jform2 changes

When you change jform2 could you make two changes for me as well?
One is to delete the carriage return at the end of the citation. The
other is to make the link delimiters angle brackets. If you don't
like these changes, let me know so I can make a jform3.   -- Kirk   1

jform2 changes

(J23158)   29-MAY-74 18:21;   Title: Author(s): Kirk E, Kelley/KIRK;
Distribution: /KEV([ACTION]) ; Sub-Collections: SRI-ARC; Clerk:
KIRK;

Cutting Quarters

reply to (journal,23156,)

Cutting Quarters

I think description of th system is most important with a word abo
how it has operated and had results,   1

1

Cutting Quarters

(J23159)   29-MAY-74 20:39;   Title: Author(s): Dirk H, Van
Nouhuys/DVN; Distribution: /SRL([ACTION]) ; Sub-Collections: DPCS
SRI-ARC; Clerk: DVN;

(catalog,carcjnicnl,)lacks an entry branch   1

Missing Entry Branch from Locator

(J23160)   29-MAY-74 21:14;   Title: Author(s): Dirk H, Van
Nouhuys/DVN; Distribution: /BAH([ACTION]) KIRK([ACTION]) FDBK([
ACTION]) ; Sub-Collections: SRI-ARC; Clerk: DVN;

For Shortening the Process of Setting a Simple Content Analysis
Filter

"Go to Programs + Compile Content Analayser Pattern +Institute
Program P as Content Analyser Pattern" is a lot of (explative
deleted) to go through to creat the pattern fo some simple search, It
would help if the compile command would automcctically institute the
pattern as in the old days, Then you could institute a pattern wth
one command and atleast use "execute program",   1

What about a "Delete Explative" command?   2

For Shortening the Process of Setting a Simple Content Analysis
Filter

(J23161) 29-MAY-74 21:38; Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /NEWNLS([ACTION]) ; Sub-Collections: SRI-ARC NEWNLS;
Clerk: DVN;

Office-1, Line Scanner bug, request to fix,

Jim: This is the request to Tymshare to fix the Line-Scanner bug that
pervents Bell Canada from inputing cassette through their Mux link,
John Swarbrick (Tymshares Service Mgr) said they would correct ASAP,

Office-1, Line Scanner bug, request to fix,

Augmentation Research Center
Menlo Park, California 94025
Stanford Research Institite
23 MAY 74

Mr John Swarbrick
Tymshare
10261 Budd Road
Cupertino, CA 95014

Menlo Park, California 94025

Dear Mr Swarbrick:

In response to our phone conversation tuesday, enclosed is the
copy of the Data Line Scanner modification (Field Ser Tech
Manual 9,1,5) we would like you to install to eliminate
character garbling by that device when it receives two or more
10 unit code characters back to back (no delay between).

This problem can be encountered by sending repeat characters
from any 10 unit code terminal, such as a TI. In particular it
has been encountered by Bell Canada when they input cassette via
their multiplexor link,

    Their multiplexor buffers the cassette data (like our
    Lineprocessor) and sends it in bursts to the Line Scanner,
    thus characters are received by the Line Scanner back to back
    with no delay between.

    When they dial in directly, bypassing their Mux link, they
    have no problem because their send data is not transmitted as
    bursts of characters back to back,

Hence this modification is necessary to allow Bell Canada to
input cassette through their Mux link, and to allow our
Lineprocessor to operate through the Line Scanner,

Please notify me of your actions, and if I can be of any
assistance, please do not hesitate to call,

                              Sincerely,

                              Augmentation Research Center

                              Martin Hardy
                              Supervisor, Computer Facility
                              (415) 326-6200 X3921

PS:

    The TI test is not a absolute test; The repeat key delays
greater than one 300 baud bit time between each character.
For absolute testing you must use a device that has no built
in delay, such as our Lineprocessor, or a cassette through
Bell Canada's multiplexed link.

MEH/jcn
   jb

Office-1, Line Scanner bug, request to fix,

(J23162
) 30-MAY-74 08:39;   Title: Author(s): Martin E, Hardy/MEH;
Distribution: /JCN([INFO-ONLY]) JHB([INFO-ONLY]) FEED([
INFO-ONLY]) WRF([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
MEH;   Origin: (HARDY, TYM/ECO,NLS;18,), 28-MAY-74 08:37 MEH
;####;

Corrections for the DEC PDP-11/45 Processor Handbook

Following is a file sent to Jean Iseli by Charles Landau of RISOS, for printing in the ARPANET News, but never made it because the News suspended operation. Since it is of interest to PDP-11/45 users, I am journalizing it to the people at ARC who are interested, and Jean Iseli has distributed it elsewhere.

1

(risos)   DEC PDP11/45 Processor Handbook errors   2

This file is intended to contain all known errors in the DEC PDP11/45 Processor Handbook. If you know of any additional errors, please contact Charles Landau at network mailing address RISOS at ISI or at:
Lawrence Livermore Laboratory, L-307
Box 808
Livermore, CA 94550   2a

It is hoped that this memorandum will prod DEC into issuing a corrected edition of the Handbook. In the meantime, it can be used by PDP11/45 programmers as an update to the existing Handbook,   2b

Page numbers refer to the edition copywrited in 1973.
Page numbers in parentheses refer to the edition copywrited in 1971 (labeled "1972" on the outside cover). There are only minor differences between these two editions.   2c

P. 13 (13): In section 2.3.2, see also section 2.8.3, P. 24 (24).   2d

p. 14 (14): In first sentence after "Trap", replace "under program control" with "only by traps, interrupts, RTI, and RTT. Writing into location 777776 does not change the T-bit."
It should also be noted that T-bit traps are not transparent to interrupts.
Under "Stack Limit Register", delete first sentence.
After the second sentence, insert "Bits 7-0 of the Stack Limit Register are always zero. The stack limit is equal to the contents of the Stack Limit Register plus 400. There is a 16-word "yellow" zone immediately below the stack limit (beginning at Stack Limit Register plus 340)."   2e

p. 22 (22): Under 2.7.3, replace "5 usec" with "5 or 10 usec".   2f

p. 30 (31): Under 3.3.3, second sentence, insert after "byte instructions", "always by two for R6 and R7".   2g

pp. 47-48 (49-50): Note: It is a common error to assume that DEC and INC affect condition code C.   2h

Corrections for the DEC PDP-11/45 Processor Handbook

pp. 55-56 (58-59):   Assembler syntax is ASH src,reg and ASHC
src,reg'.   2i

pp. (58-59):   Arrows from bit 14 should come from bit 15 instead.
Also, the ISP has several errors, the most glaring being that
"df<5:0>" should be replaced by "Df<5:0>".   2j

p. 56 (59): Replace last two sentences with "In this case the
right shift becomes a rotate if the shift count is between -16 and
0 inclusive. The 16 bit word is rotated right the number of bits
specified by the negative of the shift count."   2k

p. 59 (62):   For SBC and SBCB, condition code C is set if dst was
0 and C=1; cleared otherwise.   2l

p. 60 (63):   For SXT, Z is set if N bit clear, cleared otherwise.   2m

p. 61 (64):   Replace "17-bit" with "17-bit or 9-bit".   2n

p. (74):   Third line of ISP, replace "even" with "odd".   2o

p. 84 (88):   BLO is the same instruction as BCS.   2p

p. 85 (89):   BHIS is the same instruction as BCC.   2q

p. 99 (103):   Insert "Condition codes: unaffected".   2r

p. (105):   Under Operation, replace "SP+2*nn" with "PC+2*nn".
Also, the ISP is incorrect.   2s

p. 103 (107):   Insert "Condition Codes: unaffected".   2t

p. 105 (109):   Insert "Regardless of the processor mode,
interrupts are inhibited between the SPL and the next instruction.
In single instruction mode, the PDP11/45 will not stop after an
SPL instruction."   2u

p. 106 (110):   Replace Operation with "PC_addr(dst)".   2v

pp. 113-114 (117-118):   When the PS is loaded by RTI or RTT, the
current and previous processor mode and register bit are inclusive
or'ed. The processor priority is ignored in user or supervisor
mode, loaded in kernel mode. The T bit and condition codes are
always loaded.   2w

p. 114 (118):   Replace "If a trace trap is pending" with "If the
PS loaded from the stack has the T bit on".   2x

pp. 115-117 (119-121):   This section was lifted from the PDP11/20

Processor Handbook, despite the fact that trace traps operate
differently on the PDP11/45. Here is an attept to set the
situation straight.
Under Stack Overflow Trap, insert "see p. 14 (14)".
Under "An instruction that cleared the T-bit", replace
the rest of the paragraph with "The trap will not occur."
Under "An instruction that caused an Instruction Trap",
replace the rest of the paragraph with "The instruction trap
occurs. If the service routine exits with an RTI, the T-bit is
set again and the trace trap occurs."
Under "An instruction that caused a stack overflow", I am
not sure that this description is correct. Recall that stack
overflow traps occur only in Kernel mode.
Under "An interrupt between setting of the T-bit and fetch of the
traced instruction", replace last sentence with "The trace trap
occurs immediately." Note that this does not produce the desired
result.
Under "A WAIT", replace rest of paragraph with "The processor
waits. When an interrupt occurs, if the interrupt service routine
exits with an RTI, the trace trap will occur immediately." Under
"A HALT", I am not sure that this description is correct. Recall
that in User and Supervisor modes Halt causes an instruction trap.
Under "Trap priorities", see also p. 231 (235).
Delete the last two paragraphs in this section.   2y

