DHC 26-JAN-73 11:44 14086

Response to (Journal, 14059,): I don't think so.

Charles, thanks for the reply to (Journal, 14011,). Unfortunatnately, I looked at your message with the Print Journal message and was therby automatically linked to my message, as you will be, if you are viewing this message with the Print Journal command.

Perhaps the command should have an option to automatically link, vs. query before linking. D/

DHC 26-JAN-73 11:44 14086

Response to (Journal, 14059,): I don't think so.

(J14086) 26-JAN-73 11:44; Title: Author(s): Crocker, David H./DHC; Distribution: Irby, Charles H./CHI; Sub-Collections: NIC; Clerk: DHC;

Request for Current Journal Hardcopy for NIC, and ARC

Charles: This is to formalize my request for a new procedure for Journal hardcopy, evolving from NIC needs and from our discussion yesterday.

1

The new procedure would produce a lineprinter printout of all new Journal entries each time the Journal was run.

2

This printout would be used as a master for NIC for reproduction for distribution where speed is essential. At present, the turnaround time for hardcopy from the 360 is 5 days to 2 weeks, which is too slow to be useful for Network dialogue. Therefore at present, NIC is making hardcopy for distribution from entries in JBN (NICSTA) initial file, which is a nuisance and far from automated.

3

At the time the NIC copy is produced on the lineprinter, we could also obtain a copy for ARC, to be posted or filed and used for repro to reduce the number of printout actions by individuals.

.

(J14087) 26-JAN-73 9:18; Title: Author(s): North, Jeanne B./JBN; Distribution: Hoffman, Carol B., Lee, Susan R., Michael, Elizabeth K., Dornbush, Charles F., ARC, Guest O., Feinler, Elizabeth J. (Jake), Handbook, Augmentation Research, Kelley, Kirk E., Meyer, N. Dean, Byrd, Kay F., Prather, Ralph, White, James E. (Jim), Vallee, Jacques F., Kaye, Diane S., Rech, Paul, Kudlick, Michael D., Ferguson, Ferg R., Lane, Linda L., Auerbach, Marilyn F., Bass, Walt, Engelbart, Douglas C., Hardeman, Beauregard A., Hardy, Martin E., Hopper, J. D., Irby, Charles H., Jernigan, Mil E., Lehtman, Harvey G., North, Jeanne B., Norton, James C., Page, Cindy, Paxton, William H., Peters, Jeffrey C., Ratliff, Jake, Van De Riet, Edwin K., Van Nouhuys, Dirk H., Victor, Kenneth E. (Ken), Wallace, Donald C. (Smokey), Watson, Richard W., Andrews, Don I., North, Jeanne B./SRI-ARC NICSTA; Sub-Collections: SRI-ARC NICSTA; Clerk: JBN;

Origin: <NORTH>JLHDCPY.NLS;1, 26-JAN-73 8:46 JBN ;

response to lpd's [nwg/rfc#446]

peter:

thank you for taking the time to consider the problems and recommended solutions in your rfc. this type of cooperation is a distinct step in the direction of eliminating extant confusion and enabling arpanet to mature, your consideration is very much appreciated.

i would offer the following additional suggestions in amplification of your thoughts:

- (1) how about forming a server host representatives group; members of which can be contacted by users and prospective users to answer questions relative to their hosts where the answers are not available at the nic.
- (2) how about a classification of 'server hosts' to disambiguate:
- o those who serve only a restricted user community; such as researchers in a particular community.
- o those who would like to be network servers (wholesalers) such as possibly ucla and ucsb.
- o those who would like only select capabilities to be employed by network users.
 - o others.

such a classification would further eliminate confusion and unnecessary contact of personnel.

(3) how about a classification of users by their utilization attributes?

we agree that this information should be maintained at the nic and are proposing to supply information we receive to the nic for such purpose.

thank you again; we would be most pleased in collaborating with you in seeing these ideas implemented.

jean iseli.......

(J14088) 26-JAN-73 11:04; Author(s): Iseli, John/JI; Distribution: Deutsch, L. Peter, Crocker, Steve D./LPD SDC2; Sub-Collections: NIC; Clerk: JI;

response to lpd 14079

peter:

relative to your recent request for information on information management systems, we found an nsf sponsored research project at ucla wherein they are providing common access to a number of science information service data bases (biological abstracts, chemical abstracts, eric files, agriculture files, rudimentary census data [not very complete], etc.)

the person to contact at ucla is: r. bruce briggs
cis project manager
campus computing network

the current service, batch, is free until july 1973. service via arpanet is not practical at this time, but an operational system is being developed for network usage and may be ready within the next few months.

documentation they sent us includes:

computerized bibliographic search service supplementary guide: preparing text-pac profiles for the eric files guide for preparing text-pac profiles profile analysts guide supplemental guide: preparing text-pac profiles for the ca-condensates file

will keep you informed of other responses ... jean iseli

(J14089) 26-JAN-73 12:03; Author(s): Iseli, John/JI; Distribution: Deutsch, L. Peter, Crocker, Steve D./LPD SDC2; Sub-Collections: NIC; Clerk: JI;

Howzit Goin

Have you successfully run OLS on your IMLAC? I haven't heard from you in a while and I'm wondering how you've been doing. Two documents you should really have are the OLS manual (NIC 5748) and "Telnet Access to UCSB's On-Line System" (rfc 216 NIC 7546). Do you have them?

Our resource evaluation group is progressing slowly. We've concentrated mostly on UCSD, UCLA-CCN, MULTICS, and MATHLAB and are dabbling in STAN-AI, ILLIAC-TENEX, and Harvards organic molecule system. We have a secretary who is trying to compile procedures for obtaining accounts at each site. She is having pretty good success. How are things at your end? Gotta go.

Howzit Goin

(J14090) 26-JAN-73 10:42; Title: Author(s): Pickens, John R./JRP; Distribution: Neigus, Nancy J./NJN; Sub-Collections: NIC; Clerk: JRP;

Measurements: creating, journalizing, reading TNLS file

CREATING A FILE 1 During normal hours: 1a Null file: 1a1 When Load Average Time (seconds) 1a1a 1/23 10:35 4.17 1.4 1a1b 11:27 4.05 1.4 1a1c 13:02 5.31 1.1 1a1d Average-----4.51-----1.3 1ale Insert Statement (10 sts. of 100 char each): 1a2 1a2a Load Average Time (seconds) When 1/23 10:35 4.17 1a2b 13.5 12.9 1a2c 1a2d 13.9 2.60 10.0 1a2e 11:27 1a2f 4.07 11.6 1a2g 2.96 11.4 1.68 10.4 1a2h 2.40 11.3 1a21 13:02 3.92 12.4 1a2j

Update Old version: 1a3

10.3

10.6

12.4

1a2k

1a21

1a2m

1a2n

2.72

2.43

3.08

Average-----11.6833

When	Load Average	Time (seconds)	1а3а
1/23 11:25	2.45	1.0	1a3b
11:55		0.9	1a3c
13:25	3.05	0.9	1a3d
Average	2.75	0.9333	1a3e
During Compile and	Load time:		1ь
Null file:			161
When	Load Average	Time (seconds)	1b1a
1/23 12:01	5.33	1.2	1ь1ь
1/25 12:16	2.55	1.0	1b1c
12:17	2.55	0.9	1b1d
Average	-3.4767	1.0333	1ble
Insert Statement	t (10 sts. of 1	00 char each):	162
When	Load Average	Time (seconds)	1 b 2 a
1/23 12:02	6.76	15.8	1b2b
	5.14	15.0	1b2c
	5.39	14.3	1 b2 d
	5.29	14.5	1b2e
Average	5.645	14.9	1b2f
Update Old versi	ion:		163
When	Load Average	Time (seconds)	1 b 3 a
1/23 12:35	5.29	1.0	1b3b
During off-hours:			1e
Null file:			1c1

