

JUNE 10-16, 1973: A WEEK IN REVIEW

WEEKLY ANALYSIS REPORT:

WEEK: JUN 10 - 16, 1973 (24 HOURS/DAY)

TOTAL SYSTEM CPU: 46.079

(ARC)

IDENT	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1
(MFA)	1.192	9.938	.120	2.587	8.337
(DCE)	.335	25.166	.013	.727	75.122
(BAH)	.687	21.940	.031	1.491	31.936
(SRL)	.724	17.367	.042	1.571	23.988
(JCN)	.609	11.755	.052	1.322	19.302
(DVN)	.454	11.810	.038	.985	26.013
(PR)	.191	9.597	.020	.415	50.246
(RWW)	.081	2.650	.031	.176	32.716
	-----	-----		-----	
(TOTAL)	4.273	110.223		9.274	

(STAFF)

(MFA)	1.192	9.938	.120	2.587	8.337
(DCE)	.335	25.166	.013	.727	75.122
(BAH)	.687	21.940	.031	1.491	31.936
(SRL)	.724	17.367	.042	1.571	23.988
(JCN)	.609	11.755	.052	1.322	19.302
(DVN)	.454	11.810	.038	.985	26.013
(PR)	.191	9.597	.020	.415	50.246
(RWW)	.081	2.650	.031	.176	32.716
	-----	-----		-----	
(TOTAL)	4.273	110.223		9.274	

(PSO)

(KFB)	.059	5.711	.010	.128	96.797
(MEJ)	.970	53.841	.018	2.105	55.506
(KIRK)	1.973	54.814	.036	4.282	27.782

JUNE 10-16, 1973: A WEEK IN REVIEW

(LLL)	.054	1.924	.028	.117	35.630	6a4d
(NDM)	.015	.042	.357	.033	2.800	6a4e
	-----	-----		-----		6a4f
(TOTAL)	3.071	116.332		6.665		6a4g
						6a4h
(NIC)						6a5
(EJF)	.686	23.637	.029	1.489	34.456	6a5a
(MLK)	.449	25.551	.018	.974	56.906	6a5b
(MDK)	.633	23.804	.027	1.374	37.605	6a5c
(JBN)	.696	33.317	.021	1.511	47.869	6a5d
	-----	-----		-----		6a5e
(TOTAL)	2.464	106.309		5.348		6a5f
						6a5g
(HARDWARE)						6a6
(MEH)	.378	22.024	.017	.820	58.265	6a6a
(JR)	.003	.611	.005	.007	203.667	6a6b
(EKV)	.001	.003	.333	.002	3.000	6a6c
	-----	-----		-----		6a6d
(TOTAL)	.382	22.638		.829		6a6e
						6a6f
(TENEX)						6a7
(DIA)	1.815	36.025	.050	3.939	19.848	6a7a
(KEV)	.526	17.134	.031	1.142	32.574	6a7b
(DCW)	.438	9.836	.045	.951	22.457	6a7c
	-----	-----		-----		6a7d

JUNE 10-16, 1973: A WEEK IN REVIEW

(TOTAL)	2.779	62.995		6.032		6a7e
						6a7f
(NLS)						6a8
(WLB)	.015	1.597	.009	.033	106.467	6a8a
(CFD)	.433	17.303	.025	.940	39.961	6a8b
(JDH)	.799	25.495	.031	1.734	31.909	6a8c
(CHI)	.340	11.026	.031	.738	32.429	6a8d
(DSK)	.642	20.243	.032	1.393	31.531	6a8e
(HGL)	.890	22.979	.039	1.932	25.819	6a8f
(EKM)	.173	16.794	.010	.375	97.075	6a8g
(JEW)	3.393	52.757	.064	7.364	15.549	6a8h
	-----	-----		-----		6a8i
(TOTAL)	6.685	168.194		14.509		6a8j
						6a8k
(GROUP) TOTALS						6b
GROUP	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU	6b1
						6b2
(STAFF)	4.273	110.223	.039	9.274	25.795	6b3
(PSO)	3.071	116.332	.026	6.665	37.881	6b4
(NIC)	2.464	106.309	.023	5.348	43.145	6b5
(HARDWARE)	.382	22.638	.017	.829	59.262	6b6
(TENEX)	2.779	62.995	.044	6.031	22.668	6b7
(NLS)	6.685	168.194	.040	14.509	25.160	6b8
	-----	-----		-----		6b9
(TOT)	19.654	586.691		42.656		6b10

JUNE 10-16, 1973: A WEEK IN REVIEW

6b11

(STATS)

6c

HIGHEST CPU: JEW 3.393 hrs	LOWEST CPU: EKV .001 hrs	6c1
HIGHEST CON: KIRK 54.814 hrs	LOWEST CON: EKV .003 hrs	6c2
HIGHEST CPU/CON: NDM .357	HIGHEST CON/CPU:1: JR 203.667	6c3

6c4

(OVERHEAD)

6d

(JCP)	2.146	45.543	.047	4.658	21.222	6d1
BACKGROUND	2.115	76.638	.028	4.590	36.235	6d2
CAT	6.215	13.007	.478	13.489	2.093	6d3
DOCB	-	-	-	-	-	6d4
DOCUMENTATION	.005	.117	.043	.011	23.400	6d5
GILBERT	-	-	-	-	-	6d6
NETINFO	-	-	-	-	-	6d7
NIC-WORK	-	-	-	-	-	6d8
PRINTER	5.539	83.699	.066	12.022	15.111	6d9
OPERATOR	.399	8.611	.046	.866	21.581	6d10
SYSTEM	3.987	177.900	.022	8.653	44.620	6d11
	-----	-----		-----		6d12
(TOTAL)	20.406	405.515		44.289		6d13