P. 119 (123): In User or Supervisor mode, HALT traps through
location 4.   2z

P. 120 (124): Replace "PSW" with "PS".   2a@

P. 121 (125): RESET does nothing in User and Supervisor modes.   2aa

P. 122 (126): MTPI R6 loads the appropriate stack pointer.   2ab

p. 124 (128): MFPI R6 gets the appropriate stack pointer. If the
current and previous processor modes are both
User, MFPI moves from user D-space, not I-space.   2ac

p. 145 (149): Under 6.3, first paragraph, insert "Vectors are in
Kernel D-space."   2ad

p. (155): Replace "Kernel Virtual Address 10" with "Kernel
Virtual Address 250". Bit 11 of SSR0 is unused.   2ae

p. 152 (156): Under 6.6.1.4, add "Memory management traps do not
occur when this bit is on."   2af

p. (157): Under 6.6.1.7, the vector address is 250, not 10.   2ag

Corrections for the DEC PDP-11/45 Processor Handbook

p. 152 (157): Under 6.6.1.9,, replace second sentence with "It will be set to 1 during T-bit, Parity, Odd Address, and Time Out traps, and interrupts, and set to 0 otherwise,"   2ah

p. 153 (157): Under 6.6.2, after "including explicit references through the PC", insert "and excluding implicit ones (i.e., to reference index words)". After first paragraph, add "The information in SSR1 and SSR2 is frozen when a segment violation (abort)
occurs. It is unfrozen when bits 15-13 of SSR0 are cleared,"   2ai

p. 197 (200): Under 8.4, virtual, add "During HALT, RESET, and WAIT instructions, the PC is displayed,"   2aj

p. 198 (201): Under 8.6, data paths, add "During HALT, RESET, and WAIT instructions, R0 is displayed,"   2ak

p. 199 (202): Under 8.8.2, first paragraph, add ""Data paths" must be selected,"   2al

pp. (219-231): Appendix B has been completely rewritten in the 1973 edition,   2am

p. 229 (233): Before vector 4, insert:
"0   Reserved for PC and PS after a fatal stack violation." Under vector 4, stack violations, replace "R6-related operations" with "R6-related operations in Kernel mode". Insert:
"4   HALT in User or Supervisor mode,"   2an

p. 230 (234): Under vector 10, delete ""HALT" in user mode;".
Replace "106400-107777" with:
"106400-106477
106700-107777
170003-170010
170013-170077"   2ao

p. 231 (235): Under "Order of Service", add:
"0   Illegal and Reserved instructions,
and TRAP, EMT, BPT, and IOT   Trap (10)"
After "Console Control", add "(e.g. HALT switch)",   2ap

p. 234 (237): In item 12, replace "endangered" with "engendered",   2aq

p. 235 (239): Replace the sample dispatch program with the following program, which saves all registers,
```
MOV R0,-(SP)
MOV @#PIR,R0
MOVB R0,@#PS
BIC #177761,R0
```

Corrections for the DEC PDP-11/45 Processor Handbook

```
MOV DISPAT(R0),R0
RTS R0              ;or JMP @R0 to leave R0 on stack                    2ar
```

Corrections for the DEC PDP-11/45 Processor Handbook

(J23163) 30-MAY-74 09:11;   Title: Author(s): Mil E. Jernigan/MEJ;
Distribution: /SRI-ARC; Keywords: PDP-11/45 Errata; Sub-Collections:
SRI-ARC NIC; Clerk: MEJ;
Origin: <JERNIGAN>DEC.NLS;1, 30-MAY-74 09:06 MEJ ;

Recent Proposal and Another Journal Item both Claim the Same Number

I screwed up in giving out pre-assigned numbers with the result that
the journal number 22125 appears on printed copies of our most recent
porposal, but in the catalog belongs to a journal item of which Beau
is th author, Jim Norton dicovered the problem a couple of weeks ago
and said he was going to ask Dave Hopper to remove the number from
Beau's item and give it to the proposal, Dick Discovered this morning
that that had not occured,   1

Dave, unless you know a reason not to, could you go ahead an make
that chnage?   2

Recent Proposal and Another Journal Item both Claim the Same Number

(J23164) 30-MAY-74 09:18;   Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /JDH([ACTION]) JCN([INFO-ONLY]) RWW([INFO-ONLY]
) BAH([INFO-ONLY]) ; Sub-Collections: DPCS SRI-ARC; Clerk: DVN;

New Line Processor program description for Users

Contains switch and light meanings and error reporting procedures.

New Line Processor program description for Users

There is a new Lineprocessor program (at SRI and being sent to Dean) with the following changes: 1

It handles the mouse buttons more carefully,   1a

It does error detection and reporting on a limited basis,   1b

It notifies the TENEX subsystem in use (e.g. NLS) when system reset is pushed on the Lineprocessor panel. At this time, NLS does not recognize this however -- later NLS will clean everything up for the user,   1c

The status light and sense switch meanings have changed in some cases. So here is a switch and light description to pin up next to Lineprocessors: 2

                                                                          3

Sense switches -- down is normal, UP means: 4

0: inhibit printing on printer   4a

1: display last error and halt if error occurs with 1 up,   4b

2: inhibit keyboard translations for CA, CD, etc,   4c

3: inhibit coordinate mode (used to type control chars to TIP),   4d

Status lights (with SW1 DOWN)   5

0: printer is open   5a

1: (rapidly flashing -- 36ms period) LP is 'alive'   5b

2: not used at present (off)   5c

3: LP in coordinate mode (set by Terminal Type command)   5d

Status lights (with SW1 UP) - a four light pattern: 6

(0000): no errors since last LP system reset   6a

(1000): display output buffer overflow error   6b

(1001): buffer overflow (not display output buffer)   6c

(1010): internal screwup associated with buffer overflow   6d

(1011): protocol sequence error (bad stuff from NLS)   6e

(1100); protocol value error (bad parameter from NLS)   6f

EVERYONE PLEASE run with Sense Switch 1 UP, (Except for momentary
checks to see status lights). If an error is detected one of two
things will happen: 7

The status lights will remain OFF and the 'error' light will come
on,   7a

   Please make a note of this and hit the error light reset button
   (NOT system reset) and go on,   7a1

The status lights will register one of the above error conditions
(e,g, 1000) and the Lineprocessor will 'halt', Please make a note
of the following: 7b

   1) Note whether the error light was on or not!   7b1

   2) Make a note of what you had just done - e,g, just typed
   final command accept for replace character command, Also note
   if you can what you expected NLS to do to the screen next -
   e,g, mark a character, write a string in the command feedback
   line or recreate the screen, Take note of any junk on the
   screen - e,g, in TTY window, in the middle of re-create,   7b2

   3) If a reasonable time of day, call DIA and answer his
   questions,   7b3

   4) Hit system reset, If in NLS, do a quit and use keyboard CA,
   Set terminal type to Lineprocessor, REEnter NLS,   7b4

New Line Processor program description for Users

(J23165) 30-MAY-74 09:44;   Title: Author(s): Don I, Andrews/DIA;
Distribution: /SRI-ARC([INFO-ONLY]) ; Sub-Collections: SRI-ARC;
Clerk: DIA;   Origin: (ANDREWS, LP5/24,NLS;1,), 30-MAY-74 08:53
DIA ;####;

NIC/INWG Data per your request

Vint ... Sorry for the delay in getting you these data on INWG
correspondence. Hope it is of use. Please note that these data
represent what it costs us; what price tag Jim Norton might put on
this is up to him --- I'm simply not in that loop. ... Mike Kudlick   1

SUMMARY INFO   2

    $ 75.   approx mailing cost per yr
      3000.   approx xerox cost per yr
       700.   approx ovhd'd cost for personnel

    $ 4000.   approx annual cost for handling INWG notes at the NIC   2a

BREAKDOWN OF DATA   3

    MAILING COSTS   3a

    Each note is currently sent to 101 INWG members.
    U.S. members get first class mail; foreign, "air printed" mail.
    Postage for a 4-oz document (13 pgs + envelope) varies with
    destination: 3b

                   # members   postage   total
        Europe   48 $ .84 $ 40.32
        Asia   15   1.05   15.75
        South Amer   2   .84   1.68
        U.S.   36   .40   14.40
                                                  --------   3b1

        cost for one avg INWG note mailing = $ 72.15   3b2

    XEROX COSTS   3c

    Assuming $.055 per copy, Xerox cost of one INWG note is $72.72
    (actual cost varies from $.04 to $.07 per copy).   3d

    one year's INWG Xerox cost is $3000 (approx)
        ($72.72 per note) x (41 notes)   = $2981.52   3e