When	Load Av	erage Time	(seconds)		1c1a
1/25 23	:06 0.14	1.1			1c1b
Insert Sta	tement (10 sts	. of 100 cha	r each):		1c2
When	Load Av	erage Time	(seconds)		1c2a
1/25 23	:06 0.14	4.9			1c2b
23	:14 0.14	4.9			1c2c
23	:18 0.10	4.9			1c2d
23	:24 0.10	4.6			1c2e
Average	0.12	4.82	25		1c2f
Update Old	version:				1e3
When	Load Av	erage Time	(seconds)		1с3а
1/25 23	:28 0.20	1.0			1c3b
SUBMITTING TO JO	URNAL (1/23/7	3 14:00)			2
Deferred numb	er, Interogate	, sent to tw	o idents		2a
# char L	oad Average	Load File	Journal Su	bmission	2a1
1000 3	. 32	0.3	7.6		2a2
2000 4	.74	0.5	7.3		2a3
3000 4	. 80	0.5	6.6		2a4
4000 5	.08	0.5	7.1		2a5
Average4	. 485	0.45	7.15		2a6
Number, one i	dent		k .		2b
# char L	oad Average	Load File	Journal Su	bmission	2ь1
1000			8.0		2b2

2000	4.97		8.6	2b3
3000	5.85		8.5	2b4
4000			9.1 (two i	fents) 2b5
Avera	age5.41-		8.55	266
READING A	JOURNAL F	ILE		3
Log-in:				За
When	Load	Average	Time	3a1
1/25	12:31	2.01	1.0	3a2
	12:32	1,98	1.0	3a3
	14:47	3.16	1.0	3a4
	14:56	2.32	1.0	3a5
Avera	age	-2.3675	1.0	3a6
NLS:				3ь
When	Load	Average	Time	3ь1
1/25	11:40	3.87	2.5	3b2
	11:42	3.54	2.4	3ь3
	11:43	3.24	2.6	3b4
	12:51	1.09	2.7	3ъ5
	14:57	2.25	2.2	356
Avera	age	-2.798	2.48	3ь7
Print a	journal i	reference	statement (in initial file): 3c
When	Load	Average	Time	3e1
1/25	11:43	3.09	0.6	3e2

11:44	2.97		0.5		3e3
11:45	3.34		0.6		3c4
11:46	3.54	4	0.5		3e5
Average	3.23	5	0.55		3c6
Print Journal	file (P	rint Plex †):		3 d
# char W	hen	Load Avera	ge Time	Difference	3d1
1000 1/25	11:43	3.60	3.0		3d2
	14:24	3.72	2.9		3d3
Average		-3.66	2.95		3d4
2000	11:50	3.75	5.2		345
	14:21	2.56	4.9		3d6
Average		-3.155	5.05	2.10	3d7
3000	11:53	4.69	7.0		3d8
	13:35	1.43	6.8		349
Average		-3.06	6.90	1.85	3d10
4000	14:30	3.67	8.9		3d11
	13:04	1.00	8.7		3d12
Average		-2.335	8.80	1.90	3d13
Average				1.95	3d14
Return to Ini	tial fil	e (&):			Зе
When L	oad Aver	age	Time		3e1
1/25 11:49	3.61		0.5		3e2
11:52	4.46		0.5		3e3
11:56	4.50		0.7		3e4

Measurements: creating, journalizing, reading TNLS file

13	:07	0.81	0.6	3e5
13	:34	1.24	0.7	3e6
13	:38	1.76	0.6	3e7
14	:23	3.83	0.6	3e8
14	:25	3.81	0.4	3e 9
Average		3.0025	0.575	3e10
		+		

NOTES:

The load average was read with the exec command "logstat". 48

Times and load averages were usually taken before beginning the command.

When inserting a file, each measurement was taken after ten consecutive Insert Statement commands, each of which included one hundred characters, totaling one thousand characters of input per measurement.

4c

NDM 25-JAN-73 23:47 14091 Measurements: creating, journalizing, reading TNLS file

(J14091) 25-JAN-73 23:47; Title: Author(s): Meyer, N. Dean/NDM; Distribution: Rech, Paul/PR; Sub-Collections: SRI-ARC; Clerk: NDM; Origin: <MEYER>MEASURE.NLS; 3, 25-JAN-73 23:45 NDM;

tals course registration

susan poh from mitre would like to register for the tals course on 7 and 8 feb. 1973.

tals course registration

(J14092) 26-JAN-73 6:36; Title: Author(s): Silberski, Robert/RS2; Distribution: Jernigan, Mil E., Poh, Susan S./MEJ SSP; Sub-Collections: NIC; Clerk: RS2;

This is a revised version of 11382, updated to reflect changes to the interchange convention actually in use at this time.

This document is pursuant to a meeting held at DDSI (Los Angeles) on 2 August 1972 to discuss specifications for interfacing the NLS Output Processor to DDSI's COMp80 service. Attending this meeting were Walt Bass, Mark Brown, and Paul Johnson. The principal points discussed were:

1

Conventions for simplifying the user interface to the COMp80, so that the user can access the powerful capabilities of the COMp80 without having to cope with the machine's full generality.

1a

Specifications for the language interfacing the Output Processor to the COMp80.

16

Standards for magnetic tape formatting.

1 c

User Interface

2

The COMp80 provides a great deal of flexibility for specifying positions, character sizes and spacings, fonts, spot size and intensity, etc. It is my sense that giving all this "power" to the general user would be counterproductive in that the user would be likely to end up getting involved in long design cycles, trying to optimize all the variables so as to produce a sought-after document format.

2a

What I have tried to do is to specify for the user a simplified subset of the full COMp80 capability which will enable users to easily and reliably get documents produced without extensive debugging of Output Processor directives. This simplified subset has the following characteristics:

2b

The user will view the COMp80 as a machine for composing 8 1/2 X 11" pages of text (any of these specs. may be generalized in the future, but until we get it working . .).

2b1

The user will specify physical dimensions such as character size and margin settings in units of one-thousandth inch, and the page will have a coordinate system in which (0, 0) is the upper left corner of the page and (8500, 11000) is the lower right corner.

2b2

The user will specify the character size and basic line spacing using a single number which will be referred to as the "Character Size" — an integer in a range yet to be determined, which is the number of thousandths between the

bottoms of two successive lines of text -- e.g., a character size of 100 has 1000/100 = 10 lines per inch. DDSI will accept responsibility for converting our "Character Size" parameter into the COMp80 character size specifications needed to produce the desired results in the final product (i.e., after blow-up from the microfilm into delivered hardcopy.

2ь3

The COMp80 offers 8 line widths (CRT spot sizes) and 8 intensity levels. Mark Brown has indicated that of the 64 character densities which are thus possible, perhaps 8 or 16 could actually be distinguished in a final offset-printed product. It is my feeling that only 3 or 4 densities would actually prove to be of general use, and I propose to offer the user only the following options: Light, Medium (Normal), and Bold. DDSI has accepted responsibility for determining the COMp80 settings which will produce the desired effects in the final printed documents so that we (ARC) don't have to worry about diddling with the COMp80 hardware.

2b4

Output Processor / COMp80 Interface

3

The Output Processor (OP) will produce a sequential file consisting of 7-bit bytes, packed 5 to a 36 bit word, left-justified (low-order bit is wasted). This sequential file will be copied to tape as per the specifications in the following section for transmission to DDSI.

