to the individual. 1k4r

(s11=3) Journal sending 1k5

Now that we have seen where the mail is delivered I will show how mail is sent ## G S ##. 1k5a

[Have already entered SENDMAIL subsystem,] 1k5a1

[Fade in tasker screen,] 1k5a2

[(demo,0140:wdg) Screen will show "Journal submission",] 1k5a3

After composing the message or paper you need only say where it is, for example, in a file ## B "ROBERT" ## called ROBERT and a section called message ## ",MESSAGE" ##. 1k5b

[Type "b" for branch submission, Submit (robert,message),] 1k5b1

specify a title, for example ## T ... ## "Planning proposal Deadline", 1k5c

[Type "t" and "Planning proposal deadline,"] 1k5c1

and give a distribution list of "idents", for example ## S A "DCE" ## DCE for Dr. Engelbart and ## "SRI-ARC" ## SRI-ARC for everyone in our organization, 1k5d

[Type send for action command with DCE and SRI-ARC for distribution.] 1k5d1

Other ## <sp> SH ## information such as author, date, full names, and addresses are automatically obtained, 1k5e

[Type done command,] 1k5e1

The system will then find out whether the people on the distribution list wish hardcopy or online delivery of this item ## D <ca> <cd> ##, 1k5f

If hardcopy is desired, the message or paper is printed on a high speed printer in a suitable format ## Q ##, 1k5g

[Quit back to editor,] 1k5g1

If ## J L ## online delivery is desired the citation shown before is sent to the mail box of each person on the distribution list, 1k5h

[Return to journal branch of ROBERT, (ROBERT,0128:gw)] 1k5h1

Here is the delivered message ## J L ##, 1k5i

[Pause then jump to "Computer network" slide,] 1k5i1

[CAMERA = fade to black,] 1k5i2

(s11-4) Communication via the network 1k6

Our initial computer service, called office-1, is connected to the ARPANET. It is one of some forty computer hosts attached to this world wide computer network, ## J L ## 1k6a

[Show list of hosts on the ARPANET,] 1k6a1

Many of our users communicate to our computer via this network. Moreover, it is this communications channel that permits us to carry on active dialog among ## J ## a widely

distributed community and permits us to reach out and use special facilities available elsewhere. 1k6b

For example, large data storage, sophisticated data management systems, and fast central processors. 1k6c

[Fade to black.] 1k6c1

(s11-5) Dialog 1k7

[Voice in background. Camera pulling back from display workstation in center room. People are at work at varius stations.] 1k7a

The large community of workers throughout the ARPANET provides a vast, distributed group of people with a reservoir of knowledge. 1k7b

The concept of having interreferenced collections of open dialog composed of papers, comments, rebuttals, trip reports, minutes and so forth, provides a rich environment for a working community of people. 1k7c

The capabilities of delayed online dialog, real-time dialog, and recorded dialog yield new benefits from cooperating groups of people. perhaps the confusion and delays exerienced by groups in their communications can be relieved with these coordinated tools and techniques. 1k7d

[Camera cuts to ending slide on tasker.] 1k7e

["Video Production by SRI-ARC staff."] 1k7e1

(J24608) 25-NOV-74 13:06;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /SRI-ARC([INFO-ONLY]) ; Keywords: script ONR video tape NLS; Sub-Collections: SRI-ARC; Clerk: RLL;

JBP 25-NOV-74 13:46 24609

Re: NSW and PCP documents

Please note that the set of 7 PCP and 6 NSW documents are being reproduced for hard copy distribution and should be availble next week. Also note that the files indicated as xxx.TXT for online copies dont print well on arc funky lineprinter but are designed for the rest of the world. [they will print fine if you replace all carriage returns with control-S]
--jon.

1

JBP 25-NOV-74 13:46 24609

Re: NSW and PCP documents

(J24609) 25-NOV-74 13:46;;;; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JBP;

JEW 25-NOV-74 16:25 24610

An NSW Super-Document

I have begun and will continue to maintain an NSW super-document (white,nswdoc,1:xbz) containing all pertinent state information about the NSW, with the goal of providing a comprehensive design document during development, and the basis for NSW system documentation when the time for that comes. At present, the file contains only the documents I could get my hands on quickly; I would appreciate an informed nudge (verbal, hand-written, or on-line) from anyone who knows of a document that should be included but isn't, and the continued support of ARC in keeping the file uptodate via document update, addition, and deletion.

1

JEW 25-NOV-74 16:25 24610

An NSW Super-Document

(J24610) 25-NOV-74 16:25;;;; Title: Author(s): James E. (Jim) White/JEW; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections: SRI-ARC; Clerk: JEW;

DSM 25-NOV-74 17:25 24611

Status of NLS Split

This documents the changes which have been made to the NLS source files. 1

Status of NLS Split

(J24611) 25-NOV-74 17:25;;;; Title: Author(s): David S. Maynard/DSM; Distribution: /EKM([ACTION]) KJM([ACTION]) HGL([INFO-ONLY]) JDH([INFO-ONLY]) DSM([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: DSM;

JBP 22-NOV-74 08:36 24612

output processor ideas

< POSTEL, FOO,NLS;1, >, 21-NOV-74 18:44 JBP ;;;; 1

JBP 19-NOV-74 12:45 24547
new output processor directives
Message: i would like to have three new output processor directives:
1) Grab this branch ,GB;
2) Grab all blanches below level m ,GBBLVL=m;
3) Grab all statement above level m the next n lines ,GSALVL=m,n;
--jon, 1a

FEED 19-NOV-74 18:04 31368
Design Recommendation: new Output processor directives
Message: Jon, Thanks for your input (24547,),,we will add the recommendation to our list of Design recs to be considered for implementation as soon as funds are available -- latest would be Jan 75.
(Dean, What would it take in hrs of programming time to implement these? Please respond to Feedback). Feed/jim 1b

JBP 22-NOV-74 08:36 24612

output processor ideas

(J24612) 22-NOV-74 08:36;;;; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /EKM([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JBP;

Tab command in useroptions Control command is second level when there is no conflicting first letter, first level command. 1

(J24613) 25-NOV-74 20:36;;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /BUGS([ACTION]) ; Sub-Collections: SRI-ARC BUGS;
Clerk: KIRK;

Split Status

INTRODUCTION 1

This document describes modifications which have been made to NLS to take advantage of the new XCML Compiler . See CHI's (MJOURNAL,24323,1:w) for a complete description of the new CML and CML Compiler. The two main changes are: 1a

1) LEVEL ONE !L1! is now default for all COMMAND WORDS. You may specify LEVEL TWO !L2! for a command, but this is not necessary, as the compiler assigns !L1! to the first command work encountered in case of conflicts. 1a1

2) A new declaration DECLARE COMMAND WORD which associates an integer with a command word and passes the address of this integer whenever the command word is passed as an arguement to an xroutine. 1a2