    PERSONNEL COSTS   3f

    With a 20-bin Xerox sorter device, it takes about 1.0 hour to
    xerox and staple 101 copies of a 13-page document. And, it takes
    about 0.75 hours to label, stamp, and stuff the envelopes.   3g

NIC/INWG Data per your request

Total = (41 notes / yr) x (1,75 hrs per note) = 71,75 hrs /
yr   3h

SRI man-yr cost for this work is approx $20K
71,75 hrs is approx 3,5% of one man-yr
0,035 x $20000 = $700,   3i

COMPUTER USAGE   3j

Since no INWG notes originate through the NIC Journal, the only
computer time we use is for generating the mailing labels,
This takes about 1 second of connect time per group member,   3k

Total connect time =
 (1 sec/member) x (100 members) x (40 issues/yr) = 1,5 hrs/yr
I haven't included any charge for computer usage in the summary at
the top of this note, because of this very light usage,   3l

NIC/INWG Data per your request

(J23166)   30-MAY-74 10:16;   Title: Author(s): Michael D. Kudlick/MDK;
Distribution: /VGC MLK(for your info) JAKE(for your info);
Sub-Collections: SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>VINT.NLS;8, 30-MAY-74 10:11 MDK ;

Bug will file write access

I modified an unlocked file in a directory <feedback,fdbk,> other
than my login directory <kelley>. However, when I tried to update, i
received a message stateing that the new version of that file could
not be opened. When I connected to the directory, it then let me
update. This seems inconsistent. Feedback is in my directory group,
I'm not sure how this is supposed to work but it seems I should
either be able to update if I can modify, or else I should not be
allowed to modify,   1

Bug will file write access

(J23167)   30-MAY-74 11:36;   Title: Author(s): Kirk E, Kelley/KIRK;
Distribution: /BUGS([ACTION]) ; Sub-Collections: SRI-ARC BUGS;
Clerk: KIRK;

A First Step Towards the Subsystem Marketplace

As some of you know, Kirk has designed and coded a file-reading
system intended to serve his Whole Universe Catalog. The system is
serviceable for reading other files including (documenaton ,Help).
At the moment it exists in several simlple-to-complicated forms. One
is calle Point and View.   Kirk's system would be atleast as useful
as the present HELP command system for some users of help and might
be preferable to normal jumping with viewspecs etc. to some other
pople in their daly work.   1

I suggest we make KIRK's system avaialbe as a subsystem under some
appropriate name and see what people do with it.   2

   It would first be necessary to settle on the exact form of the
   system.   2a

   Kirk might have do do some further debugging and refining and a
   little formal training   2b

I suggest this approach partly becuase it would be an example of the
subsystem makrket place of which Doug has long spoken and which Steve
Croker et al, now imagine for NSW.   3

A First Step Towards the Subsystem Marketplace

(J23168)   30-MAY-74 13:49;   Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /EMC([ACTION] Since Kirk did the work on his own
time,if the PV system became part of standard NLS, ARC should do
something for him) SRI-ARC([INFO-ONLY]) NJN([INFO-ONLY]) JI([
INFO-ONLY]) DHC([INFO-ONLY]) ; Sub-Collections: SRI-ARC DIRT EMC;
Clerk: DVN;

Bug with TAB command and jump to return.

If you jump to a place (or places) using the TAB command, Jump to
Return fails to return you to any of those places.   1

Bug with TAB command and jump to return.

(J23169)   30-MAY-74 14:01;   Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /BUGS([ACTION]) KEV([ACTION]) ; Sub-Collections:
SRI-ARC BUGS; Clerk: KIRK;

Caledar Slip for People Working on the Proposal

We have pushed back by one week the deadline for final report
contributions from the following people who are working on the
proposal:HGL CHI EKM KEV DIA RWW JEW.   (documentation,final,calendar)
reflects this change, Integration and production of the report will
be a lot easier if others bring in their sections on time, Monday,   1

Caledar Slip for People Working on the Proposal

(J23170)   30-MAY-74 16:56;   Title: Author(s): Dirk H, Van Nouhuys,
Harvey G, Lehtman/DVN HGL; Distribution: /HGL([ACTION]) CHI([
ACTION]) EKM([ACTION]) KEV([ACTION]) RWW([ACTION]) JEW([
ACTION]) FINAL([INFO-ONLY]) ; Sub-Collections: DPCS SRI-ARC
FINAL; Clerk: DVN;

re my note on INWG costs

Vint ., re my note on INWG costs (in -- Gjournal, 23166,NLS, 1:wy)   1

I realized this morning after receiving a copy of the message you
sent Bob Kahn that I made a gross error in computing the total
annual mailing costs. The cost for mailing a SINGLE INWG note to
the entire membership is indeed approximately $75, as indicated in
the details of my note.   1a

But the ANNUAL mailing cost is approx $3000 ...
    (41 notes per yr) x ($72.15, per mailing) = $2958.15.   1b

This of course increases the total annual cost of handling INWG
notes at the NIC to approx $7000, as shown below.   Very very
sorry to hand you that erroneous info. ..., Mike   1c

REVISED SUMMARY DATA: 1d

$ 3000,   approx mailing cost per yr
  3000,   approx xerox cost per yr
   700,   approx ovhd'd cost for personnel

$ 7000,   approx annual cost for handling INWG notes at the NIC   1e

re my note on INWG costs

(J23176) 31-MAY-74 09:39;   Title: Author(s): Michael D. Kudlick/MDK;
Sub-Collections: SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>VINT,NLS;13, 31-MAY-74 09:38 MDK ;   Title:
Author(s): Michael D. Kudlick/MDK; Distribution: /VGC MLK(for your
info) JAKE(for your info); Sub-Collections: SRI-ARC; Clerk: MDK;
Origin: <KUDLICK>VINT,NLS;8, 30-MAY-74 10:11 MDK ;

New NLS bug

When jumping to file return it said "illegal statement in file return ring". Thanks I said. How about an error msg that tells me what to do?

1

New NLS bug

(J23177)   31-MAY-74 12:10;   Title: Author(s): James H. Bair/JHB;
Distribution: /FDBK([ACTION]) BUGS([ACTION]) ; Sub-Collections:
SRI-ARC BUGS; Clerk: JHB;

DEX 1.5 bug; It doesn't do anything!

When I try it on my file <KELLEY>TAPE, It returns the tenex herald
without doing anything. Does not even create NLS file.   1

DEX 1,5 bug: It doesn't do anything!

(J23183)   31-MAY-74 22:17;   Title: Author(s): Kirk E, Kelley/KIRK;
Distribution: /HGL([ACTION]) ; Sub-Collections: SRI-ARC; Clerk:
KIRK;

Jump file return bug

Jump to file return just gave me a core dump and put me in an old
version. I'm in the running system.

1

Jump file return bug

(J23184)   1-JUN-74 15:32;   Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /BUGS([ACTION]) ; Sub-Collections: SRI-ARC BUGS;
Clerk: KIRK;

Process of creating the hardcopy command syntax summary from <Help,>

This pertains to a conversation Dirk & Jeanne & Kirk had on Friday,
Dirk thought this might prove useful for planning documentation
schemes,

Process of creating the hardcopy command syntax summary from <Help,>

This process of getting out a quickie New NLS command summary for
hardcopy use might contain some clues for our discussions of possible
ways to make some use of our work in the Help database for
userguides-writing. The document I describe here about 6
person-hours to extract & adapt & format (partly becase it was a
trial & error process)   1

Refer to the black notebook on round table "NEW NLS" for the results. 2

What I did: 3

    Extracted descriptions of relevant conventions and concepts for
    the hardcopy file I was creating.   ●   3a

        These were mostly found in 4 branches in the NLS concepts
        section of Help. I followed the various links until getting
        all the definitions I wanted copied to the other file. I
        couldn't describe any particular sequence of actions for this
        process. I think you have to already have in mind a conceptual
        framework to decide what you're looking for and what will and
        will not be included.   3a1

        When copied to the file, I formatted and sorted and edited
        these.   3a2

    Went to <help, syntax> and copied that branch into the other file. 3b

    Now in the file for hardcopy: 3c

    Deleted all database comment statements (preceded by %). When a
    syntax statement as under one of these it got moved up and shown. 3d

    Deleted the branches without syntax statements in them and those
    that consisted only of liks to items not in syntax branch.   3e

    Left in the heading statements having syntax statements under
    them,   3f

        Used the same categories as were used in the database to divide
        up the lists of the commands for hardcopy.   3f1

    If, under a category heading there were nodes consisting of links
    to syntax statements under other categories, the path name to that
    command was added to this category statement as a Show Also, and
    the statements which were links were deleted.   3g

    Deleted all definitions of the variables CONTENT and SOURCE which
    were branches under each syntax statement which used the words.   3h