За

The byte stream will be punctuated by command bytes, each of which may be followed by argument bytes when appropriate. The commands to be implemented first are:

3b

= 1 : Output Line Segment

3b1

= 2 : New Page (advance frame)

3ь2 3ь3

= 3 : Insert Figure

= 4: End of Document (Any bytes between this and the EOF mark on the tape are to be ignored)

3b4

The Output Line Segment command byte is followed by these arguments:

3c

y-coordinate of line segment (2 bytes)

3c1

This is the y-coordinate (in thousandths) of the	
base-line of the characters to be printed in the	
line-segment i.e., the line on which the upper case	
	2-1-
letters rest.	3c1a
x-coordinate of left margin of line segment (2 bytes)	3c2
This is the x-coordinate (in thousandths) of the left	
edge of the leftmost character position in the line	
	2-2-
segment.	3c2a
x-coordinate of right margin of line segment (2 bytes)	3e3
This is the x-coordinate (in thousandths) of the right	
edge of the rightmost character position in the line	
	ЗсЗа
segment.	Jesa
The x-coordinates will actually address the position	
which lies between two adjacent character positions	
i.e., the x-right of one line segment may have the same	
value as the x-left of the following line segment.	3e3b
value as the x-tert of the fortowing time segment.	0000
Justification Code (one byte)	3c4
= 0 : Set Line Segment Left Flush (ragged right)	3c4a
= 1 : Set Line Segment Right Flush (ragged left)	3c4b
= 2 : Center Line Segment Between Left and Right Margins	3c4c
= 3 : Full Justification (insert space between words	
[and maybe characters within a word] to make both right	
and left edges of line segment flush with margins)	3c4d
Number of text segments in this line segment (one byte)	3c5
Number of text segments in this time segment (one byte)	000
A line segment may contain up to 126 text segments, each	
of which may be in a different face, size, boldness,	
etc. These text segments are combined into a single	
line segment so as to permit them to be consistently	2-5-
justified by the CCMp80.	3c5a
Each text segment consists of the following information:	3e5b
Type Face (one byte)	3c5b1
್ರಾಹ್ಮಹಾಗಡು ಕ್ರಮ್ ಮರ್ಯಕ್ರವೆಯನ್ನು ಸ್ವಾಹ್ಯಕ್ಕೆ	
= 0 : Courrier	3c5bla

= 1 : Directory	3c5b1b
= 2 : Film	3e5b1e
= 3 : OCR-B	3e5b1d
= 4 : NMA Microfont	3с5b1е
= 5 : News Gothic	3c5b1f
= 6 : Times Roman	3c5b1g
Type Size (two bytes)	Зе5ь2
The spacing in thousandths between the base lines of two adjacent lines.	3c5b2a
Type Style (one byte = b1 b2 b3 b4 b5 b6 b7)	3c5b3
Boldness (b6 b7)	3c5h3a
= 00 : medium (normal)	3c5b3a1
= 01 : light	3c5b3a2
= 10 : bold	3c5b3a3
Slant (b5) [hardware italics]	Зс5ь3ь
If b5 is on, slant the characters in this text segment.	3e5b3b1
Underlining (b4)	3c5b3c
If b4 is on, draw a line under the text in this string, using a boldness to complement that of the text.	3e5b3e1
Monospacing (b3)	3e5b3d
If b3 is on, monospace the characters in the text segment; otherwise, set the characters proportionally spaced (if allowed in that font) or monospaced as appropriate.) 3c5b3d1
Character Count (two bytes)	Зе5ь4

Characters (one byte per character)	36202
The Insert Figure commad byte is followed by these arguments:	3d
Figure Number (three bytes)	3d1
This is the unique (ARC Catalog) number assigned to a photograph or drawing which will be submitted to DDSI in hardcopy. DDSI is to merge this figure into	
offset-printed copy by the most practicable method.	3d1a
y-coordinate of center of figure on page (two bytes)	3d2
x-coordinate of left edge of figure (two bytes)	3d3
x-coordinate of right edge of figure (two bytes)	3d4
Magnetic Tape Format	4
7 track format	4a
One file per document	4ь
Files seperated by EOF tape marks	4b1
End of tape indicated by two EOF marks in a row	4ь2
A file consists of any number of fixed length records	4c
The last record in a file is the same length as all the others, hence may contain garbage.	4c1
Each record consists of 512 36-bit words	4d
Each word is broken into 6 6-bit packets, each of which has one parity bit (using odd parity).	4 e

(J14093) 29-JAN-73 18:00; Title: Author(s): Bass, Walt/WLB; Distribution: Bass, Walt, Meyer, N. Dean, Engelbart, Douglas C., Watson, Richard W., Van Nouhuys, Dirk H., Norton, James C., Auerbach, Marilyn F./com; Sub-Collections: SRI-ARC COM; Clerk: WLB;

Let's Let Kirk Insert Dex Tapes at Night

We are not using DEX to hold down the daytime load average.

1

Kirk Kelley has an inbox beside his desk. If you put a Dex tape in that box he will put it in the system during the off hours of the night. We are each a little better off during the day if we let Kirk load in Dex tapes that have no special urgency.

Let's Let Kirk Insert Dex Tapes at Night

(J14094) 26-JAN-73 16:19; Title: Author(s): Van Nouhuys, Dirk H./DVN; Distribution: Byrd, Kay F., Lee, Susan R., Hoffman, Carol B., Kelley, Kirk E., Jernigan, Mil E., Lane, Linda L., Norton, James C., Engelbart, Douglas C./kfb srl cbh kirk mej lll jcn dce; Sub-Collections: SRIARC DPCS; Clerk: DVN;

Survey inquiry

I heard (via Bob Bressler and his recent RFC) that the NMC has or will have a standard format survey available on a standard socket (he says 17(octal)). What is the status of that? I am working on hoststat programs on TENEX that will use a previously obtained survey from "official survey sites", and I'd like to know when I can put the NMC in my table.

JOEL

Survey inquiry

(J14095) 26-JAN-73 14:11; Title: Author(s): Levin, Joel B./JBL; Distribution: Naylor, William E./WEN; Sub-Collections: NIC; Clerk: JBL;

JEW 26-JAN-73 15:45 14096

Reply to (JOURNAL, 14063,): Electromagnetic Compatibility Analysis survey

The NIC has no software or data bases in the area of electromagnetic compatibility analysis.

1

Your comment about having no way of addressing server sites is well taken, and we will create a group in the IDENT system by which one can address the Technical Liaisons at all server hosts. A Journal article announcing formation of the group and giving its ident will be sent to the NWG. Thanks for the suggestion.

JEW 26-JAN-73 15:45 14096

Reply to (JOURNAL, 14063,): Electromagnetic Compatibility Analysis survey

(J14096) 26-JAN-73 15:45; Title: Author(s): White, James E. (Jim)/JEW; Distribution: Iseli, John/ji ; Sub-Collections: SRI-ARC; Clerk: JEW; Crigin: <WHITE>ISELI.NLS; 2, 26-JAN-73 15:43 JEW;

questions on output processor

questions on output processor

(J14097) 26-JAN-73 14:26; Title: Author(s): Perry, John S./JSP; Distribution: Van Nouhuys, Dirk H./DVN; Sub-Collections: NIC; Clerk: JSP;

KIRK 26-JAN-73 20:59 14098

Resignation from economist chair on Parsley Committee.

As I have lost interest in PODAC, I no longer wish to be a member of the Parsley Committe. PSO has ample representation and the Committee has ample man-power to handle my function as POD economist. Thank you.

KIRK 26-JAN-73 20:59 14098

Resignation from economist chair on Parsley Committee.