This represents the first stage in splitting NLS to eventually run on two different machines. Our plan is to finish this stage of the split and bring this version of NLS up as the running system both at ARC and at OFFICE-1 before starting more extensive modifications to NLS for NSW. This approach has the advantage of getting rid of the resolver problem for the running system at OFFICE-1. 1b

SPLIT TASKS DONE 2

The following is a short scenario of the tasks which were performed to accomplish passing command words as integers . 2a

Subsystem Split was entered . 2b

Table was initialized using the Clear command. 2c

The Replace keywords command was executed on the following files: 2d

(nls,select,) 2d1

(nls,psedit,) 2d2

(nls,pscalc,) 2d3

(nls,pssendmail,) 2d4

(nls,psprogs,) 2d5

(nls,pssystem,) 2d6

(nls,psuserop,) 2d7

(nls,pshelp,) 2d8

(nls,fonly,) 2d9

The file (nls,syntax,) was loaded. 2e

The content analyzer program (martin,LiL2,ca,) writtn by Karolyn Martin was run on the file to fix the level declarations for command words. 2f

The branch "DECLARE EXT-KEYWORD" was deleted. 2g

The statement "DELCARE COMMAND WORD" was added. 2h

The Insert Command in Split was used to insert the table of Command Words . 2i

Statement one was changed to point to the XCML Compiler instead of the CML compiler. 2j

An iterative loop was entered: 2k

Load attempted. 2k1

The Command Fix was used to remove remaining references to Command words which appeared as unresolved globals in the load map. 2k2

When all undefined globals had been eliminated another load was done without running resolver. No multiply defined globals occurred. 2l

SPLIT PROBLEMS 3

The save file (rel-nls,xnls,sav,) passes Command Words as integers. This version of NLS has not as yet been tested extensively. The following are the known problems. I would appreciate hearing about any additional problems encountered with this version of NLS. 3a

Prompts which use the command word will not work. 3b

This occurrs in XSELECT and also in the Substitute Command 3b1

SPLIT TASKS TODO 4

Fix known bugs 4a

CHI suggests passing command words as two word records where

the first word is a pointerto an integer and the second word is a pointer to a string. 4a1

Test (rel-nls,xnls,sav,) to uncover new bugs 4b

Fix user programs to pass integers. 4c

SPLIT SUBSYSTEM 5

An NLS Subsystem (maynard,split,subsys,) was written as an aid in modifing the NLS source code to accept the integers pased by the new CML compiler to represent command words. The subsystem manages a table which associates integers with strings. This table is stored on disk and mapped into core on subsystem entry. This table is mapped into core at a fixed location (554000) therefore this subsytem MUST be the first program loaded into the program buffer.The Split subsystem contains the following commands which were used to make the changes to the NLS source files. 5a

Split Subsystem Commands: 5b

The following syntax of the commands was produced using the Syntax Generator Subsystem. My comments concerning the semantics of the commands are enclosed in square brackets []. 5b1

[Clear - initializes table] 5b2

Clear (all stored declarations) OK (REALLY ?) OK 5b2a

[Delete - takes two integers as arguements removes command words within this range from the table] 5b3

Delete (declarations from) CONTENT (through) CONTENT OK 5b3a

[Replace - looks for occurrences of indirectly referenced variables within a CASE statement and replaces the reference by the appropiate integer from the table, adding the variable to the table if necessary. For example the statement " = sstatement ! ..." becomes " = 4 %- statement -% ! ..." assuming the string "statement" had the value 4 in the table] 5b4

Replace (Keywords in) Plex (at) DESTINATION OK 5b4a

Replace (Keywords in) Branch (at) DESTINATION OK 5b4b

Replace (Keywords in) Group (at) DESTINATION OK 5b4c

Replace (Keywords in) Statement (at) DESTINATION OK 5b4d

Replace (Keywords in) OPTION (Filtered:) VIEWSPECS Plex (at) DESTINATION OK 5b4e

Replace (Keywords in) OPTION (Filtered:) VIEWSPECS Branch (at) DESTINATION OK 5b4f

Replace (Keywords in) OPTION (Filtered:) VIEWSPECS Group (at) DESTINATION OK 5b4g

Replace (Keywords in) OPTION (Filtered:) VIEWSPECS Statement (at) DESTINATION OK 5b4h

[Fix - similiar to Replace execpt that 1) Fix looks for occurrences of indirectly referenced variables anywhere within the selected structural entity and 2) Fix only replaces variables which are already in the table by their associated integers, i.e, Fix will not add strings to the table] 5b5

Fix (Command words in) Plex (at) DESTINATION OK 5b5a

Fix (Command words in) Branch (at) DESTINATION OK 5b5b

Fix (Command words in) Group (at) DESTINATION OK 5b5c

Fix (Command words in) Statement (at) DESTINATION OK 5b5d

Fix (Command words in) OPTION (Filtered:) VIEWSPECS Plex (at) DESTINATION OK 5b5e

Fix (Command words in) OPTION (Filtered:) VIEWSPECS Branch (at) DESTINATION OK 5b5f

Fix (Command words in) OPTION (Filtered:) VIEWSPECS Group (at) DESTINATION OK 5b5g

Fix (Command words in) OPTION (Filtered:) VIEWSPECS Statement (at) DESTINATION OK 5b5h

[Process - builds the table from a CML COMMAND WORD DECLARATION associating the integer in the declaration with the command word. Attempts to redefine either integers or command words are not allowed, a warning message is given.] 5b6

Process (Declarations in) Plex (at) DESTINATION OK 5b6a

Process (Declarations in) Branch (at) DESTINATION OK 5b6b

Process (Declarations in) Group (at) DESTINATION OK 5b6c

Process (Declarations in) Statement (at) DESTINATION OK 5b6d

Process (Declarations in) OPTION (Filtered:) VIEWSPECS Plex (at) DESTINATION OK 5b6e

Process (Declarations in) OPTION (Filtered:) VIEWSPECS Branch (at) DESTINATION OK 5b6f

Process (Declarations in) OPTION (Filtered:) VIEWSPECS Group (at) DESTINATION OK 5b6g

Process (Declarations in) OPTION (Filtered:) VIEWSPECS Statement (at) DESTINATION OK 5b6h

[Insert - Outputs the currently stored table in a format which corresponds to the CML DECLARE COMMAND WORD syntax.] 5b7

Insert (Declarations to follow) DESTINATION LEVEL-ADJUST OK 5b7a

DSM 26-NOV-74 09:09 24614

Split status

(J24614) 26-NOV-74 09:09;;;; Title: Author(s): David S. Maynard/DSM;
Distribution: /EKM([ACTION]) KJM([ACTION]) HGL([INFO-ONLY])
JDH([INFO-ONLY]) DSM([INFO-ONLY]) ; Sub-Collections: SRI-ARC;
Clerk: DSM;

RWW 26-NOV-74 09:22 24615

All command s Available from Second Level

There have been a number of suggestions that commands be at the same level across subsystems like show would be invocked consistently in each subsystem, LBack when we were discussing new NLS one of the suggestions made which I thought was being implemented was that any commad could be recognized as a second level command, that is once you hit the space what happened was to drop you into anticipatory mode so that if you then hit ins you would get insert, In this way users who felt confused could achieve consistency aros subsystems etc, I believe this would solve the problem, Does anybody remember why we did not go this way, Thanks Dick 1

RWW 26-NOV-74 09:22 24615

All command s Available from Second Level

(J24615) 26-NOV-74 09:22;;;; Title: Author(s): Richard W. Watson/RWW; Distribution: /CHI([INFO-ONLY]) EKM([INFO-ONLY]) DSM([INFO-ONLY]) HGL([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: RWW;

JMB 26-NOV-74 11:57 24616

something's been fooling around with my initial file.