Inserted colons after all statement names, to reduce confusion
with the syntax, and also after all heading lines which looked
like the others but which we'd left unnamed in Help for searching
problems,   3i

Formatted file for output processor   3j

Printed it   3k

After I finished it, the file was NOT in optimally readable hardcopy
form (see black notebook),   4

Category idea needed to be reevaluated, There were too many
categores for a hardcopy reader, It's really not easy to find a
particular command, Maybe fewer & more visible categories would
work, Or else, really discrete categories could be
tried--because: 4a

In Help: many commands belong in more than one category; all
such statements were made links except for one node which
actually contained the statement, That node was usually chosen
more for software reasons than for the most important location
for user-reading, since the real stuff would appear in each of
those places in Help anyway,   4a1

As the hardcopy document turned out--in all the instances of
that node where links were used, that command listing was made
a "Show also", and the actual location of the statemnt is not
intuitive and is hard to search for in such a lengthy document,
This brings me to the second defect: 4a2

"Show also"s in a hardcopy document are totally inappropriate,
The user has to page through and through to find what's referred
to, especially since the commands are not in some general
organization, i.e. alphabetical, but divided into many categories, 4b

One answer: the links should not have been changed to show
alsos but each should have been replaced by the actual
informaton, so the user could find it under each category,
This would have made the document very lengthy but it already
was longer than it needed to be with the show alsos and the
categories,   4b1

Consider restructuring the categories into which information is
divided in the database according to different principles of
the best number and kind for hardcopy use before copying the
stuff,   4b2

Process of creating the hardcopy command syntax summary from <Help,>

(J23185) 1-JUN-74 16:06;   Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /DIRT([INFO-ONLY]) ; Sub-Collections: SRI-ARC DIRT;
Clerk: JMB;

BUG in Sendmail

When I try to Process a Sendmail form that includes
>   PLEX: 1A
>   or   PLEX: <1A>
>   or   PLEX: ,d
>   or   PLEX: (,d)
but doesn't include DONE, I get the errormessage "Bad statement
Identifier" and it won't do it,   1

(1) Can you make this work?   2

(2) What is the correct syntax for the ADDRESS folloing the source
name--do you include link delimiters?   3

BUG in Sendmail

(J23186) 1-JUN-74 16:45;   Title: Author(s): Jeanne M. Beck/JMB;
Distribution: /FDBK([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
JMB;

.fr and old versions

.fr returns me to an old version.   1

,fr and old versions

(J23187)   1-JUN-74 17:07;   Title: Author(s): Kirk E, Kelley/KIRK;
Distribution: /BUGS([ACTION]) ; Sub-Collections: SRI-ARC BUGS;
Clerk: KIRK;

Whole Universe Catalog Demonstration

Martin, on June 12 (a week from Wednesday) I plan to give a
demonstration to ARC and the point foundation towards getting funds
for the Whole Universe Catalog. The following things will be needed: 1

    1) the projector   1a

    I would like to invert the image (white on black) for part of
    the demo. If this is not possible, it will have to remain
    inverted for the whole demo.   1a1

    2) a camera (with a zoom lens that stays in focus, if possible),   1b

    3) the mixer-fader and splitter between the camera and tasker.   1c

    4) video tape recorder.   1d

Phil Giesen (Urban and Social Sciences division of SRI) will operate
the camera, video tape recorder, mixer-fader and splitter. I notice
the splitter doesn't work when the camera half is on the top fourth
of the screen (where I want to use it). Also, the fader seems to
overdrive the Conrac.   2

Please let me know as soon as possible if any of these tools cannot
be made available as needed so that I can plan around them.   3

Whole Universe Catalog Demonstration

(J23188)   1-JUN-74 23:07;   Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /MEH([ACTION]) ; Sub-Collections: SRI-ARC; Clerk:
KIRK;

Response to Feedback Received as of 5/31/74

This is specifically addressed to DVN, NDM, KIRK, JHB, MEJ, RLL, DCE, JDH, and LEG. Anyone using the new NLS should take a look at the first branch addressed to 'Everyone'.

Response to Feedback Received as of 5/31/74

Response to feedback received as of 5/31/74   1

   For other lists of fixed bugs and answers to questions see,
(23019,) (22973,) (22915,) (22896,).   1a

Everyone -   1b

   There were five responses to Ken VIctor's item about copy etc,
with a filter (GJOURNAL, 23105,). preferences were scattered
between methods 1, 2, and 3. Unless more people respond in
opposition to method 1 it will remain in effect.   1b1

   The user program inmes is now available in the new NLS.   1b2

   when you are reporting a bug please specify if it occurred in
TNLS as this does help speed things up.   1b3

Laura Gould -   1c

   your problem with slash and backslash is probably because you
are using an upper case terminal. If you type two slashes or
backslashes it should work.   1c1

   when you use a single quote for a character search you can only
input a single character following the quote, i.e. 's will find
the next "s" but 'soup will give you the message "oup?".   1c2

   Could you send a specific example where double quotes for
content addressing doesn't find a string within the current
statement, it seems to work here.   1c3

   The message "File numbers do not match in storesrring" is a
recurring bug which the programmers have not yet been able to
fix. If it happens again it might help them if you could
recount what you had been doing previously.   1c4

   The message upon entering Help has been revised - you might
take a look at it and see what you think.   1c5

Dirk -   1d

   ref: (23080,) - Set Case Mode First is implemented   1d1

   ref: (23148,) - Most files have no Miscellaneous information
associated with them and thus your result.   1d2

   ref: (23160,) - (catalog,carcjnicn1,) now has an entry branch   1d3

   ref: (22988,) Set case should now work for plexes too.   1d4

Dean —   1e

    ref: (23087,) — Did you write Sendmes? People here thought so,
If so, can you fix it to accept O'Sullivan?   1e1

Kirk —   1f

    ref: (23122,) — ,fr: and ,r: should work in Jump to Link   1f1

    ref: (23145,) — The bug with jump to next on the last statement
in a file has been fixed.   1f2

    ref: (23082,) Viewspecs are now remembered with jump to return
in TNLS and with ,r in DNLS.   1f3

    ref: (23083,) You can now delete the last statement in a file
when it is the only thing on the screen.   1f4

    ref: (23027,) — Jumping and viewspecs problems should all be
fixed.   1f5

    ref: (23040,) — Delete Last command in the Programs subsystem
should now work.   1f6

    ref: (22938,) Set Name Delimiters should work with a locked
file now.   1f7

    ref: (22981,) viewspecs ebe should work now.   1f8

Jim Bair —   1g

    ref: (23085,) — Jumping on a link typein seems to work O.K.
now.   1g1

    ref: (23041,) — Name delimiters have priority over link
delimiters, so if a "(" is the first thing in a statement it
will be taken as a name delimiter and you won't be able to bug
it as a link.   1g2

Mil —   1h

    ref: sndmsg 18 May 74 1222 — Jump to ,e seems to work O.K. now.   1h1

Robert —   1i

    ref: (23121,) — The CM is now repositioned to point to the last
character after the last character or word has been deleted,   1i1

Response to Feedback Received as of 5/31/74

ref: (23059,) - Jump to file return should now take you to the
updated version of a file, 1l2

ref: (23079,) - Slash in TNLS has been fixed 1l3

ref: (23015,) - The problem with positioning the CM after
update compact is a mystery right now but is being worked on, 1l4

ref: (22916,) - Jean Beck has fixed the links in the menus for
Currentcontext commands, you might want to read the revised
description of the Currentcontext and Reset Currentcontext
commands and see if they're clearer, 1l5

Doug - 1j

ref: sndmsg 21 May 74 2217 - you should be able to institute
M,CA now with no problems, 1j1

Dave Hopper - 1k

ref: (23153,) - All the content analyzer glitches reported have
been fixed, 1k1

Response to Feedback Received as of 5/31/74

(J23214) 3-JUN-74 12:07;   Title: Author(s): Susan R, Lee/SRL;
Distribution: /SRI-ARC([INFO-ONLY]) LEG([INFO-ONLY]) ;
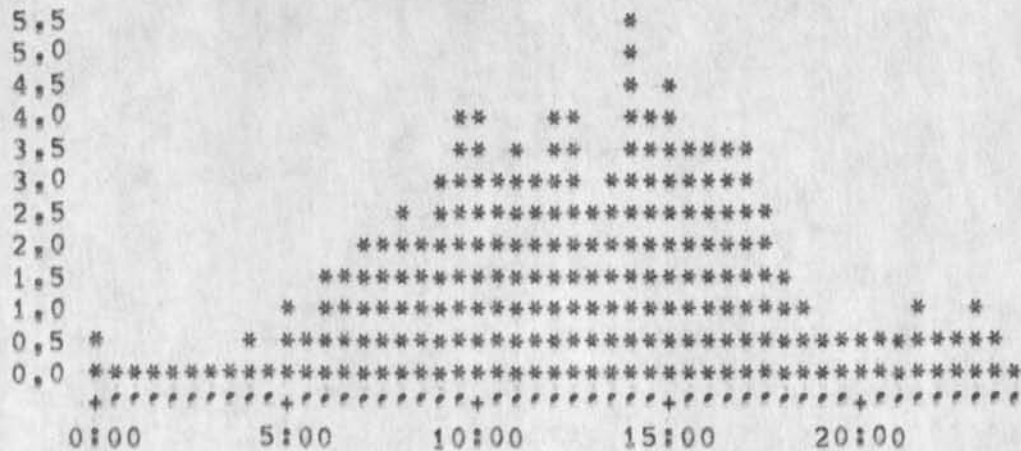Sub-Collections: SRI-ARC; Clerk: SRL;

Superwatch Average Graphs for Week of 5/26/74

The %SU for DNLS is still only for OLDDNLS.