(J14098) 26-JAN-73 20:59; Title: Author(s): Kelley, Kirk E./KIRK; Distribution: Auerbach, Marilyn F., Van Nouhuys, Dirk H., Lane, Linda L., Jernigan, Mil E., Lehtman, Harvey G., Victor, Kenneth E. (Ken), Rech, Paul, Wallace, Donald C. (Smokey)/MFA dvn lll mej hgl kev pr dcw; Sub-Collections: SRI-ARC; Clerk: KIRK; Origin: <KELLEY>NUL.NLS;1, 26-JAN-73 20:52 KIRK;

CCM Interest Group Exists

There is now a COM Interest Group (Ident = COM). You are on it. If you don't want to be, please let me know.

COM Interest Group Exists

(J14099) 26-JAN-73 14:55; Title: Author(s): Bass, Walt/WLB; Distribution: Bass, Walt, Meyer, N. Dean, Engelbart, Douglas C., Watson, Richard W., Van Nouhuys, Dirk H., Norton, James C., Auerbach, Marilyn F./COM; Sub-Collections: SRI-ARC COM; Clerk: WLB;

Output Processor Interest Group Exists

There is now an Output Processor Interest Group (Ident = OPIG).
You are on it. If you don't want to be, please let me know.

Output Processor Interest Group Exists

(J14100) 26-JAN-73 14:57; Title: Author(s): Bass, Walt/WLB; Distribution: Bass, Walt, Engelbart, Douglas C., Watson, Richard W., Norton, James C., Meyer, N. Dean, Van Nouhuys, Dirk H., Auerbach, Marilyn F., Irby, Charles H./OPIG; Sub-Collections: SRI-ARC OPIG; Clerk: WLB;

Re INTERROGATE Command

Suggestion for a tiny user feature optimization: in the INTERROGATE command, allow CR to stand for 'Y CR in response to "DO YOU WANT IT RETRIEVED?". Also, maybe do an automatic ALTMODE after the user types in the file name (if user types CR rather than ALTMODE CR) to eliminate confusing "THAT FILE IS NOT ARCHIVED" messages. -- Walt

Re INTERROGATE Command

(J14101) 26-JAN-73 15:12; Title: Author(s): Bass, Walt/WLB; Distribution: Wallace, Donald C. (Smokey)/DCW; Sub-Collections: SRI-ARC; Clerk: WLB;

Draft Reply to X-PARC's XGP Proposal

Please let me know if this meets with your approval.

Doug Engelbart, Dick Watson, and Walt Bass met on 12/27/72 to discuss the proposed acquisition of a Xerox Graphic Printer (XGP) by ARC for development as a local mixed-font text/graphics output device. This memo summarises the important points of that discussion. The XGP is a raster-scan driven printing device with severe real-time operating requirements including digital input at a rate of approximately 500 kilobaud. The simplest kind of operation possible seems to be represented by the XPRINT system currently implemented at X-PARC. Using a minimal configuration we would get a system with the following characteristics: 2 Multiple-fonts on a page limited to those that can simultaneously be kept in core (say 2-4), where a change in size requires a change in "font". 2a 2) No multiple-column capability without reprogramming the NLS Output Processor or pre-processing the OP COM formatted output. 2b No easy way of extending the capabilities to mixed 2c text/graphics. 4) Real-time demand on the PDP-10 for characters at up to 15 kilo-haud data rate. 2d To develop this minimal system, assuming gift of the XGP, would 3 require: Purchase of extra core and probably a disc for our nova 3a 2) Hand building of a Nova-XGP interface (to plans supplied 3b by Xerox). 3) Provision, probably by construction, of a high-speed 3c Nova/PDP-10 interface. 4) Possibly extensive PDP-10 monitor programming to meet the real-time demands of the XGP. 3d An undetermined amount of Nova program development and 3e maintenance. We discussed this minimal system along with several more

expensive possibilities and concluded that we saw no way of utilizing the XGP that met minimum cost/benefits requirements.

Braft Reply to X-PARC's XGP Proposal

It was our unanimous decision that we should not proceed with any XGP-related development unless Xerox can demonstrate that there is an economical way of using the XGP to duplicate, except for resolution, the capabilities of the Comp80 as specified in (14093,).

Draft Reply to X-PARC's XGP Proposal

(J14102) 26-JAN-73 15:18; Title: Author(s): Bass, Walt/WLB; Distribution: Engelbart, Douglas C., Watson, Richard W., Norton, James C./dce rww jcn; Sub-Collections: SRIARC COM OPIG; Clerk: WLB;

WLB 26-JAN-73 15:21 14103

Error in DNLS Journal Submission Procedure

You cannot specify "SRI-ARC" as subcollection membership in DNLS journal submission: When you type "sri-a" NLS echoes (and enters in the field) "SRIARC".

Error in DNLS Journal Submission Procedure

(J14103) 26-JAN-73 15:21; Title: Author(s): Bass, Walt/WLB; Distribution: Kaye, Diane S., Lehtman, Harvey G., Irby, Charles H./bugs; Sub-Collections: SRI-ARC BUGS; Clerk: WLB;

IMP/TIP Memory Retrofit Schedule

1 /

This revision contains two major changes to RFC #434. First, all retrofits scheduled prior to February first have been completed and are therefore removed from the schedule. Second, the CCA retrofit has been rescheduled from 3/20 to 2/28.

1a

The revised text of RFC #434 follows:

16

During the first several months of 1973 we will be retrofitting each IMP and TIP with additional core memory. At the end of the retrofit program, the memory sizes of the various machines will be as follows:

1c

IMP (516 or 316) - 16K words

1c1

TIP - 28K words

1c2

TIP with Magnetic Tape Option - 32K words

1c3

In addition, the expansion of the TIP core memory will necessitate enlarging the TIP to two cabinets.

1 d

Listed below is the schedule for the remaining retrofits. We have arranged this schedule to coincide with the usual monthly Preventive Maintenance at each site so as to minimize user inconvenience, but the work required will frequently require the machines to be down longer than normal. I will issue additional RFC's updating this schedule as necessary.

1e

Any site which anticipates difficulty with the expansion of TIP size, and thus the floor space requirement, should contact Hawley Rising (BBN) at

(617) 491-1850 ext, 473

All dates given below are in the form (month/day)

1 f

Utah (2/1)

1 f 1

UCSB (2/6)

1f2

Belvoir (2/8)

1f3

NOAA (2/12)

1f4

USC (2/13)

Stanford (2/14)	116
ETAC (2/15)	117
Aberdeen (2/22)	118
ISI (2/22)	1f9
Case (2/26)	1:10
CCA (2/28)	1f11
SRI (3/7)	1112
Rome (3/14)	1f13
FNWC (3/15)	1f14
UCLA (3/19)	1f15
AMES IMP (3/21)	1f16
GWC (3/22)	1±17
Carnegie (4/4)	1f18
SDC (4/17)	1f19
Illinois (4/18)	1120

(J14104) 29-JAN-73 7:47; Title: Author(s): McKenzie, Alex A./AAN; Distribution: Martin, Reg E., Leichner, Gene, Falk, Gil, Iseli, John, Donnelley, Jed E., Kantrowitz, William, Wolfberg, Michael S., Feinroth, Yeshiah S., Hurt, James, Hearn, Anthony C., Stein, James H., Shoshani, Arie, Harslem, Eric F., Metcalfe, Robert M. (Bob), Reussow, Bradley A., Reins, E. R. (Dick), Kadunce, Daniel L., McCutchen, Samuel P., Petregal, George N., Madden, James M., Young, Michael B., Padlipsky, Michael A., Stevenson, Schuyler, Deutsch, L. Peter, Davidson, John, O'Sullivan, Ihomas, Seroussi, Sol F., Bradner, Scott, Thomas, Robert H., Thomas, John C., Romanelli, Michael J., Stoughton, Ronald M., Owen, A. D. (Buz), Fink, Robert L., Meir, Jaacov, North, Jeanne B., Crocker, Steve D., Lawrence, Thomas F., McConnell, John W., Ollikainen, Ari A. J., White, James E. (Jim), Hathaway, A. Wayne, Foulk, Patrick W., Winter, Richard A., Van Zoeren, Harold R., McKenzie, Alex A., Winett, Joel M., Bhushan, Abhay K., Pyke, Thomas N., Wilber, B. Michael, Feigenbaum, Edward A., Braden, Robert T., Pepin, James M., Wessler, Barry D., Melvin, John T./NLG; Sub-Collections: NIC NLG; RFC# 447; Updates Document(s): 434; Clerk: AAM;