My directory list assures me that I have not written on this file since 20-NOV.

JMB 26-NOV-74 11:57 24616

something's been fooling around with my initial file.

The current version of my initial ffle <beck,jmb,nls;393,> was created 20-NOV, and I have not touched it since then. There is a statement in it which reads "journal items (most recent first)"; the statement signature says it has not been written since 31-JUL-74, and the name delimiters are currently (). But I have had its name delimiters defined as NULL NULL for 6 months as least. It's name delimiters must have been changed on 21-NOV or 22-NOV because journal mail was properly delivered to that branch through 21-NOV. On 22-NOV, XXX wrote a NEW statement named journal with parentheses in my ffle where it then proceeded to deliver the mail since then. Only the old journal statement had its name delimiters changed, no others, though you see that the statement signature does not reflect the change; I am sure I did not change them. How and why did this happen? I am now going to update the file and fix it up before you get this message.

1

JMB 26-NOV-74 11:57 24616

something's been fooling around with my initial file.

(J24616) 26-NOV-74 11:57;;;; Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /BUGs([ACTION]) FDBK([ACTION]) ; Sub-Collections:
SRI-ARC BUGs FDBK; Clerk: JMB;

DVN 26-NOV-74 14:54 24617

Origin and Nature of (gjournal,24543,)

In response to (gjournal,24589,)

DVN 26-NOV-74 14:54 24617

Origin and Nature of (gjournal,24543,)

24543 is my initial file. In assembling the information I intended to distribute under the title ASAS, which was a message, I had committed the content to a command form and had several occasions to jump to link to other files in editing the command form. After some back tracking over the event I am fairly sure that out of mindless habit I type "1f" one time for load file which the sendmail system interprets as the "File" command. Thus I journalized my initial file. 1

DVN 26-NOV-74 14:54 24617

Origin and Nature of (gjournal,24543,)

(J24617) 26-NOV-74 14:54;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: DVN;

SRL 26-NOV-74 15:13 24618

Some Impressions on Using NLS for the DCA Internetting Report

This is a citation for purposes of adding this document to the DPCS subcollectioin. The real document is (journal,31390,) 1

SRL 26-NOV-74 15:13 24618

some Impressions on Using NLs for the DCA Internetting Report

(J24618) 26-NOV-74 15:13;;;; Title: Author(s): Susan R. Lee/SRL; Distribution: /SRL([INFO-ONLY] I'm really glad you wrote thisday in daY out, aVerage typists typing mats for offset printing figure 3 pages an hour) , Sub-Collections: DPCS SRI-ARC; Clerk: DVN;

DVN 26-NOV-74 15:27 24619

Bug Eats Period in Individual Comments

If you put a period in the comment parenthetical comment field following someone's ident in sendmail distribution, the system feeds the ident+comment back to you as if you were doing an ident file search and deletes the period and following spaces. 1

DVN 26-NOV-74 15:27 24619

Bug Eats Period in Individual Comments

(J24619) 26-NOV-74 15:27;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /FDBK([ACTION]) SRL([INFO-ONLY] This happened to you) ; Sub-Collections: SRI-ARC FDBK; Clerk: DVN;

RLL 26-NOV-74 15:37 24620

Bug: none erasure of feedback words in substitute command

Bug: If you do a repeat on a substitute command in DNLS, the noise words (feedback) is not wholely erased, thus creating confusion as to exactly where one is in the command. The words 'substitute branch', for example never appear again. 1

RLL 26-NOV-74 15:37 24620

Bug: none erasure of feedback words in substitute command

(J24620) 26-NOV-74 15:37;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /FEED([ACTION]) FDBK([ACTION]) JDH([INFO-ONLY]) ; KeyWords: bug substitute command feedback noisewords; Sub-Collections: SRI-ARC FDBK; Clerk: RLL;

DVN 26-NOV-74 15:49 24621

SUMMARY OF ARC JOURNAL

In the first week of November Bob Kahn in the ARPA office sent a message to Dick Watson telling that Steve Lukasik was writing a paper on message sending sytems based on Computer networks. Kahn asked for source material on ARC's journal system. He said it should not be too technical and should not be more than a few inches. [We assumed he ment a few inches thick.] I mailed to him the documents that contain the branches cited below with the subject branches marked and in addtion the following summary. I extracted the summary from the references, mostly from (mjournal,24448,) filtered to reduce detail and lighty edited to reduce jargon. 1

SUMMARY OF ARC JOURNAL 2

The ARC journal was conceived not only to help people communicate, but record the communication so that they or others may have appropriate future access to the sucessive messages. It differes from many simple message sending systems like Sendmessage or the Post Office in that it provides means of preserving the messages and retrieving them easily. It combines some of the features of the telegraph with the file drawer, the library catalog, and the file clerk. 2a

SENDING DOCUMENTS OR MESSAGES 2b

The user can submit a file from ARC' Online System (NLS), a file prepared on another computer system in the ARPANET (document), or text typed at submission time (message) to the Journal system. When submitted, a copy of the document or message is transferred to a permanent computer file that can be read but not changed. It is assigned a unique catalog number, and automatically cataloged. Later, catalog indices based on number, author, and "titleword out of context" are created by another computer process. 2b1

At her discretion, a user may choose not to have material catalogued. 2b2

Issuing and controlling of catalog numbers is performed by a NUmber System (an automatic, crash-protected computer process). 2b3

At the time of submission, the user can contribute such information as: title, distribution list, comments, keywords, catalog numbers of documents this new one supersedes (updates), and other information. 2b4

The distribution is specified as a list of unique identification terms (abbreviated) for individuals or groups. The latter option allows users to establish dialogue groups. Special indices of items belonging to subcollections (dialogue

groups) can be prepared to aid their members in keeping track of their dialogue. 2b5

Entry of identification information initially into the system, group expansion, querying to find a persons or groups identification, and other functions are performed by an Identification System. 2b6

DOCUMENT DISTRIBUTION 2c

Documents are distributed to a person in one, two, or all of the following ways according to instructions kept by the Identification System: 2c1

1) in hardcopy through the U.S. or corporation mail, 2c1a

2) online as citations (for documents) or actual text (for messages)that automatically appear in a special file that each user sees every time she logs into the system. 2c1b