Superwatch Average Graphs for Week of 5/26/74

TIME PLOT OF AVERAGE NUMBER OF GO JOBS FOR WEEK OF 5/26/74
x axis labeled in units of hr:min, xunit = 30 minutes   1

```
    5,5                                        *
    5,0                                        *
    4,5                                        *  *
    4,0                          **    **    ***
    3,5                          ** * **    *******
    3,0                          ********* *********
    2,5                      *  *********************
    2,0                        ************************
    1,5                      ****************************
    1,0         *  *****************************           *   *
    0,5 *          *  *********************************************
    0,0 ****************************************************************
        +''''''''+''''''''+''''''''+''''''''+''''''''+''''''''
        0:00        5:00       10:00       15:00       20:00                     1a
```

TIME PLOT OF AVERAGE PER CENT OF CPU TIME CHARGED TO USER ACCOUNTS
FOR WEEK OF 5/26/74
x axis labeled in units of hr:min, xunit = 30 minutes   2

```
    61,6                                   *
    53,9                  *   **        **** *
    46,2                  ** ****************** **    *
    38,5              ****************************    * ***
    30,8              ***************************** *****
    23,1 *            ************************************
    15,4 **         *  ************************************
     7,7 *****  ******************************************
     0,0 ****************************************************************
        +''''''''+''''''''+''''''''+''''''''+''''''''+''''''''
        0:00        5:00       10:00       15:00       20:00                     2a
```

TIME PLOT OF AVERAGE NUMBER OF USERS FOR WEEK OF 5/26/74
x axis labeled in units of hr:min, xunit = 30 minutes   3

```
14                                    *
13                                  ****          *
12                                 *****      ******
11                                 ***** *    ********
10                               ********** ********
 9                              **************************
 8                             ***************************
 7                             *****************************
 6                            ****************************
 5                         **********************************          * *
 4       *                 ***********************************  *      *****
 3       ***********************************************************************
 2     ***************************************************************************
 1     ***************************************************************************
 0     ******************************************************************************
       +////////+////////+////////+////////+////////+////////
      0:00        5:00       10:00      15:00      20:00
```
3a

TIME PLOT OF AVERAGE IDLE TIME FOR WEEK OF 5/26/74
x axis labeled in units of hr:min, xunit = 30 minutes   4

```
75.0    * **
67.5   ******   *
60.0   *******  *
52.5   *********
45.0   ***********                                         ***
37.5   ***********                              *   ****** *
30.0   ***********                              *************
22.5   **************** *                       *************
15.0   ******************** ***  **             *************
 7.5   ********************* ******** ******************************
 0.0   ******************************************************************************
       +////////+////////+////////+////////+////////+////////
      0:00        5:00       10:00      15:00      20:00
```
4a

Superwatch Average Graphs for Week of 5/26/74

TIME PLOT OF AVERAGE NUMBER OF NETWORK USERS FOR WEEK OF 5/26/74
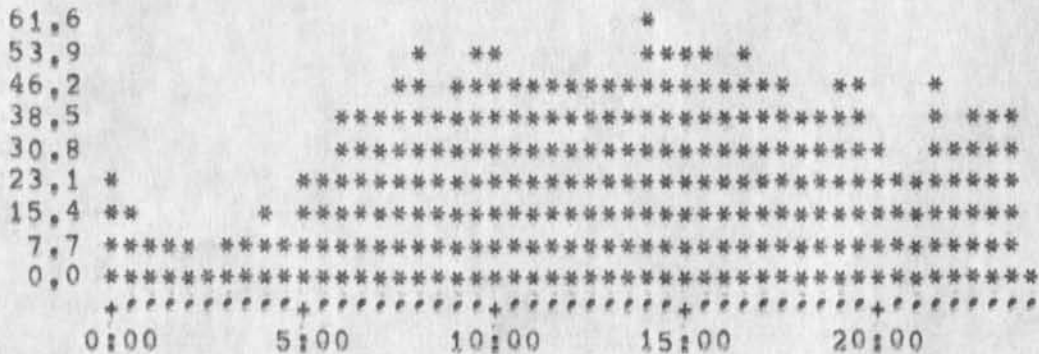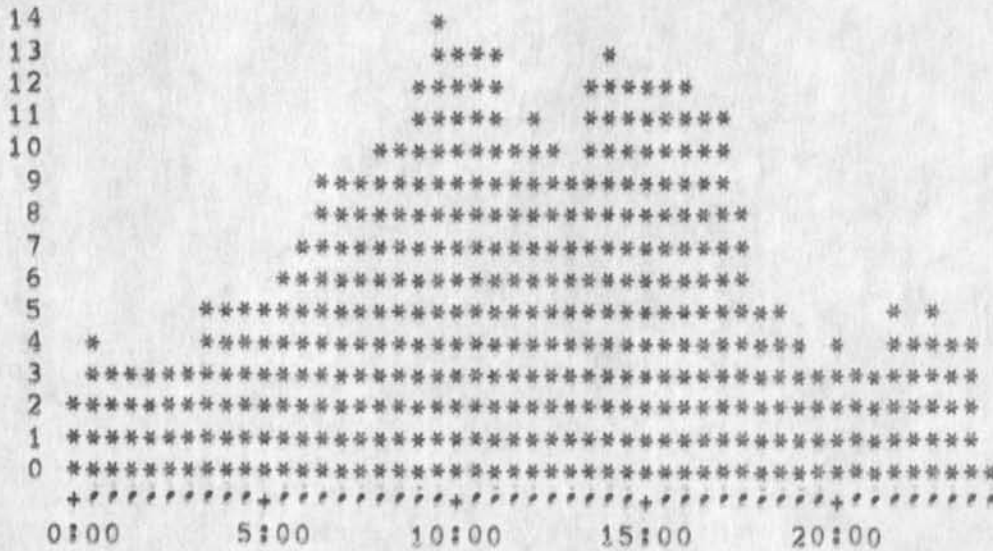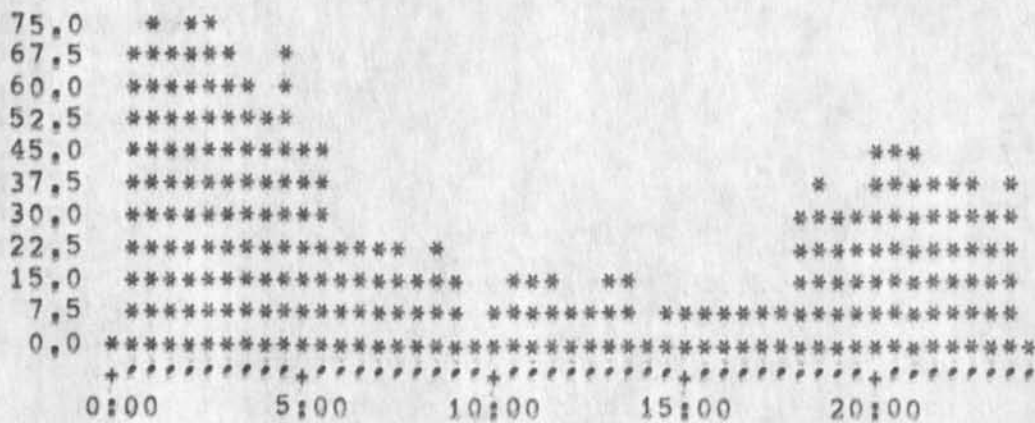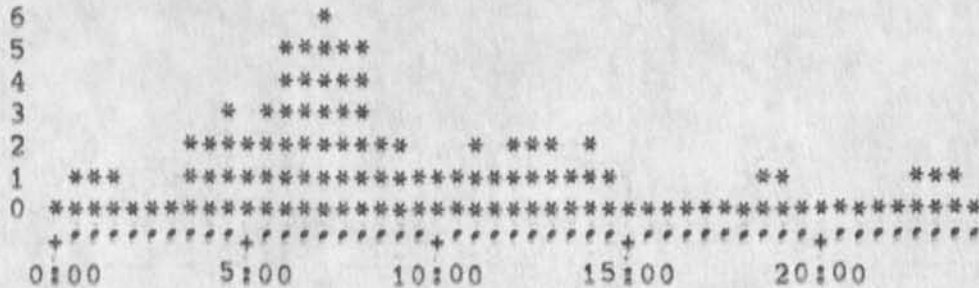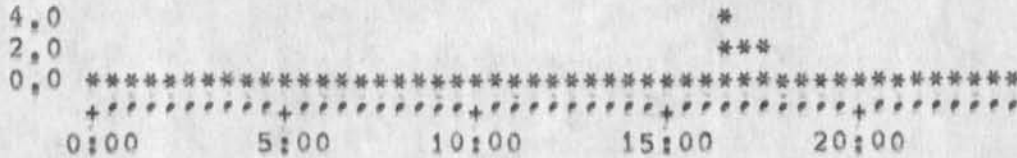x axis labeled in units of hr:min,   xunit = 30 minutes   5

```
     6                    *
     5                  *****
     4                  *****
     3              *  ******
     2          **************    *  *** *
     1  ***    ************************         **         ***
     0  ***************************************************************
        +'''''''''+'''''''''+'''''''''+'''''''''+'''''''
        0:00      5:00      10:00     15:00     20:00
```
                                                                            5a