Dear Vint,
Did you get my INWG note on Host/Host Protocol? Does it have to
wait for translation before the English copies are distributed?
Alex

(J14105) 29-JAN-73 6:09; Title: Author(s): McKenzie, Alex A./AAM; Distribution: Cerf, Dr. Vinton G./VGC; Sub-Collections: NIC; Clerk: AAM;

Dear Jon,

During the "Cambridge FTP" meeting here at BBN last Thursday the group decided to ignore your comment (objecting to RFC 414) about continuation lines not beginning with a number. Instead, we formulated a new set of rules as follows:

- 1) Any response, usually beginning with code "xxx ", which will have several lines of output will begin the first line with code "xxx-". (This rule helps sites like TENEX when it is a user site and must discover how to interleave user typing with responses —there is probably the same problem for any full-duplex user.)
 2) Subsequent lines of the response are only constrained to not begin with three digits. This allows sithe which already have fancy error-diagnostic generating routines to "be lazy" and use them witout modification Multics seems to be another such site.
- 3) The last line of the response is constrained to begin with the code "xxx ". This is designed to insure that the programmer at the server site takes a positive action to let the user site know that the response is finished, rather than being extra-lazy and counting on another response coming along "soon".

Comments?

Regards, Alex

(J14106) 29-JAN-73 6:26; Title: Author(s): McKenzie, Alex A./AAM; Distribution: Postel, Jonathan B., Neigus, Nancy J./JBP NJN; Sub-Collections: NIC; Clerk: AAM;

the YOU HAVE A MESSAGE message

Sent to jbn and np

the YOU HAVE A MESSAGE message

During the last few days, when I log in to the NIC I get a line from the TENEX exec that says "YOU HAVE A MESSAGE". I can't find anything in my TNLS User's Guide about how to obtain a copy of the alleged message. What should I do?

(J14107) 29-JAN-73 7:54; Title: Author(s): McKenzie, Alex A./AAM; Distribution: North, Jeanne B., Irby, Charles H./JBN NP; Sub-Collections: NIC NP; Clerk: AAM;

Faster literal collection for TNLS

This will make it difficult to run TNLS on standard TENEX unless the new SIN is made part of standard TENEX. However, I feel the improvement is worth it.

1a2a

1a3

ms per character.

character.

I have rewritten the procedure RDLIT (which is used to read a literal from the user at a typewriter terminal) to use the new SIN facility for supplying a string of break characters. Preliminary measurements of the improvement follow. (I was told recently that Paul had done some measurement of the old literal collection times and I would like to ask him to verify this improvement.) This was a best case test, in which no special characters were typed (e.g. BC, BW, ect.) 1a OLD literal collection 1 a 1 to read 1052 characters (15 full lines) took 5.1 seconds according to †T, yielding 4.85 ms per character. 1ala New literal collection 1a2 to read 1052 characters took 1.9 seconds, yielding 1.8

This gives us about a 2.7 improvement in processing of a

(J14108) 28-JAN-73 12:13; Title: Author(s): Irby, Charles H./CHI; Distribution: Victor, Kenneth E. (Ken), White, James E. (Jim), Dornbush, Charles F., Michael, Elizabeth K., Vallee, Jacques F., Mitchell, James G., Deutsch, L. Peter, Kaye, Diane S., Andrews, Don I., Bass, Walt, Hopper, J. D., Irby, Charles H., Lehtman, Harvey G., Wallace, Donald C. (Smokey), Victor, Kenneth E. (Ken), Dendy, Robert L., Melvin, John T., Rech, Paul, Vallee, Jacques F., Andrews, Don I., Watson, Richard W., Norton, James C., Van Nouhuys, Dirk H./NPG TENEXT PR JFV DIA RWW JCN DVN; Sub-Collections: SRI-ARC NPG TENEXT; Clerk: CHI;

Subcollection problem in Journal

Dave, Please note (journal, 14103,). -- Charles.

Subcollection problem in Journal

(J14109) 29-JAN-73 11:53; Title: Author(s): Irby, Charles H./CHI; Distribution: Hopper, J. D./JDH; Sub-Collections: SRI-ARC; Clerk: CHI;

Response to (Journal, 14065,), Journal Subsystem

Nancy, Thanks for your suggestions about the Journal EXEC command. I will try to make it happen as soon as I can. Do you think one should be able to submit files, branches, etc., as well as messages? After looking into it somewhat the savings in startup time that I had hoped for are not materializing.

However, I still think it would be more convenient than having to enter NLS first. Also, I had intended that the interrogate would be automatically invoked as you suggested it should. The matter of what constitutes a Command Accept in the submit message literal is somewhat tricky, since experienced users will expect to be able to use their normal control characters. I will think about this for a while. I think I understand the problems and will try to come up with a solution that is fairly easy on the novice user. — Charles Irby.

Response to (Journal, 14065,), Journal Subsystem

(J14110) 29-JAN-73 12:08; Title: Author(s): Irby, Charles H./CHI; Distribution: Neigus, Nancy J./NJN; Sub-Collections: SRI-ARC; Clerk: CHI;

Response to (journal, 14061,), NLS links

Dave, a link of the form (a,b) is interpreted to mean file A, statement B, where file A is in assumed to be in the directory given in the Execute File Status for the file containing the link. The links of the form (journal, jnl#) are missing a comma and thus are not being interpreted properly — they should be (journal, jnl#,). Also, upper/lower case only matters in viewspecs — as in (Directory, File, Statement: Viewspecs). Journal is a Directory not a file. — Charles.

Response to (journal, 14061,), NLS links

(J14111) 29-JAN-73 12:17; Title: Author(s): Irby, Charles H./CHI; Distribution: Crocker, David H., Kaye, Diane S., Lehtman, Harvey G., Irby, Charles H./DHC BUGS; Sub-Collections: SRI-ARC BUGS; Clerk: CHI;

Response to (journal, 14060,), EXEC journal

Dave, As currently planned the EXEC level Journal command would allow one to use the .LastName and other query facilities fo the Identification System just as the current Journal does. -- Charles.

Response to (journal, 14060,), EXEC journal

(J14112) 29-JAN-73 12:20; Title: Author(s): Irby, Charles H./CHI; Distribution: Crocker, David H., Kaye, Diane S., Lehtman, Harvey G., Irby, Charles H./DHC BUGS; Sub-Collections: SRI-ARC BUGS; Clerk: CHI;

Response to (journal, 14086,), Print Journal

Sorry, I was a bit premature in stating that the new Print Journal code was now in the system. It did not get in in time to he in the running system. It will be added within the next day or two. -- Charles.

Response to (journal, 14086,), Print Journal

(J14113) 29-JAN-73 12:24; Title: Author(s): Irby, Charles H./CHI; Distribution: Crocker, David H., Kaye, Diane S., Lehtman, Harvey G., Irby, Charles H./DHC BUGS; Sub-Collections: SRI-ARC BUGS; Clerk: CHI;

Visit Log: 29 Jan 73, Karl Zinn, University of Michigan, Center for Research on Learning and Teaching (CRLT) Visit Log: 29 Jan 73, Karl Zinn, University of Michigan, Center for Research on Learning and Teaching (CRLT)

Spent quite a bit of our time talking about the Community Workshop idea as applicable to the CBI Community. I gave him a copy of (12445,), which we referred to quite a bit during our visit.