3) through the ARPANET for printing or online delivery at remote sites. This delivery uses a standard Network wide protocol. 2c1c

Document distribution is automated, with online delivery performed by a background computer process that runs automatically at specified times. Printing and mailing are performed by operator and clerical support. With each such printed document, an address cover sheet is automatically printed, so that the associated printout pages only need to be folded in half, stapled, and stamped before being dropped in the mail. 2c2

DOCUMENT ACCESS 2d

An effort has been made to make convenient both online and offline access to Journal documents. The master catalog number is the key to accessing documents. Several strategically placed hardcopy master and access collections (libraries) are maintained, containing all Journal documents. 2d1

The catalog system genrates author, number, and titleword indices, both online and in hardcopy. The online versions of the indices can be searched conveniently with standard NLS retrieval capabilities. 2d2

Online access to the full text of a document is accomplished by using the catalog number as a file name and loading the file. 2d3

Larger Journal documents are stored as separate files in a set of system directories. Short documents, called "messages"--- given special treatment in the interests of economical storage--- are stored in a set of (currently about 20) files, several hundred to a file. Whenever a document remains unread for three weeks, it is archived to magnetic tape, and its online storage released for other use. Although over 15,000 items have been journalized on the PDP-10 since April of 1971, most have long ago been archived and therefore do not occupy online storage, except when brought back for reexamination. 2d4

PRIVACY 2e

From the outset, one of the design goals for the Journal has been to provide an atmosphere in which memos, formal design documents, proposals, and other items, once published, would thereafter be readily accessible to anyone who cared to consult them. 2e1

This model of dialogue was appropriate for the system's initial user community, ARC itself, where subgroups working on highly inter-related tasks needed to keep abreast of one another's activity. As the Journal's user community grew to encompass researchers throughout the ARPANET, the model remained for the most part appropriate. Again the participants were engaged in separate but inter-related subtasks of a single, large project (i.e., ARPANET protocol design and implementation), and each working group had legitimate (and often vital) interest in the work of the others. With the extension of the Journal to a dual-host system, a new class of users became involved. Many Utility users, though anxious to use the Journal as a dialogue support aid, were not at all anxious to have all of their dialogue (including, perhaps, personal correspondence, new product information, and so forth) accessible to the general public. 2e2

In reponse, a feature was added to the journal that allows the sender to limit access to himself, a clerk, and the list of persons to whom he addresses the item. Items of restricted access are not catalogued. Further identity checks, applied when users log in to NLS, have been implemented to safe guard this feature of the journal. 2e3

USE 2f

Since its implementation in April of 1971, the Journal has been heavily used (containing at present over 15,000 messages and documents). Initially users were the ARC staff, then a larger user community with network access to ARC's computer facility,

and most recently commercial and government users of a second computer facility operated for ARC. The Journal has evolved as a result of our experience with it and in response to the increased demands placed upon it by its growing user base. 2f1

For example, in July of 1970, ARC's PDP-10 became part of the ARPANET. Once the lowest-level, inter-machine communication protocol was developed, the central task was to design and implement the software protocols required for general, inter-process communication and other, more specialized exchanges. This task was undertaken by an informal group of geographically separated systems programmers called the Network Working Group (NWG). 2f2

In early 1969, ARC had offered to serve as the Network Information Center. As soon as hardware connections were made and protocol development reached a stage sufficient to permit simple, teletype-like use of a remote time-sharing system, ARC began to provide dialogue support for the NWG via the Journal. Not only did the exchange of information facilitate development of new technology, the body of documentation remains a useful reference source. 2f3

COMPUTER OPERATION 2g

ARC's Journal is implemented as a set of computer processes consisting of a foreground subsystem which interacts with the user and provides primitives for entering a message or document in the Journal (with title, author and other information), reserving catalog numbers, and so forth, and a background process that further processes submission requests and delivers mail to the addressees indicated by the author. The Journal is supported by several additional systems: an Identification System responsible for maintaining information about users -- their location, group memberships, phone numbers, and so forth -- and a Number System responsible for keeping track of which catalog numbers have been assigned and to whom, and which are available for future assignment. 2g1

REFERENCES 3

Rough Draft Report Chapter (mjournal,24448,) 3a

James E White, Dialog Support: the NLS Journal, Identification, and Number Systems, Stanford Research Institute, Menlo Park, California 94025November 1974, 11p. 3a1

Chapter of 1972 Final report (journal,13041,4a) 3b

SUMMARY OF ARC JOURNAL

Augmentation Research Center, Stanford Research Institute, Menlo Park, California 94025. Online Team Environment / Network Information Center and Computer Augmented Team Interaction. 16 March 1973. 178p. 3b1

Augmented Knowledge Workshop (journal,14724,4d3) 3c

Douglas C Engelbart, Richard W Watson, James C Norton, The Augmented Knowledge Workshop, Proceedings of the National Computer Conference in June 1973 in Publications of the American Federation of Information processing, Volumne 42, New York, 1973. 19p. 3c1

DVN 26-NOV-74 15:49 24621

SUMMARY OF ARC JOURNAL

(J24621) 26-NOV-74 15:49;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /RWW([INFO-ONLY]) DCE([INFO-ONLY]) JCN([INFO-ONLY]) JEW([INFO-ONLY]) JDH([INFO-ONLY]) JHB([INFO-ONLY]) POOH([INFO-ONLY]) SRL([INFO-ONLY]) JMB([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: DVN; Origin: < VANNOUHUYS, BLAPJOURNAL,NLS;1, >, 21-NOV-74 09:42 DVN ;;;;####;

Augmentation Research Center
Menlo Park, California 94025
Stanford Research Institute
26 NOV 74

Dr. Craig Fields
Advanced Research Projects Agency
1400 Wilson Blvd,
Arlington, Va 22209,

Dear Dr. Fields:

Here is the required information for a list of NIC-related people who need access to Arpanet TIPS.

Individuals

Network address: NIC@SRI-ARC
Phone number: 326-6200 ext 3695
TIPs they require access to: ALL

Samuelson, Kjell	password: KSAM
Hough, Roger	password: RH
Kirstein, Peter	password: PK (already set up?)
Iseli, Jean	password: JI (already set up?)
Atherton, Pauline	password: PAA
Bourne, Charles P.	password: CPB

Organizational Affiliation:

Network Information Center
Augmentation Research Center
Stanford Research Institute
333 Ravenswood Ave,
Menlo Park, Ca. 94025
Attn: Jake Feinler

Sincerely,

Jake Feinler
Network Information Center
(415) 326-6200 X3695

JAKE/DCE
RWW
JCN
MEH

(J24622) 26-NOV-74 18:47;;;; Title: Author(s): Elizabeth J. (Jake) Feinler/JAKE; Distribution: /DCE([INFO-ONLY]) JCN([INFO-ONLY]) RWW([INFO-ONLY]) MEH([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JAKE; Origin: < FEINLER, NICLIST.NLS;3, >, 26-NOV-74 18:33 JAKE ;;;;

####;

one reason why the searches in Help are so slow

The database is carefully designed and maintained so that the first word asked for in a search can be found via an any-name search which is much faster than a first-name search on large files. It appears that help has been doing a first-name search all this time. Search time should decrease dramatically when the code is changed to take advantage of the file structure. 1

one reason why the searches in Help are so slow

(J24623) 26-NOV-74 21:47;;;; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /HGL([ACTION]) JDH([ACTION]) RWW([INFO-ONLY])
DVN([INFO-ONLY]) POOH([INFO-ONLY]) JMB([INFO-ONLY]) JHB([
INFO-ONLY]) NPG([INFO-ONLY]) RLL([INFO-ONLY]) ;
Sub-Collections: SRI-ARC NPG; Clerk: KIRK;

Attitudes and efforts in engineering software sharing.