TIME PLOT OF AVERAGE PER CENT OF SYSTEM USED IN DNLS FOR WEEK OF
5/26/74
x axis labeled in units of hr:min,   xunit = 30 minutes   6

```
   4.0                                  *
   2.0                                 ***
   0.0  ***************************************************************
        +'''''''''+'''''''''+'''''''''+'''''''''+'''''''
        0:00      5:00      10:00     15:00     20:00
```
                                                                            6a

Superwatch Average Graphs for week of 5/26/74

(J23215) 3-JUN-74 12:18;   Title: Author(s): Susan R. Lee/SRL;
Distribution: /JCN([INFO-ONLY]) RWW([INFO-ONLY]) DCE([
INFO-ONLY]) PR([INFO-ONLY]) JCP([INFO-ONLY]) DVN([INFO-ONLY
]) JAKE([INFO-ONLY]) DLS([INFO-ONLY]) BAH([INFO-ONLY]) WRF(
[INFO-ONLY]) DSM([INFO-ONLY]) KJM([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: SRL;   Origin: (LEE,
WEEK5/26GRAPHS,NLS;1,), 3-JUN-74 12:11 SRL ;####;

More feedback on New NLS

(bug) items for New NLS

1

If FILENAME is an operand of a Command, I'd like for a mode of
selection that permits me to bug: the isolated file name occuring
as a WORD; or a FILENAME embedded in a full (verbose) TENEX file
identification/description string; or as embedded in a link,

1a

3 Jun -- Losing the instituted Conan program; Go Programs,
Compile Content Analyzer program, or otherwise institute a content
analyzer program, and keep having it get de-instituted in
mysterious ways. Sometims when I Quite the Program mode, and just
do VSPEC change in Edtor mode, no filtering -- return to Program
mode and find that the analyzer pattern has somehow been
de-instituted,

1b

More feedback on New NLS

(J23216) 3-JUN-74 12:31;   Title: Author(s): Douglas C, Engelbart/DCE;
Distribution: /FDBK([ACTION]) ; Sub-Collections: SRI-ARC; Clerk:
DCE;

SENDMAIL should have plex-entity option

Seems one can only send a file or a branch. I habitually set up my
material to be journalized so that I transmit a plex. This should be
added to the option in SENDMAIL. (Basically I don't see why the
standard array of structural-entity options aren't offered as a
matter of course.)

1

SENDMAIL should have plex-entity option

(J23217)   3-JUN-74 12:36;   Title;   Author(s): Douglas C.
Engelbart/DCE; Distribution: /FDBK([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: DCE;

File return still does not work,

Sorry, jump to file retrn still does not return to updated version,
(June 3 1:30 PDT), Reference (gjournal, 23214,) and my orginal item
(23059,)   1

File return still does not work.

(J23218)   3-JUN-74 13:32;   Title: Author(s): Robert N. Lieberman/RLL;
Distribution: /FDBK([ACTION]) ; Sub-Collections: SRI-ARC; Clerk:
RLL;

Tape to film quality in question,

Ken, I am waiting on Norton , who issstill in D.C, area, for a
history of the funding at ARC,
there seems to be a question of how good the quality will be if we
tape then tranform it to 16mm, to shoot directly onto film would
require more time , Will make decision by Friday,
Do youhave a copy of the distribution list you intend to send out?
would appreciate one, thanks, RObert,   1

Tape to film quality in question,

(J23219)   3-JUN-74 14:55;   Title: Author(s): Robert N. Lieberman/RLL;
Distribution: /AKS([ACTION]) ; Sub-Collections: SRI-ARC; Clerk:
RLL;

Reply to Rush Request of Fields for Progress since Sept, 73

Since September 1973 we have made the following technical advances: 1

General NLS Advances 2

1, We designed and implemented a Command Meta Language (CML) system and command interpreter which allows higher-level language specification of the user interface and also allows centralized command parsing, user feedback, and measurement, 2a

2, A User Profile system was added to permit users to choose default user interface characteristics. The design for this system, in conjunction with the CML facility, will enable the command vocabulary and syntax of NLS to be tailored for and by the user to his needs, 2b

3, Help facilities were added to NLS to provide quick syntactic assistance (i,e,, a description of command options at any point driven by the CML command data structure) or to provide access to more extensive online documentation, 2c

4, We made the initial design for splitting off NLS "frontend" functions to a minicomputer to increase the possibility of resource sharing and reduce the costs of NLS, We restructured the internal functions of NLS into cleanly intercommunicating subsystems to aid in such a future division, 2d

5, In rewriting the NLS system to take advantage of the linguistic and conceptual changes noted above, we redesigned, cleaned up, and expanded the user command language to remove known inconsistencies, to add novice-oriented features, and to incorporate frequently used TENEX EXEC functions into NLS, 2e

6, We developed the Lineprocessor, an inexpensive micro-computer box with its associated NLS virtual terminal concepts and communication protocols, to permit the use of low-cost alpha-numeric displays with mouse and keyset as full two dimensional devices, This development contributed to the Network Graphics Protocol, 2f

NLS Journal Advances 3

1, The NLS Journal was integrated into the network mail system, 3a

2, We designed a multi-host Journal system and implemented a two-host version on ARC and OFFICE-1 machines communicating through the network, It supports all Journal functions such as distribution, recording, cataloging, storage, and retrieval on both machines in a resource sharing manner, 3b

3, We added private dialog to the Journal, At submission time, the user may designate his Journal item as either public (the default) or private, This new feature is just one application of a more general mechanism: the user can, in the general case, restrict access to any NLS file to any desired set of users or groups, In contrast to TENEX controls, this new privacy feature permits limitation of access according to individual user identification, rather than according to TENEX directory,   3c

Network Information Center   4

1, A new ARPANET Directory format was designed and published,   4a

2, An Official hostnames list and online file were established and made available,   4b

3, The Resource Notebook was expanded from 30 sites to over 100,   4c

Analysis   5

1, We conducted a number of studies: of NLS command usage and command timing, type of use of the Journal,   5a

2, A new NLS measurement system was designed,   5b

3, The needs for a calendar system was analysed and design suggestion made,   5c

4, Support was given to the ARPA Defense Energy Informaion System Project in NMRO,   5d

Technology Transfer   6

1, We brought the OFFICE-1 machine up and onto the ARPANET to provide NLS Utility service,   6a

2, We established Feedback procedures to gather, analyze, and reply to comments and complaints from our growing user population,   6b

3, We designed and established training and user development procedures for working with the expanding and diverse user population,   6c

Tenex   7

1, Development of the archival system for TENEX, BSYS, continued, The system was released to the general TENEX community,   7a

2. The Group resource allocation system was distributed to the
TENEX community.   7b

(J23220) 3-JUN-74 15:03;   Title: Author(s): Richard W, Watson/RWW;
Distribution: /JCN([INFO-ONLY]) DCE([INFO-ONLY]) HGL([
INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: RWW;
Origin: (WATSON, DIF,NLS;1,), 14-MAY-74 09:07 RWW ;####;

updated version of pdp-10 report.