1

For instance, Karl has been getting Journal distribution from the CBI sub-group that Tom O'Sullivan set up in the NIC Journal.

1a

Karl and I had some years ago entertained fairly seriously the possibility of jointly working up a Summer "Institute" or "Workshop" here at ARC, composed of computer-associated teaching/learning research guys (from universities) working together on ideas where their discipline and ours overlap. Had the idea that we might be able to get NSF or some other agency to sponsor such a thing.

2

The idea now has even more relevance, and we both are interested in considering it anew.

2a

Karl would be interested in giving the possibility some thought, and can consider helping enlist participants, plan the get-together, running it, working on the post-meeting "Proceedings," or etc. (most of this list was entered by DCE as candidates for Karl's consideration).

2b

His interest must really depend upon what the payoff will be to his discipline and his career; and ARC would have a similar set of consideratons involved in committing itself to one or more such gatherings. But the potential value seems high (to me) for ARC's Community Workshop promotion and evolution — and, if our commitment is allowed to continue on through the years, so that indeed these Communities do emerge and evolve, then I'd guess that for Karl and other enlistees there should be some very real gains to balance off against the time, energy, etc. (in other words, I think that we could feel honestly that we were offering them a good thing).

2c

I told him of ARPA Human Resource Office's interest in a possible CBI Network Community, and of Tom O'Sullivan's starting on 1 Feb 73 to work in that office for its director, Col. Austin Kibler. (Phone: 202 694-5917) He should contact them.

3

Karl has contributed a lot to his discipline by publishing surveys, putting together conference proceedings, etc. I think that we have a fair set of his works in XDOC, and I am asking

6 a.

Visit Log: 29 Jan 73, Karl Zinn, University of Michigan, Center for Research on Learning and Teaching (CRLT)

Karl to send me copies and citations to update our XDOC collection of his work.	4
To update Karl's own bibliography on us, I gave him copies of:	5
Engelbart/English FJCC68 paper: (3954,)	5 a
March 69 RADC	5 b
April 70 RADC,	5 c
July 70 RADC	5 d
DCE "dinosaur" paper: (5255,)	5 e
Jun 71 RADC	5 £
Sep 71 Lindgren's Innovation article: (10480,)	5g
Apr 72 ONR (10045,)	5h
May 72 RADC (13041,)	51
Oct 72 paper on KW Architect Community (12427,)	5 J
CCC paper, "Coordinated info sys Communities," (12445,)	5k
Our Publicaton list (incomplete no entries after #19, July 70, and no XDOC/Journal numbers)	51
Quickprint of the biblio list from (Jernigan, Jbiblio, 1F).	5 m
Action Notes:	6

We (ARC) should consider workshops (such as mentioned above for CBI types) for other collections of participants: e.g., from Operations Research, Software Engineering, Large- and/or Distributed-Project Management, Organizational Development, Information Services, Technical Documentation and Publication, or etc. It would have tremendous positive impact on ARC, on SRI, and probably on a number of these groups; it would provide a very valuable sort of calibraion of our Community (and) Workshop ideas; and it very likely would do more for launching some of the Communities than almost anything else (that I can think of).

(Note, after Karl left: I really think that he could fill an

DCE 29-JAN-73 15:55 14114

Visit Log: 29 Jan 73, Karl Zinn, University of Michigan, Center for Research on Learning and Teaching (CRLT)

important role in getting Kibler's CBI Community going with a Community Workshop. As I portrayed to Karl, it takes a sort of tripod to make it happen: sponsorship from outside the Community; Knowledge Workshop Utility Servicee dedicated to serving the (such) communities; and one (or a group of) Community Workshop "architect(s)" working from within the Community. Kibler/O'Sullivan may be able to supply the first, ARC and its Workshop Utility commitment can perhaps supply the second, and Karl Zinn is the type of Community-architect candidate that every Community should find. I think this all warrants our continued attention.)

65

Visit Log: 29 Jan 73, Karl Zinn, University of Michigan, Center for Research on Learning and Teaching (CRLT)

(J14114) 29-JAN-73 15:55; Title: Author(s): Engelbart, Douglas C./DCE; Distribution: Norton, James C., Watson, Richard W., Kudlick, Michael D., Rech, Paul, Brown, David R., Cox, Bonnar/jcn rww mdk pr drb bc; Sub-Collections: SRI-ARC; Clerk: DCE;

2h

Outline for DCE's presentation of 24 Jan 73 at the Computer Communications Conference, San Jose

Following is the outline of my slide-movie presentation for the Second Annual Computer Communications Conference at California State University, San Jose, 24 Jan 73 (the presentation associated with the written paper -- 12445,). 1 The ordinal numbering coincided with the side-carousel slots, and the letter-number designations are those marked on the Set G was made on Friday, 19 Jan, and Sets A, B, C, D, E and F were made on Monday 22 Jan 73, all by Bill Harris, SRI photographer. 1a Note: Older sets of slides have the A, B, ... letter series, too; I put the letters in red on these new ones to help differentiate. 1a1 For the movie run, I used Reel One of our ASIS69 movie, starting at about the 10-minute point, where I am introducing the control devices, and running about 15 minutes -- getting into the dialogue with Dave Evans and his inroductory demonstration of DNLS. 15 The Proceedings of the Meeting are in XDOC (13332,). 1c Knowledge Workshop, what we are used to: 2 1 B10 Specially set-up corner of PR's office, as heavy sample workshop area -- books with markers, dictionary, reports, desk calculator, glasses, phone, phone message, phone books, -- blackboard with "SAVE", DO NOT ERASE. -- too far away to have all impact that the collection on table cold bring. 2a A14 Walker office, Don, Ann Robinson, and DCE 2b 2c A20 Bill Kautz and office A9 Coffee Break, 5 (DCE) 2d A19 Goldberg-Group Bulletins and Periodicals 2e A18 Mildred Kelley and files 21 7 A12 Group-X Library, 28 B17 SRI Mail cart and delivery man, JFV in background

looking at bulletin board

ARC'S Equ	ipment:	3
9 08	PDP 10, WRF JCP at console	За
10 D11	Disk packs, WRF and JCP changing disk pack	Зь
11 D4	IMP, TTY, Modem cabinet	Эс
ARC's Kno	wledge Workshop environment:	4
12 D18	DCE at console in office	4a
13 C16	Commons, 4 cons, JBN JFV JEW DSK (Good shot)	4b
of disp (coffee station	JBN facing camera, at her work station, of which top lay box is barely in view past her work-aid tabl cup, papers) to back of DCW sitting at his DNLS , with WRF leaning over. Unused DNL consold standing t. Schedule board visible over DCW's head.	4c
	IMLAC Station, over left shoulder of CHI, mouse, op console	4d
	Proj Meet, Audience proj and controls, JCN, JFV MEJ BAH MEH	4 e
17 C20	Proj Meet, Screen, JCN, JBN MEH BAH MEJ CFD JFV	4 f
18 A4	Conf DVN Linked, DCE	4g
** 19 C1	3 NLS Src Docs, JFV	4 h
20 c7	ARC Ref shelves, DCE	4 i
21 B1	DEX input, LLL	4.j
22 B5	PSO/NIC mailing, table, Xerox, Susan and Carol	4 k
23 B8 Station	NIC Phone, Susan, shelves with NIC collectioon, log	41
24 C4	Vault JBN	4 m
** Short	movie run then Screen Shots:	5
View drop	ping into 12445, the CCC paper	6