The ASME has for about six years addressed the problem of setting up a clearing house for analytical software (especially in the area of stress analysis). A review of the current status of this effort was conducted at the winter meeting. The content of this session is of particular interest to both our NSW and CAD community activities. 1

The session was chaired by Donald S. Griffin (Westinghouse, Madison, Pa) who has been a prime mover in the effort. The co-chairman was Michael P. Gaus (Natinal Science Foundation) 1a

The keynote address was provided by H. Kraus (RPI). He discussed the Attitudes toward computer software and its exchange in the pressure vessel industry (open literature paper of the same name ASME number 74-wa/pvp-1) His results show both and interest and a resistance to the concept. The central problems are program certification and documentation. 2

A panel discussion followed: 3

Nicholas perrone (Dept. of the Navy, Arlinton, Va) This talk is summarized in XDOC 24510. 3a

There is some interesting data on operations in western europe. Dr. Perrone is familiar with the NSW effort. 3a1

Kenneth Medearis (K. Medearis & Assoc., Fort Collins, Co) This talk is summarized in XDOC 24598. 3b

This contains a feasibility study for a software center for civil engineering software. (unimplemented) 3b1

Pedro Marcal (MARC analysis Research Corp, Providence, Ri) discussed the cost of such a center. His estimates call for $250,000 per program package per year (which does not included original development). In addition, he estimates that $1 billon is currently being spent on software and support in stress analysis alone. 3c

Nichol (Sandia) revied some adjacent work including the National Controlled Thermonuclear Research Computer Center. This effort which is funded for $50 million over the next 5 years will provide a information bank for people working on fussion. 3d

Michael Gaus (National Science Foundation) sited a GAO report concerning the cost of software prepared by Harry Mason. During the discussion a fellow from the NBS (who had a program which could compute the sine of an angle to an arbitrary number of places - say 200,000) said that NBS was being funded for precision

software development because of this GAO report and the interest of Senator? Brooks. 3e

In general, there seemed to be a real interest in something like a program warehouse, although there was doubt that it could be funded at a level which would make it operational. I think, too, that the engineering population in general has only thought in terms of clearing houses and user groups and may soon be ready for more comprehensive thinking. 4

RLB2 27-NOV-74 08:58 24624

Attitudes and efforts in engineering software sharing.

(J24624) 27-NOV-74 08:58;;;; Title: Author(s): Robert Louis Belleville/RLB2; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: RLB2; Origin: < BELLEVILLE, ASME-SFTWARE-CENT-ATTITUDE.NLS;1, >, 26-NOV-74 12:36 RLB2 ;;;;####;

DVN 27-NOV-74 10:16 24625

What Kind of 11 Do You Need For a Slot?

SRI is responding to an NSF solicitation for a thing called an Editorial Processing Center, which, in this context, means a palce whereNLS is used to edit reports. They will want to have an 11 in July as a front end and a slot. What is the cheapest form of 11 they culd use?

1

DVN 27-NOV-74 10:16 24625

What Kind of 11 Do You Need For a Slot?

(J24625) 27-NOV-74 10:16;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /MEH([ACTION]) KEV([ACTION]) JOAN([ACTION] please put one copy in the DPCS notebook and send on copy to zzat Whitting-Okeefe at SRI) PWO([INFO-ONLY]) JCN([INFO-ONLY]) ; Sub-Collections: DPCS SRI-ARC; Clerk: DVN;

CHI 27-NOV-74 10:18 24626

regarding rww's 24615: secondlevel anticipatory mode

Dick, the facility you describe (as missing from the system) is exactly what you get with terse-anticipatory recognition mode. Try it you may like it. -- Charles. 1

CHI 27-NOV-74 10:18 24626

regarding rww's 24615: secondlevel anticipatory mode

(J24626) 27-NOV-74 10:18;;;; Title: Author(s): Charles H. Irby/CHI; Distribution: /RWW([ACTION]) NPG([INFO-ONLY]) ; Sub-Collections: SRI-ARC NPG; Clerk: CHI;

CHI 27-NOV-74 10:30 24627

some additions to nsw super-doc

Jim, I have the following two suggestions re the nsw superdoc:
1) add the files SPLIT, FE-DESIGN, and DOC-CML (all in NSW-sources) to the doc and
2) set up the doc so that we can write on it.
-- Charles.

1

CHI 27-NOV-74 10:30 24627

some additions to nsw super-doc

(J24627) 27-NOV-74 10:30;;;; Title: Author(s): Charles H. Irby/CHI; Distribution: /JEW([ACTION]) NPG([INFO-ONLY]) RWW([INFO-ONLY]) ; Sub-Collections: SRI-ARC NPG; Clerk: CHI;

DVN 27-NOV-74 10:44 24628

Resumes of Developement People in Editorial Processing Center Proposal

Pat Whitting-Okeefe et al want to include some proramming time for features to the Ouput Processor and the like in their proposal. I have assured them that most of what they want is in the NSW plan and showed them the plan. It appears no work would be done befoe July. Do you, Dick, see any problem in including Harvey's and Elizabeth's resumes? 1

DVN 27-NOV-74 10:44 24628

Resumes of Developement People in Editorial Processing Center Proposal

(J24628) 27-NOV-74 10:44;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /RWW([ACTION]) JOAN([ACTION] please add a copy to the dpces notebook and mail a copy in the sri mail to Pat Whitting-Okeefe?) PWO([INFO-ONLY]) HGL([INFO-ONLY]) EKM([INFO-ONLY]) ; Sub-Collections: SRI-ARC DPCS; Clerk: DVN;

JHB 27-NOV-74 12:50 24629

USER DEVELOPMENT TRAINING SCHEDULE

User Development will meet early in Jan to check out and complete the schedule.