Frank, I updated the pdp-10 report as you specified except for dashes
(which I felt should not be deleted), It will be stored in my archive
file as (lieberman,pdp-10-report-1974,nls;4,) , so if you want it
you can print it or copy it. I will not print out this version
unless you desire it, (Don't think it is necessary, Kathy can make
the correction herself.) Stay cool, Robert   1

updated version of pdp-10 report,

(J23221)   3-JUN-74 17:03;   Title: Author(s): Robert N, Lieberman/RLL;
Distribution: /FGB([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
RLL;

New TENEX documentation put into NLS and Journal

I wanted to see the new documentation that was listed in my logon messags today -- so I ingested them into NLS and made them more or less structure consistent,   1

I'd thinkthat we should Journalize such so as to have a more consistent set of docmentatioon available to NLS users -- in fact, I think that in the future this ought to be done by some ARC support staff before the fact -- doesn't seem at all appropriate for us to have to go poking around in sequential text files for documentation,   2

JCN, perhaps you could set a policy/procedure -- beginnin (if you wish) with somebody breaking out the separate branches (and Journalizing them as sort of official additions to our documentation) of the cleaned up NLS versions that appear as the main branches in file (Engelbart, changes,:xzh),   3

(J23222) 3-JUN-74 17:16;   Title: Author(s): Douglas C. Engelbart/DCE;
Distribution: /JCN([ACTION]) DVN([INFO-ONLY]) WRF([INFO-ONLY]
) JHB([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk: DCE;

INMES doesn't seem to work yet in New NLS -- cf, 23214

Susan: re your note (23214, 1b2) about "INMES" now working in New
NLS -- I tried it, and I get loading message that says there is no
entry point, and when trying to RUN theprogram, get similr NO-GO
message,   1

INMES doesn't seem to work yet in New NLS -- cf. 23214

(J23223)   3-JUN-74 17:43;   Title: Author(s): Douglas C.
Engelbart/DCE; Distribution: /FDBK([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: DCE;

Filtered structure operations -- cf KEV's 23105

I vote for Ken's #4, without more 'rationale' supporting another

KEV, in (GJOURNAL,23105,) lists four ways that the sample plex below
(cf -- GJOURNAL,23105,4a:gw) could be copied under filtering: 1

   A   1a

      B   1a1

         C   1a1a

         D   1a1b

      E   1a2

MY assumption is that of the four ways, his #4 (GJOURNAL, 23105, 4d:
gw), would be the most logical: 2

   "Method 4:   2a

      A   2a1

      DUMMY STATEMENT   2a1a

         C   2a1a1

         D   2a1a2

      E "   2a1b

It would seem very logical to me to also have the following -- a
Method 5 as shown below -- where the failure of Statement B to pass
the filter test automatically made inelligible the substructure of B
for even being tested,:   3

   A   3a

      E   3a1

There is a difference between being logical and being useful, and in
any event there must be consistency; whichever filter-restructuring
algorithm is adopted should be supported by a rationale that will
seem sensible to most users to help them learn and remember the
algorithm.   4

For any choice other than Ken's #4 I'd really want to see
documentation that convinced me that the choice (a) was more useful,
(b) could be described by a tidy algorithm, and (c) could be
justified with reasonable rationale,   5

Filtered structure operations -- cf KEV's 23105

(J23224) 3-JUN-74 18:30;   Title: Author(s): Douglas C, Engelbart/DCE;
Distribution: /FDBK([ACTION]) SRI-ARC([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: DCE;

Feedback Fans False Hopes

When I just tried to set case mode first, NLS replied "Not
Implemented",   1

Feedback Fans False Hopes

(J23225)   3-JUN-74 20:09;   Title: Author(s): Dirk H, Van Nouhuys/DVN;
Distribution: /NEWNLS([INFO-ONLY]) ; Sub-Collections: SRI-ARC
NEWNLS; Clerk: DVN;

Current State of Quarterly Management Report

As of Monday, I had not received input from RWW, JCN, and CHI on the
quarterly management reports. I have faked Charels' part from other
sources. I would appreciate it if Charles checked
(vannouhuys,qmr,2c) and (vannouhuys,qme,2d). Assuming we have no
problems and require no action from the government, we now need only
the Fiscal Status from JCN.   1

Current State of Quarterly Management Report

(J23226)   3-JUN-74 21:05;   Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /CHI([ACTION]) JCN([ACTION]) RWW([INFO-ONLY])
DCE([INFO-ONLY]) ; Sub-Collections: DPCS SRI-ARC; Clerk: DVN;

Support Staffing and Equipment

If The NIC ladies go away and Jeannie Leavitt goes to work full time
for Jake on the first of July, and unless this organization is going
to shrink more than I suspect, We will have to do some task
reorganizing and hire a new secratary, I have asked Sandy to assemble
a list not only of what each of them does, but of known tasks that
are not being done even now, If we are going to hire a new secratary,
I think Monday is none too soon to start, Jeanne Beck's return for
the Summer will help with the documentation shelf,   1

Perhaps we can gain back some s on offices and TI's; it looks as if
we have more thna we need of both,   2

Support Staffing and Equipment

New TENEX Documentation: Reply to 23222

Jeanne Beck seems to me the right person to take care of this matter.   1

New TENEX Documentation: Reply to 23222

(J23228)   4-JUN-74 08:29;   Title: Author(s): Dirk H, Van Nouhuys/DVN;
Distribution: /JMB([INFO-ONLY]) JCN([INFO-ONLY]) DCE([
INFO-ONLY]) WRF([INFO-ONLY]) JHB([INFO-ONLY]) ;
Sub-Collections: DIRT DPCS SRI-ARC; Clerk: DVN;

you may want to make the list of user programs an appendix or delete
it entirely,

User Programs System and Library   1

  Introduction   1a

    As described in our last final report (13041,4d1e4), the L10
    programming language and the User Programs subsystem in NLS
    allow the user to write programs which: 1a1

      -act as filters through which the user may view or edit a
      file,   1a1a

      -automatically edit a series of statements based on content
      analysis,   1a1b

      -define special purpose sorting algorithms,   1a1c

      -produce special sequences of statements from a file, and
      which   1a1d

      -constitute special purpose additions to the NLS command
      language,   1a1e

    Our emphasis in the last contract period has been to deliver
    these powerful tools to the user, Our efforts have been
    focused on two areas: 1a2

      1) We have provided a library of user programs, written by
      our staff and our users, which satisfy common needs,   1a2a

      2) We have made L10 easier to learn,   1a2b

    Our work in this area is in keeping with our efforts to apply
    the Knowledge Workshop techniques to the needs of groups
    outside of ARC, and to study the process of integrating NLS
    into ongoing work situations,   1a3

      The User Programs Library allows us to experiment with a
      wide variety of additions to the NLS environment, to freely
      evolve potentially useful tools, and to examine their
      usefullness. It also provides an inexpensive way to add
      capabilities which are not general enough or used enough to
      warrant inclusion in the NLS command language,   1a3a

      As users learn to program, NLS should adapt itself very
      closely to the unique needs of each group, ARC, in turn,
      will be given a tangible medium for understanding the
      special problems of our application groups,   1a3b

  User Program Library   1b

User Programs 1b1

At the time of writing, there are 37 programs in the User Programs Library. They include: 1b1a

content analyzer filters (e.g. one which displays only those statements with Output Processor directives in them), ... 1b1a1

content analyzer editing programs (e.g. one which deletes spaces at the beginning of each statement), ... 1b1a2

sort algorithms (e.g. one which ignores statement names), 1b1a3

executable programs (which to the user look like special purpose commands, e.g. one which executes a substitute command on a set of files), ... 1b1a4

Many were written to fulfill specific needs. Some can be grouped into process aids. 1b1b

For example, message handling might be facilitated by using the executable program which copies one's MESSAGE.TXT file into NLS, the content analyzer program which edits journal and message citations to a form designed for one line views (so that the two types of mail can be integrated), and then the sort algorithm which orders the branches by date. These few aids make it easy to handle one's mail entirely in NLS, permitting all the powers of NLS for viewing, classifying, deleting, redistributing, and working with the messages. 1b1b1

Another example might be the documentation production process. The Library includes programs which produce a bibliography to the journal references in the file, produce a Table of Contents at the front of the file, insert directives throughout the file to format according to any of a number of predesigned styles, create a title page, show only those statements with Output Processor directives in them (to ease format adjustments), and (having processed the file for output) delete all directives in the file (leaving it clean for online viewing). 1b1b2

All programs included in the User Programs Library meet certain standards. They must include adequate error checking, they must be well commented and documented, they use NLS file structure to make their flow clear, they only use unconditional program control transfers where required,

and the executable programs must follow the command syntax
conventions throughout NLS. Programs which were offered but
did not meet these conditions were made to do so,   1b1c

The programs in the User Program Library are a rich
source of examples for the novice programmer. They range
from simple to very sophisticated programs, and cover a
wide range of activities,   1b1c1

Access from NLS   1b2

The command which loads a program into the user's programs
buffer space has been modified to check the directory
<user-progs> where all the programs in the Library (both
source and object code) are stored, if it does not find the
program in the connected directory. The user need only know
the name of the program,   1b2a

Additionally, the command looks at the extension of the
object code file,   1b2b

If the extension is "REL" it simply loads the program.
These are executable programs,   1b2b1

If it is "CA" it loads the program and institutes it as
the current Content Analyzer filter program,   1b2b2

If it is "SK" it loads the program and institutes it as
the current Sort Key extractor program,   1b2b3

If it is "SG" it loads the program and institutes it as
the current user Sequence Generator program,   1b2b4

These additions make use of programs in the Library simpler,   1b2c

Documentation   1b3

Every program in the Library has in its source code a branch
which explains how to use that program, what it does, how
much buffer space it requires, and who wrote it,   1b3a