25 G27 12445,1:xbh, "Command Reset"	6 a
26 G34 JI Bugsel gc from x view of 12445	6 b
27 G32 ** gct, JI Bug dds, w.	6c
28 G33 after J I, full-screen Stat "The second"	6 d
29 G35 12445, Proto Com-Wksh Sup, xbh, "Move Branch" SEL1	6 e
30 G36 12445, Proto Com-Wksh Sup, xbh, "Move Branch" effect	6 f
Signatures, for recent-change infor, and TD-item link use	7
31 G20 In Work, TD, ready to jump link for Signature view	7 a
32 G21 Signatures on after Jump to Link (12445,1:mxbhK) (POOR Chars)	7b
User-prog counting words in a file	8
33 G19 View xh, "Word Count of File is 3706" on 12445	8 a
Read Journal Mail series	9
34 G1 DCE TD Br gebbt, JL on "read Jou mail" (DCE, journal: gebszm)	9 a.
35 G2 DCE Jou Br, gebszm, JL ready	9.5
36 G3 DCE Jou Br (tz), JL ready (not bugged)	9 c
37 G6 DCE Jou Br, JI Bugsel (MEH) 1	9 d
38 G8 V=wg at MEH 13588 citation, Horiz Split Bugsel	9е
39 G9 JL to empty lower window,	91
40 G10 After JL, three stats in lower window	9g
41 G11 DCE Jou Brn ebtry, compiling conan for "MDK" author	9 h
42 G12 1g, 1h, 1p lac 1co from conan filter on "MDK *"	91
43 G13 Bugsel for executing Sort Plex on DCE Journal Branch: ebt	9.j

44 G14 After "Sort Plex", Journal branch, DCE file, View ebt,	9 k
User-prog formatting of verbose directory output	10
45 G16 just after insert sequential frm verbose directory	
output	10a
46 G15 compiling user progtam "d"	10b
47 G17 Just did SelBranch for Reformat-Branch User program, with rw "verbose-output" branch in view.	10e
48 G18 Dir branch after did User-prg reformat, LF Bugsel	10 d
Journal entry of visit-log memo	11
49 G22 gct view of O'Sullivan's Contact log of 13 Dec 72 visit, ready for jou, with PR head statement (CHARS poor but ok)	11a
50 G25 Same spot, wy view, up to "Process Command Form" Bug (Fuller PR fillout, good chars)	11b
Journal "secondary distribution" operation	12
51 G44 "Secondary Distrib Doc 13744", Ouart Man Rept cictation from his private catalog, setting up NLS command to effect seconary distribution.	12a
Interactive Calculator	13
52 G45 Calc Example, after "Add Column" sum in accum	13a
Interactive Measurements Analysis facility	14
53 G46 Superwatch graph Bad Chars still "representive"	14a
DPCS sample pages:	15
Technical Documentation samples	15a
54 E2 Diagram of bubble chamber good labels and text	15a1
55 E3 Analytic graph, good labels, caption	15a2
56 E5 Pictorial cutaway of reactor, man figure,	15a3

57 E11 FJCC 71 page, three Figs: Block Diag, Pictorial of scopes and equip, and equip-config chart. Captions, labels, full page.	15a4
58 E13 Full page, two Figs, showing segment and argument management schematics for file structure. Labels, short captions, page text.	15a5
Our COM-output samples	15b
59 E6 12445 Table of Contents as from COM	15b1
60 E8 COM Output Processor Guide, from COM (PxIX PxN)	15b2
61 E9 NIC Author Index via COM	15b3

(J14115) 29-JAN-73 9:30; Title: Author(s): Engelbart, Douglas C./DCE; Sub-Collections: SRI-ARC; Clerk: DCE;

I just used Sendprint and printed the result. It brightened my day muchly.

However (however's seem to always crop up):

By the time this is incorporated into the Output processor (or whatever) please provide for:

No Rubouts; i.e., just shooting the bytes out (aother option?), without worrying if the receiver has completed his formfeed. it shows up as '? marks on out printer. tns.

(J14116) 29-JAN-73 11:49; Author(s): Crocker, David H./DHC; Distribution: Wallace, Donald C. (Smokey)/DCW; Sub-Collections: NIC; Clerk: DHC;

Dirk, What is the easiest way to specify a group of directives which are used regularly, to save from typing all of them, each time?

Also, thanks for including me on the list of people to be consulted before the 'commands changes'. Ari, tho, feels that "rfc"'s such as those should go to a larger group; e.g., liaisons, to get more feedback. Thought I'd pass his comment on to you.

(J14117) 29-JAN-73 11:52; Author(s): Crocker, David H./DHC; Distribution: Van Nouhuys, Dirk H./DVN; Sub-Collections: NIC; Clerk: DHC;

Results of speeding up ldchr, chbptr, apchr, and string compare routines:

These and other changes and results are documented in (andrews, nlsrecord,).

Results of speeding up ldchr, chbptr, apchr, and string compare routines:

The time spent executing the string compare and ldchr, chbptr code went from about 4.7% down to about 1.7% Because those routines do not call chbptr to compute byte pointers, and because strings are compared a word at a time, many fewer call and returns are made: The time spent in the call-return mechanism went from about 20-22% down to about 15-17%.

1

Results of speeding up ldchr, chbptr, apchr, and string compare routines:

(J14118) 28-JAN-73 14:50; Title: Author(s): Andrews, Don I./DIA; Distribution: Victor, Kenneth E. (Ken), White, James E. (Jim), Dornbush, Charles F., Michael, Elizabeth K., Vallee, Jacques F., Mitchell, James G., Deutsch, L. Peter, Kaye, Diane S., Andrews, Don I., Bass, Walt, Hopper, J. D., Irby, Charles H., Lehtman, Harvey G./NPG; Sub-Collections: SRI-ARC NPG; Clerk: DIA;

I used the system described in the link above to submit this message. Pay no attention to the "not for network users"--if you get this message it works over the network.

There is a new method of submitting files and messages to the journal. A brief description contained in (nls, status, 1a35). It is alittle easier in that it allows you to use all the editing commands available in NLS etc.

1

(J14119) 29-JAN-73 13:53; Title: Author(s): Stone, Duane L./DLS; Distribution: McNamara, John L., Bair, James H., Lawrence, Thomas F., Norton, James C., Kennedy, Edmund J., Panara, Roger B., Bethke, William P./jlm jhb tfl jcn ejk rbp wpb; Sub-Collections: RADC; Clerk: DLS;

NLS Links Win Again -- See (14061,)

The links given in your message are syntactically incorrect and therefore will not get you into the proper journal file. The links are for FILE Journal, statemenst number jnl#. The syntax desired is (journal, jnl#,). (Since, in the case of journal documents, the directory is irrelevant because everything goes throught the catalog, the variation (jnl#,) will work.) THE COMMA IS ESSENTIAL— otherwise the syntactic definition of links takes it for a statement name or number. CASE IS ALSO IRRELEVANT

(J14120) 29-JAN-73 12:40; Title: Author(s): Lehtman, Harvey G./HGL; Distribution: Kaye, Diane S., Lehtman, Harvey G., Irby, Charles H., Crocker, David H., Van Nouhuys, Dirk H./bugs dhc dvn; Sub-Collections: SRI-ARC BUGS; Clerk: HGL;

NIC	C DAY-TO-DAY	1
	Supervision of the NIC activities of PSO	1 a
	[As Susan becomes more experienced, this work will take less time.]	1a1
	Routine document requests, by Network and outsiders	1ъ
	[The volume of this work should grow; some can be handled by Susan, some need retrieval help until better catalogs are built.]	151
	Literature searches	1 c
	[This service is not yet developed; a few requests have come in; more should be done; Jake has the background for this.]	1c1
	NIC Catalog and Directory production and distribution	1 d
	[Scheduled production is needed; higher priority for people and machine resources; steady, gentle supervision.]	1d1
	NIC Announcement Bulletin	1 e
	[Inauguration and then scheduled production needed; same supervision as above.]	1e1
	Catalog and collection building	1 f
	[Document resources for Network interests should be expanded; a planned bibliographic growth as contrasted with the haphazard development resulting from literature search requests; Jake could handle.]	1f1
	Collection building	1 g
	[Of the references cataloged, documents in fullsize and/or micro should be selected for acquisition. Barbara started doing some of this 30-NOV-72.]	1g1
NIC	C MEASUREMENT AND EVALUATION	2
	Service levels and satisfaction	2a
	[Nothing done on this; an apparent necessity if the	2.1