USER DEVELOPMENT TRAINING SCHEDULE

(schedule) USER DEVELOPMENT TRAINING SCHEDULE - latest months first (by week beginning) 1

Dec Jan Feb 1a

2 9 16 23 30 6 13 20 27 3 10 17 24 1b

AF Auditor.....pending...? 1c

ARCHS.....20... 1d

ARPA SRL9JMB.....6JMB SRL? 1e

BRL 9-12JHB 1f

Bell JCN 13NDM 1g

ETS 17JHB 1h

Hudson 18JHB 1i

IBM Gaithersburg.....pending....? 1j

MCA 19 20JHB 1k

MIT 1l

NSA 2-5SRL 1m

NSRDC 13JHB.....20 SRL? 1n

RADC 23JHB 1o

SRI...3JHB.....13?SRL 1p

Tymshare 1q

TRAINING TRAINERS,RJ,JMB.....3?JHB 1r

FALL 74 -- for the record: 1s

Aug74 Sept Oct NOv 1t

19 26 2 9 16 23 30 7 14 21 28 4 11 18 25 1u

NSRDC 20&21SRL 1v

ARCHS 9-13 1w

USER DEVELOPMENT TRAINING SCHEDULE

Hudson	16&17			1x
ETS	18&19			1y
Bell JCN		11		1z
MIT		14-15		1a@
Rome		16-18	11-18SRL	1aa
BRL		21-22		1ab
MCA		postponed		1ac
AF Auditor		pending...Nov		1ad
IBM Gaithersburg		pending...Nov		1ae
Tymshare				1af

USER DEVELOPMENT TRAINING SCHEDULE

(J24629) 27-NOV-74 12:50;;;; Title: Author(s): James H. Bair/JHB; Distribution: /SRL([ACTION]) RJ([ACTION]) JMB([ACTION]) JCN([INFO-ONLY]) RWW([INFO-ONLY]) DCE([INFO-ONLY]) RLL([INFO-ONLY]) MEH([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JHB;

A demonstration of NLS was provided for Professor Roth's Computer Aided Design class

A demonstration of NLS was provided for Professor Roth's Computer Aided Design class on Wednesday 27 Nov 1974. 1

The areas discussed were: 2

the journal 2a

viewing a file 2b

jumping 2c

an example of the CML usage 2d

A demonstration of NLS was provided for Professor Roth's Computer Aided Design class

(J24630) 27-NOV-74 13:42;;;; Title: Author(s): Robert Louis Belleville/RLB2; Distribution: /DCE([INFO-ONLY]) RWW([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: RLB2; Origin: < BELLEVILLE, SU.NLS;1, >, 27-NOV-74 13:14 RLB2 ;;;;####;

JMB 27-NOV-74 15:39 24631

Documentation Weekly Report Proposal: Re--24572,>

I like the idea. But once a week is a little too often for me--maybe it's not for someone working full-time. Once every 2 weeks?? How about Monday instead of Friday? A report would be helpful to me too because I get out of touch with what POOH, DVN, & KIRK are doing. 1

JMB 27-NOV-74 15:39 24631

Documentation Weekly Report Proposal: Re==24572,>

(J24631) 27-NOV-74 15:39;;;; Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /DIRT([ACTION]) ; Sub-Collections: SRI-ARC DIRT;
Clerk: JMB;

c

such a conference should be well planned and guests invited well ahead of time. Also, speakers should be solicited and their talk planned some time in advanced.

c

During the Kwak meeting in January, I think it would be niffty to have each architect give a 20 minute talk on what their group is doing with NLS. Specific examples of the types of applications would be warmly received. 1

The intention is to have invited guests such as Carlson, Crain, and potential clients hear these non-SRI people using the system in other than the simpliest ways. (Carlie Anderson is another possibility). Any comments? Although two days worth of such things might be the proper time, I think ONE day would be long enough for most of the guest. We should plan for that ONE day as the most interesting, saving other architects for th second day. 2

I would also make this more of a formal presentation, with proper invitations, etc. 3

c

(J24632) 27-NOV-74 17:22;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /DCE([ACTION]) JCN([ACTION]) JHB([ACTION]) ; Keywords: KWAC marketing architects ; Sub-Collections: SRI-ARC; Clerk: RLL;

RLL 27-NOV-74 17:33 24633

bug: frozen statements disappearing unexpectedly

Frozen statements are faster and more convenient in many situations.
We should not ignore them in fixing them and in teaching them.

bug: frozen statements disappearing unexpectedly

Frozen statements bug. The setting: several statements are frozen from one file and the screen now has a different file being view. Viewspec "o" is on. 1

If you bug the second frozen statement and cause it to, say, move to another file, it disappears from the frozen stack (as expected) but also the first statement disappears from the frozen list. (NOT EXPECTED) These statements were not in the same branch and I repeated the error with two and three frozen statements listed. 2

bug: frozen statements disappearing unexpectedly

(J24633) 27-NOV-74 17:33;;;; Title: Author(s): Robert N. Lieberman/RLL; Distribution: /FEED([ACTION]) FDBK([ACTION]) JDH([INFO-ONLY]) ; Keywords: frozen statements bug; Sub-Collections: SRI-ARC FDBK; Clerk: RLL;

JMB 27-NOV-74 17:38 24634

NSW Documentation: Ref--24560,>

Exactly what documentation is included in the category "NSW documents" and what isn't? I'm not clear on the naming here. 1

JMB 27-NOV-74 17:38 24634

NSW Documentation: Ref--24560,>

(J24634) 27-NOV-74 17:38;;;; Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /RWW([ACTION]) DVN([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: JMB;

JCN 30-NOV-74 21:34 24635
Augmentation Research Center
Menlo Park, California 94025
Stanford Research Institute
26 NOV 74

Dr. Craig Fields
Advanced Research Projects Agency
1400 Wilson Blvd.
Arlington, Va 22209

Dear Dr. Fields:

Here is the required information for the list of SRI-ARC staff that needs access to the ARPANET.

Staff:

Network address:	SRI-ARC
Phone number:	326-6200
TIPs they require access to:	ALL

Andrews, Don I.	password: DIA
Bair, James H.	password: JHB
Beach, Mark Alexander	password: MARK
Beck, Jeanne M.	password: JMB
Belleville, Robert Louis	password: RLB2
Bondurant, Rodney A.	password: RAB
Engelbart, Douglas C.	password: DCE
Feinler, Elizabeth J.	password: JAKE
Ferguson, William R.	password: WRF
Goodfellow, Geoffrey S.	password: GSG
Hamilton, Joan	password: JOAN
Hardy, Martin E.	password: MEH
Hopper, J. D.	password: JDH
Irby, Charles H.	password: CHI
Johnson, Sandy L.	password: SLJ
Keeney, Marcia Lynn	password: MLK
Kelley, Kirk E.	password: KIRK
Leavitt, Jeanne M.	password: JML
Lee, Susan R.	password: SRL
Lehtman, Harvey G.	password: HGL
Lieberman, Robert N.	password: RLL
McGinnis, Adrian C.	password: ACM
Martin, Karolyn J.	password: KJM
Maynard, David S.	password: DSM
Meyer, N. Dean	password: NDM
Michael, Elizabeth K.	password: EKM
Norton, James C.	password: JCN
Ochoa, Rene C.	password: RCO
Peters, Jeffrey C.	password: JCP
Postel, Jonathan B.	password: JBP
Ratliff, Jake	password: JR
Ratner, Robert S.	password: RSR
Van De Riet, Edwin K.	password: EKV
Van Nouhuys, Dirk H.	password: DVN
Victor, Kenneth E.	password: KEV