All but the author is also stored under each entry in a
Table of Contents to the available User Programs
(user-progs,-contents,1:w), This Table of Contents is
formatted so that a one-line one-level view will give a
quick listing of all available programs
(user-progs,-contents,1:x); this list is included below,   1b3b

In combination with the very basic User Programs Users'

DRAFT Final Report: User Programs System and Library

Guide (user-progs,-userguide,1;w), the non-programmer should
find it easy to use the programs in the User Programs
Library,   1b3c

User L10 Programming   1c

  Documentation   1c1

    To facilitate the learning of L10, a new L10 Users' Guide
    has been written (18969,). This is the first L10 guide to
    be tutorial (as opposed to simply a reference guide). It
    begins with simple Content Analyzer filter patterns, and
    develops the user through L10 Content Analyzer filter
    programs, editing programs, and finally executable programs,
    It provides examples, and does not assume mcuh in the way of
    programming expertise. As well as an explanation of the
    many features of L10, it includes "tricks of the trade" and
    system information so necessary to programming in the
    complex NLS context,   1c1a

      Although this document is large (100 pages), it is
      arranged so that the user can work to whatever stage of
      skill he wishes, The document has been modified as we
      got feedback from those who have used it, It is expected
      that the L10 Users' Guide will continue to grow in both
      content and care of presentation; it should continue to
      take on aspects of a programmers' handbook,   1c1a1

    Another aid to L10 programming is a listing of all
    procedures in the NLS system (nls,sysgd,), For each
    procedure, this document provides a list of the formal
    parameters, a brief explanation of the procedure, and a link
    to the source code, Since so much of L10 programming
    depends on knowing what system procedures are available,
    this file has proven extremely important to both novice and
    expert programmers,   1c1b

      In addition to helping the programmer find a procedure
      which satisfies his need, it allows the novice to find
      examples of L10 in the system code itself, If the
      programmer finds a command which at some point must do
      what he wishes to do, he can follow system code through
      and see how the problem is solved there, This is a good
      way to learn both L10 and programming style, The list of
      procedures helps one follow the code and find the source
      listing of each procedure the system calls,   1c1b1

  Interface to core procedures   1c2

To further ease the work of the novice programmer we have
begun writing a set of procedures which match the NLS
commands. Each command will have a corresponding procedure
which requires the same parameters in the same order as the
command. These procedures will include very careful error
diagnostic messages. This should allow the novice to call
any NLS command he knows in his program.   1c2a

List of User Programs   1d

PROGRAM   FUNCTION
TYPE   1d1

addname   Adds name to nameless stmnts from first word in stmt
C   1d2

address   Asks for ident, inserts the address at the bug
E   1d3

addtext   Adds text to front/back of stmts in plx/brnch/grp/st
E   1d4

append   Sequentially appends stmnts in group, text between
E   1d5

appendlist Like APPEND, but leaves substructure
E   1d6

changed   Marks statements changed since a given date
C   1d7

delcol   Deletes bugged column, assuming next col lined up
E   1d8

deldir   Deletes Output Processor directives
C   1d9

delname   Deletes statement names
C   1d10

delsp   Deletes leading spaces from statements
C   1d11

format   Add print directives to a file
E   1d12

index   Creates a word index for st/br/plex/group
E   1d13

inmes   Inputs all of message,txt file into NLS file
E   1d14

inseqh   Does a sophisticated Input Sequential file
E   1d15

inrun   Inserts TENEX RUNOFF file into NLS file
E   1d16

jform1   Reformats journal references
C   1d17

jform2   Reformats journal references
C   1d18

jform3   Reformats journal references
C   1d19

letter   Puts file in letter form, adds dear-- & sincerely--
E   1d20

lowercase recovers from an erroneous XSET UPPER CASE
C   1d21

makeref   Scans for journal links and makes ref branch
E   1d22

notabs   Replace tab keys by spaces in plex
E   1d23

printcml Runs and prints CML programs/grammars,
-   1d24

sendmes   Sends messages from NLS
E   1d25

showdir   Shows only stmnts with Output Processor directives
C   1d26

sortmes   Sort Key extractor: by date at beginning of stmnt
SK   1d27

sortnmskp Sort Key extractor: as usual but disregards st names
SK   1d28

sortnocase Sort Key extractor: alphabetic regardless of case
SK   1d29

sortnum   Sort key extractor: sorts by first number in stmnt
SK   1d30

sortrev   Sort key extractor: exactly the reverse of usual
SK   1d31

sriform   Puts in O/P dirs and spaces to SRI standard format
C   1d32

sublist   Does substitutions on list of files given links
E   1d33

tblpts   Adds periods to end of st out to given col
C   1d34

toc   Generates Table of Contents with stmnt num refs
E   1d35

trace   NLS call return tracing system for micro-analysis
E   1d36

truncate   Truncates st/br/plx/grp to one line-assume 3/lev ind
E   1d37

wordcount   Counts visibles in st/branch/group/plex
E   1d38

References   1e

   User Programs Library Users' Guide (user-progs,-userguide,1)   1e1

   User programs Library Table of Contents
   (user-progs,-contents,1:x)   1e2

   L10 Reference Guide (7052,)   1e3

   L10 Users' Guide (18969,)   1e4

   System Procedures Guide (nls,sysgd,)   1e5

DRAFT Final Report: User Programs System and Library

(J23230) 4-JUN-74 09:32; Title: Author(s): N, Dean Meyer/NDM;
Distribution: /DVN HGL RLL; Sub-Collections: SRI-ARC; Clerk: NDM;
Origin: <MEYER>FR,NLS;8, 4-JUN-74 09:26 NDM ;

(J23243) 9-JUL-74 09:23; Title: Author(s): Douglas C. Engelbart/DCE;
Distribution: /DCE([INFO-ONLY]) JML([INFO-ONLY]) ;
Sub-Collections: SRI-ARC; Clerk: JML;   Origin: (LEAVITT,
GATX,NLS;4,), 14-JUN-74 11:23 JML ;
      ####;

Augmentation Research Center
Stanford Research Institute
Menlo Park, California 94025

J. T. Poparad
General American Transportation Corp.
Post Office Box 532
Sharon, Pa. 16146

Dear Mr. Poparad:

In your letter of May 22 (Our ref -- 23242,) you expressed
interest in our work in creating knowledge workshops, as
described in a recent article in ComputerWorld called
"Knowledge Workshops are His Hope" (Our ref -- 16557,).
Enclosed are two documents that should further explain our
progress in this area of research: 1

    D. C. Engelbart, DESIGN CONSIDERATIONS FOR KNOWLEDGE
    WORKSHOP TERMINALS, paper presented at the National
    Computer Conference, New York City, June 1973, (Journal --
    14851,)   1a

    D. C. Engelbart, R. W. Watson, J. C. Norton, THE AUGMENTED
    KNOWLEDGE WORKSHOP, paper presented at the National
    Computer Conference, New York City, June 1973, (IJOURNAL,
    14724,)   1b

Please be sure to get in touch if you have any questions or
more specific interests to be explored.   2

                              Sincerely,

                              Douglas C. Engelbart
                              Augmentation Research Center

DCE/jml

Augmentation Research Center
Stanford Research Institute
Menlo Park, California 94025

Robert C, Noel
Department of Political Science
University of California, Santa Barbara
Santa Barbara, CA 93106

Dear Mr, Noel:

In answer to your letter of March 7th (XDOC -- 23244), we are
sending you the following reports for your perusal: 1

D, C, Engelbart, "Intellectual Implications of Multi-Access
Computer Networks", a paper for the Proceedings of the
Interdisciplinary Conference on Multi-Access Computer
Networks in Austin, Texas, April 1970, (XDOC -- 5255,)   2

D, C, Engelbart, Coordinated Information Services for a
Discipline- or Misson-Oriented Community, paper presented at
the Second Annual Computer Communications Conference, San
Jose, California, 24 January 1973, (Journal -- 12445,)   3

D, C, Engelbart, Design Considerations for Knowledge Workshop
Terminals, paper presented at the National Computer
Conference, New York City, June 1973, (Journal -- 14851,)   4

D, C, Engelbart, R, W, Watson, J, C, Norton, The Augmented
Knowledge Workshop, paper presented at the National Computer
Conference, New York City, June 1973, (Journal -- 14724,)   5

If you have any questions or are interested in more
information, please don't hesitate to contact us again,   6

Sincerely,

Douglas C, Engelbart
Augmentation Research Center

DCE/hgl

Letter sending reports to R, Noel, UCSB

(J23245) 10-JUN-74 15:42; Title: Author(s): Douglas C.
Engelbart/DCE; Distribution: /DCE([INFO-ONLY]) JML([INFO-ONLY])
; Sub-Collections: SRI-ARC; Clerk: JML; Origin:
<LEAVITT>NOEL,NLS;3, 24-MAY-74 09:39 HGL ;
    ####;