Costs	2b
[Some data on these, but models should be designed and regular data collection should be carried out.]	2b1
NIC PLANNING	3
Better service	За
[Faster response; more communication with Liaisons and Agents; more initiative in support documents such as calendars, folklore.]	3a1
New services	3ь
[Selective dissemination; document production; document reduction; etc.]	3ь1
NETWORK JOURNAL	4
Proposal	4a
Design of online and hardcopy outputs	4a1
Format for online distribution	4a1a
Announcement of papers, letters, reviews, with links	4a1a1
Full text distribution format	4a1a2
Graphics?	4a1a3
Format for hardcopy distribution	4a1b
Announcement of papers, letters, reviews, with order forms	4a1b1
Preprint format	4a1b2
Traditional journal format	4a1b3
Publication schedule, both online and COM	4a2
Design of system for submission of material, for referreeing	4a3
Unedited submissions	4a3a

Delphi referrecing Design of system for reader-author dialog Dialog by online readers in real time, shared screen Dialog by online readers through ARC Journal-like system Dialog by readers offline submitting to online editorial office. Outline of study of use by contributors and readers Numbers of authors and readers, compared to traditional Publication lag, critique lag, compared to traditional Reader satisfaction and comments Editing Protocols and standards Publication Online COM OTHER ACTIVITIES WITH NIC BENEFIT Acquisition, Storage and Physical Retrieval of Text and Graphics Traditional Hardcopy Acquisition Storage Source	Copy editing	4a3b
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Dialog by online readers through ARC Journal-like system Dialog by readers offline submitting to online editorial office. Outline of study of use by contributors and readers Numbers of authors and readers, compared to traditional Publication lag, critique lag, compared to traditional Reader satisfaction and comments Editing Protocols and standards Publication Online COM OTHER ACTIVITIES WITH NIC BENEFIT Acquisition, Storage and Physical Retrieval of Text and Graphics Traditional Hardcopy Acquisition Sal Storage Use 5a1	Design of system for reader-author dialog	4a4
Dialog by readers offline submitting to online editorial office. Outline of study of use by contributors and readers Numbers of authors and readers, compared to traditional Publication lag, critique lag, compared to traditional Reader satisfaction and comments Editing Protocols and standards Publication Online COM OTHER ACTIVITIES WITH NIC BENEFIT Acquisition, Storage and Physical Retrieval of Text and Graphics Traditional Hardcopy Acquisition Sat Storage Sat Use	Dialog by online readers in real time, shared screen	4a4a
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Numbers of authors and readers, compared to traditional 4a5 Publication lag, critique lag, compared to traditional 4a5 Reader satisfaction and comments 4a5 Editing 4 Protocols and standards 4b Publication 4c Online COM 4c OTHER ACTIVITIES WITH NIC BENEFIT Acquisition, Storage and Physical Retrieval of Text and Graphics 5 Traditional Hardcopy 5a1 Storage 5a1 Use		4a4c
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Reader satisfaction and comments Editing Protocols and standards Publication Online COM OTHER ACTIVITIES WITH NIC BENEFIT Acquisition, Storage and Physical Retrieval of Text and Graphics Traditional Hardcopy 5a Acquisition Storage Use 5a1	Numbers of authors and readers, compared to traditional	4a5a
Editing 4 Protocols and standards 4b Publication 4 Online 4c COM 4c OTHER ACTIVITIES WITH NIC BENEFIT Acquisition, Storage and Physical Retrieval of Text and Graphics 5 Traditional Hardcopy 5a Acquisition 5a1 Storage 5a1 Use 5a1	Publication lag, critique lag, compared to traditional	4a5b
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Use 5a1	Acquisition	5a1a
	Storage	5alb
Microforms 5a	Use	5a1c
	Microforms	5a2

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racsimite	583
Acquisition	5a3a
Devising, Application and Use of Document Surrogates	5b
Use of numbering systems	5b1
By individuals	5b1a
By systems	5b1b
Data element design	5ь2
Universal set for all text systems	5b2a
Subsets for particular systems and individual users	5ь2ь
Thesaurus design	5ь3
Choice of terms, including machine aids	5b3a
Grammar	5b3b
Online catalog design	5b4
Format of information presented to user	5b4a
Sequence of retrieval steps	5b4b
Hardcopy catalog design	5b5
Format	5b5a
Update procedures	5b5b

(J14121) 29-JAN-73 12:40; Title: Author(s): North, Jeanne B./JBN; Distribution: North, Jeanne B./nicsta; Sub-Collections: SRI-ARC NICSTA; Clerk: JBN; Origin: <NORTH>FOR.NLS;6, 4-JAN-73 10:11 JBN;

Response to (14094,) re DEX Tape Entry.

re: night entry of DEX tapes.... yeah. now to get more DEX tapes instead of TNLS direct. we need to examine priorities (we users) and really get DEX used where it doesn't make a difference to wait.

1

Response to (14094,) re DEX Tape Entry.

(J14122) 27-JAN-73 12:02; Title: Author(s): Norton, James C./JCN; Distribution: Lane, Linda L., Byrd, Kay F., Van Nouhuys, Dirk H., Kelley, Kirk E., Jernigan, Mil E., Watson, Richard W., Kudlick, Michael D., North, Jeanne B./LLL KFB DVN KIRK MEJ RWW MDK JBN; Sub-Collections: SRI-ARC; Clerk: JCN;

JCN 29-JAN-73 8:00 14123

Response to (14102,) on the X-PARC XGP Proposal Reply

Walt:re (14102,), your draft reply to X-PARC's XGP proposal.... good, although it needs a "thanks anyway" flavor when sent to them. Who does it go to? WKE or who?

1

Response to (14102,) on the X-PARC XGP Proposal Reply

(J14123) 29-JAN-73 8:00; Title: Author(s): Norton, James C./JCN; Distribution: Watson, Richard W., Engelbart, Douglas C., Bass, Walt/RWW DCE WLE; Sub-Collections: SRI-ARC; Clerk: JCN;

Net Port Unavailability: there are not enough NET ports.

1

Today a serious problem AGAIN reared its ugly head. The system load was 1.94 at 0900EST with 14 jobs and RADC could enter only 4 users. This is a potential system unavailabity for 14 users at RADC. (The other 4 ports were in use by ARPA, Mitre, Case &, BEN.)

1a

The system could have obviously handled additional users without degradation of service quality. The users who were refused access were attempting to use the system for their daily jobs, a high pressure situation with low CPU requirements. The purpose for this use is to analyze the implementation of AHI in a real working environment as a tool to complete jobs rather than as an end in itself.

1a1

The only conclusion that can be drawn from this data (recurring) is that Net ports must be added, at least for use before 1100EST. The consequences of not doing this are to render an investigation and investment of over a 1/4 million near meaningless. This spurious variable can completely destroy the validity of studies of usage—how can that be done if the system is unavailable for use?

1a1a

Net Port Unavailability

(J14124) 29-JAN-73 7:36; Title: Author(s): Bair, James H., Stone, Duane L./JHB DLS; Distribution: Irby, Charles H./np; Keywords: net rade access use; Sub-Collections: RADC NP; Clerk: JHB;