JCN 30-NOV-74 21:34 24635

Watson, Richard W.	password: RWW
Weinberg, Ann	password: POOH
White, James E.	password: JEW

Paying Organization Information

Augmentation Research Center
333 Ravenswood Ave,
Menlo Park, Ca. 94025
Attn: J. C. Norton

Sincerely,

Augmentation Research Center

J. C. Norton
Assistant Director
(415) 326-6200 X2124

JCN/DCE
RWW
MEH

(J24635) 30-NOV-74 21:34;;;; Title: Author(s): James C. Norton/JCN;
Distribution: /JCN([INFO-ONLY]) DCE([INFO-ONLY]) RWW([
INFO-ONLY]) MEH([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
MEH; Origin: < HARDY, TIPLIST.NLS;11, >, 26-NOV-74 18:29 MEH
;;;;

####;

Conolidation of the Feedback Mechanisms for NLS

Consolidation of the Feedback Mechanisms for NLS 1

The Feedback mechanisns for users of NLS have been consolidated into one mechanism at Office-1. The directory is <FEEDBACK> and the idents are FEED, FEEDBACK, and FDBK. 1a

Service Policy: All messages will be answered within one working day, whether they are immediate problems (such as a bad file), a bug report, a design bug, or a design recommendation. Where problems cannot be conclusively dealt with at the time of the report, an acknowledgement will be sent indicating that as soon as software /hardware resources are available, the feedback will be given attention and any further developments reported to the feedback originator. 1b

All messages are sorted into various operational and historical catagories for action by appropriate staff and analysis/study. 1bi

This change should give Applications a single communiation channel for all users of our service. It will be manned, regardless of the availability of a particular individual, by a member of the Applications staff. The manpower is specifically allocated from the User Development Group for this purpose. A responsive, timely mechanism is considered vital to the evolution of NLS and the AKW community. 1c

Feedback @Office-1 has been in operation since the inception of the Utility, and has proven to be a useful aid to the development of the Knowledge Workshops. Over a thousand inquiries have been dealt with, the majority of which have required training assistance, rather than software debugging. 1d

Future plans for Feedback handling are as ambitious as manpower/time will permit, for example, a "hot line" where a user can get immediate help through a link to a continuously logged in job. Many situations are handled through phone calls, and these may be recorded in the future. Solicited in addition to unsolicited Feedback from the user community at large may be a possibility. Certainly, the potential for learning about user behavior via automatic monitoring of inquires, particulary to the Help data base, is great. Suggestions are welcome, to FEEDBACK of course! 1e

JHB 30-NOV-74 22:50 24636

Conolidation of the Feedback Mechanisms for NLS

(J24636) 30-NOV-74 22:50;;;; Title: Author(s): James H. Bair/JHB;
Distribution: /SRI-ARC([INFO-ONLY]) BOBM([INFO-ONLY]) FDBK([
INFO-ONLY]) ; Sub-Collections: SRI-ARC FDBK; Clerk: JHB;
Origin: < BAIR, FDBKSHIFT.NLS;1, >, 30-NOV-74 22:44 JHB ;;;;####;

DVN 2-DEC-74 08:29 24637

Note about NSW Documentation

Re < 24634, >

DvN 2-DEC-74 08:29 24637

Note about NSW Documentation

It's on me to derive an NSW Documentation Plan which should make some of these problems clear. I'll get it done in the next couple of days. 1

DVN 2-DEC-74 08:29 24637

Note about NSW Documentation

(J24637) 2-DEC-74 08:29;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /JOAN([ACTION] Please add to DIRI Notebook) JMB([INFO-ONLY]) RWW([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: DVN;

JEW 2-DEC-74 09:40 24638

Change of Address for NSW Super Document

The NSW super document has been moved to (nsw-sources,nswdoc,) so that anyone with access to that directory can modify the file. I will continue to accept contributions and will keep editorial watch over the file, but anyone who wants to make modifications himself may do so.

JEW 2-DEC-74 09:40 24638

Change of Address for NSW Super Document

(J24638) 2-DEC-74 09:40;;;; Title: Author(s): James E. (Jim) White/JEW; Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: JEW;

JEW 2-DEC-74 11:14 24639

L10 Signal Suggestion

Don-- Will there be a way, within the new L10 signalling facilities, to arrange that for every procedure PROC called within the scope of an ON SIGNAL, the following be effected: 1

```
ON SIGNAL ELSE GOTO inline;                    1a

...                                            1b

proc (arg1, arg2, ...);                        1c

(inline):                                      1d
```

Such a feature seems highly desireable, in particular for use within a catchphrase where one often needs to call a series of cleanup procedures, none of which should be able to prevent (by its failure) the others from being called. --Jim 2

JEW 2-DEC-74 11:14 24639

L10 Signal Suggestion

(J24639) 2-DEC-74 11:14;;;; Title: Author(s): James E. (Jim) White/JEW; Distribution: /DIA([ACTION]) NPG([INFO-ONLY]) ; Sub-Collections: SRI-ARC NPG; Clerk: JEW;

KEV 2-DEC-74 12:34 24640

IBM fight songs and a need for a record player

I have a record of IBM team fight songs that it would be fun to listen to here at ARC. Does anyone have a portable record player so that we can do this? 1

KEV 2-DEC-74 12:34 24640

IBM fight songs and a need for a record player

(J24640) 2-DEC-74 12:34;;;; Title: Author(s): Kenneth E. (Ken) Victor/KEV; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections: SRI-ARC; Clerk: KEV;

JMB 2-DEC-74 13:41 24641

Is the Journal bugging my name delimiters? Addendum to--24616,>

BUG! hassled me again

JMB 2-DEC-74 13:41 24641

Is the Journal bugging my name delimiters? Addendum to--24616,>

It happened again (Read--24616,) 1

Name delimiters again got redefined in my initial file (and again not by me) back to (and) for my author branch, causing the journal to write a new author branch at the top of my file when it delivered new stuff. This screws up links in and to my initial file as well as causing extra work in moving the branch. 2

Incidently, in both cases, only the statement (journal or author, etc.) which is to have something delivered under it gets its name delimiters redefined and is rewritten. In the first case (24616,) it was "journal", in this last instance, only "author" was changed. None of the other name delimiters in the file were redefined. 3

JMB 2-DEC-74 13:41 24641

Is the Journal bugging my name delimiters? Addendum to--24616,>

(J24641) 2-DEC-74 13:41;;;; Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /BUGS([ACTION]) FDBK([ACTION]) ; Sub-Collections:
SRI-ARC BUGS FDBK; Clerk: JMB;

JMB 2-DEC-74 13:42 24642

Reporting to Feedback with SNDMSG

It would be nice if sndmsgs to username "Feedback@OFFICE-1" did not have to include the "@OFFICE-1" ; ie, that Feedback was a valid username at any site, or the site would be assumed, or something like the situation in using the journal--you just have to give the Ident FEEDBACK and it automatically goes to the right site--OFFICE-1. 1

JMB 2-DEC-74 13:42 24642

Reporting to Feedback with SNDMSG

(J24642) 2-DEC-74 13:42;;;; Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /FDBK([ACTION]) ; Sub-Collections: SRI-ARC FDBK;
Clerk: JMB;

DVN 2-DEC-74 13:44 24643

Some Good Words For Help

Vint Cerf linked to me this morning about somethng else and mentioned that he had been using NLS-8, He said he liked it. I asked him if he had tried help. He said..."yes, that's why I liked it...an improvement over documentation." 1

DVN 2-DEC-74 13:44 24643

Some Good Words For Help

(J24643) 2-DEC-74 13:44;;;; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /JOAN([ACTION] Please file this in the DIRT notebook) DIRT([INFO-ONLY]) ; Sub-Collections: SRI-ARC DIRT; Clerk: DVN;

JBP 2-DEC-74 14:01 24644

Draft file standards

This is a first cut at some file standards, please comment and suggest additional types of files to be included in this proposal.

JBP 2-DEC-74 14:01 24644

Draft file standards

Network Working Group
Request for Comments: rrr

J. Postel (SRI-ARC)
dd December 1974

NIC: jjjjj

Standard File Formats

Introduction

In an attempt to provide online documents to the network community we have had many problems with the physical format of the final documents. Much of this difficulty lies in the fact that we do not have control or even knowledge of all the processing steps or devices that act on the document file. A large part of the difficulty in the past has been due to some assumptions we made about the rest of the world being approximately like our own environment. We now see that the problems are due to differing assumptions and treatment of files to be printed as documents. We therefore propose to define certain standard formats for files and describe the expected final form for printed copies of such files.

Discussion

Code Set

The character encoding will be the network standard Network Virtual Terminal (NVT) code as used in Telnet and File Transfer protocols, that is ASCII in an eight bit byte with the high order bit zero.

Format Control

The format will be controlled by the ASCII format effectors:

Form Feed <FF>

Moves the printer to the top of the next page, and to the left margin of the page. [Note that this differs from the NVT specification].

Carriage Return <CR>

Moves the printer to the left margin of the current line.

Line Feed <LF>

Moves the printer to the next print line, keeping the same horizontal position.

Horizontal Tab <HT>

Moves the printer to the next horizontal tab stop. It remains unspecified where such tab stops are located or how they are established.

Vertical Tab <VT>

Moves the printer to the next vertical tab stop. It remains unspecified where such tab stops are located or how they are established.

Back Space <BS>

Moves the printer one character position toward the left margin.

Not all these effectors will be used in all format standards; any effectors which are not used in a format standard are ignored.

Page Length

The page size or length will be specified in terms of the number of lines of text per page.

Page Width

The page width or line size will be specified as a number of characters per line.

Top of Page

The top of page will be specified as either the very top line of the page or the third line of the page.

Overstriking

Overstriking (note that underlining is a subset of overstriking) may be specified to be done in one or both of the following ways, or not at all:

By Line

The text of the line will be followed by a <CR> then the overstriking will follow as a series of space and overstrike characters followed by <CR><LF>.

By Character

Each character to be overstruck is to be immeadiately followed by a <BS> and the overstrike character.

Standard Formats

Terminal

Active Format Effectors

<FF>, <CR>, <LF>, <HT>, <VT>, <BS>,

Page Length

66 lines,

Page Width

72 Characters,

Top of Page

Line 1,

Overstriking

By Character or By LIne

Document

Active Format Effectors

<FF>, <CR>, <LF>,

Page Length

60 lines,

Page Width

72 Characters,

Top of Page

Line 3,

Overstriking

By LIne

References

"TELNET Protocol Specification," NIC 18639, Aug-73,

Draft file standards

(J24644) 2-DEC-74 14:01;;;; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /JEW([ACTION]) EKM([ACTION]) DSM([ACTION]) HGL([ACTION]) DHC([ACTION]) ; Sub-Collections: SRI-ARC; Clerk: JBP; Origin: < POSTEL, FILE-STANDARDS.NLS;3, >, 2-DEC-74 13:57 JBP ;;;;####;

Network Journal Delivery

Changes to Network Journal Delivery Process 1

We have received a number of complaints about the difficulty of retrieving long (over 2000 characters) journal documents at hosts other than ours. The following changes to network journal delivery have been recommended to make remote retrieval easier. These changes will be implemented, hopefully in the next two weeks, unless someone sees problems with them that we have missed. 1a

Whenever a distribution list includes idents whose ident file records specify Network Delivery (and the journal item is over 2000 characters long) the Journal will: 1b

Create a sequential file formatted for a "Network virtual printer' in a new directory at SRI-ARC. Each line will be 72 or fewer characters. End of line will be CR LF. Page break will be <CTL>L. 1b1

For each Network ident, create a Mailer file that announces the Journal item and tells how to retrieve it from the sequential file using FTP. 1b2

Each citation will be delivered separately. People have complained that the present system of batching citations and short documements creates problems when people try to use their local mail processing programs. 1b3

The sequential files created at SRI-ARC will be available for 2 weeks at which time they will be archived. 1b4

If the Journal document is less that 2000** characters long the Mailer file will contain the text rather than a reference to the file. 1c

As with the citations, each document will be delivered as a separate file. 1c1

All documents and citations will conform to the mail syntax set forth in RFC # 561 and will have properly formatted headers inserted. 1d

** It is possible that in the future this number will be reduced to around 800 characters. 1e

EKM 2-DEC-74 16:29 24645

Network Journal Delivery

(J24645) 2-DEC-74 16:29;;;; Title: Author(s): Elizabeth K. Michael/EKM; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections: SRI-ARC; Clerk: EKM; Origin: < MICHAEL, NETWORKJOURNAL.NLS;4, >, 2-DEC-74 16:22 EKM ;;;;####;

GSG 2-DEC-74 18:18 24646

NETWORK JOURNAL DELVERY

CITATION THAT POINTS TO A FILE AT ARC, ABOUT THE SIZE OF IT IN CHARACTERS, SO THE USER RETRIEVEING IT COULD GET SOME SORT OF IDEA ABOUT HOW LONG IT WOULD TAKE TO PRINT OUT, AND SUCH. [GEOFF]

GSG 2-DEC-74 18:18 24646

NETWORK JOURNAL DELVERY

(J24646) 2-DEC-74 18:18; Title: Author(s): Geoffrey S. Goodfellow/GSG ; Distribution: / EKM; Sub-Collections: NIC; Clerk: GSG;