6d14

(XEROX)

6e

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	6e1
						6e2
						6e3

JUNE 10-16, 1973: A WEEK IN REVIEW

(LPD)DEUTSCH	.078	1.455	.054	.169	18.654	6e4
(CMG)GESCHKE	-	-	-	-	-	6e5
(JGM)MITCHELL	.080	12.800	.006	.174	160.000	6e6
(WHP)PAXTON	-	-	-	-	-	6e7
(EHS)SAT-WTE	.256	10.674	.024	.556	41.695	6e8
(RES)SWEET	.146	6.846	.021	.317	46.890	6e9
	-----	-----		-----		6e10
(TOTAL)	.560	31.775		1.216		6e11

(RADC)

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	DIR	
BAIR	.092	3.467	.027	.200	37.685	264	6f4
BERGSTRM	-	-	-	-	-	39	6f5
BETHKE	.010	.753	.013	.022	75.300	13	6f6
CAVANO	.045	2.537	.018	.098	56.378	86	6f7
IUORNO	.004	.087	.046	.009	21.750	47	6f8
KENNEDY	.087	6.048	.014	.189	69.517	44	6f9
LAMONICA	.314	11.115	.028	.681	35.398	84	6f10
LAWRENCE	-	-	-	-	-	37	6f11
MCNAMARA	.054	3.479	.016	.117	64.426	120	6f12
PANARA	.006	.550	.011	.013	91.667	96	6f13
RADC	2.250	2.414	.932	4.883	1.073	84	6f14
RZEPKA	-	-	-	-	-	24	6f15

JUNE 10-16, 1973: A WEEK IN REVIEW

SLIWA	.002	.122	.016	.004	61.000	25	6f16
STONE	.173	6.887	.025	.375	39.809	287	6f17
	-----	-----		-----		-----	6f18
(TOTAL)	3.037	37.459		6.591		1250	6f19
(PER CENT TOTAL DISK CAPACITY)						2.6%	6f20

(NETUSERS) TOP FIVE

NAME	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
UCLA-NMC	.591	31.978	.018	1.283	54.108	6g4
MARRAH	.374	15.263	.025	.812	40.810	6g5
NSRDC	.351	17.058	.021	.762	48.598	6g6
NBS-TIP	.307	13.674	.022	.666	44.541	6g7
SIGART	.289	18.066	.016	.627	62.512	6g8
	-----	-----		-----		6g9
(TOTAL)	1.912	96.039		4.150		6g10

(NET) TOTAL	CPU HRS	CON HRS	CPU/CON	% SYS	CON/CPU:1	
NET	3.516	175.814	.020	7.631	50.004	6h2

6h3

7

17407 Distribution

Susan R. Lee, Beauregard A. Hardeman, Douglas C. Engelbart, Don I. Andrews, Marilyn F. Auerbach, Walt Bass, Charles F. Dornbush, Elizabeth J. (Jake) Feinler, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E. Jernigan, Diane S. Kaye, Kirk E. Kelley, Michael D. Kudlick, Elizabeth K. Michael, Jeanne B. North, James C. Norton, Jeffrey C. Peters, Paul Rech, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor, Donald C. (Smokey) Wallace, Richard W. Watson, James E. (Jim) White, Duane L. Stone, Thomas F. Lawrence, James H. Bair, L. Peter Deutsch, James G. Mitchell,

SRI Energy Committee and ARC

Don Scheuch has asked Paul Rech to be a member of SRI's Energy Committee. This is in recognition of both Pauls background in the area and ARC's desire to have SRI consider playing a central role in the creation of an Energy Community.

17408 Distribution

Donald C. (Smokey) Wallace, Richard W. Watson, Don I. Andrews,
Mark Alexander Beach, Judy D. Cooke, Marcia Lynn Keeney, Carol B.
Guilbault, Susan R. Lee, Elizabeth K. Michael, Charles F. Dornbush,
Elizabeth J. (Jake) Feinler, Augmentation Research Handbook, Kirk E.
Kelley, N. Dean Meyer, Kay F. Byrd, James E. (Jim) White, Diane S.
Kaye, Paul Rech, Michael D. Kudlick, Ferg R. Ferguson, Linda L. Lane,
Marilyn F. Auerbach, Walt Bass, Douglas C. Engelbart, Beauregard A.
Hardeman, Martin E. Hardy, J. D. Hopper, Charles H. Irby, Mil E.
Jernigan, Harvey G. Lehtman, Jeanne B. North, James C. Norton,
William H. Paxton, Jeffrey C. Peters, Jake Ratliff, Edwin K. Van De
Riet, Dirk H. Van Nouhuys, Kenneth E. (Ken) Victor

DCE 21-JUN-73 19:02 17409

Responding to Bob Balzer (17118,), nominating Dick Watson to represent me/ARC in IPT's Automatic Programming Study Group, and briefly describing the SEAS Community plan

Responding to Bob Balzer (17118,), nominating Dick Watson to represent me/ARC in IPT's Automatic Programming Study Group, and briefly describing the SEAS Community plan

Bob: I printed out your file on the Software Production Facility. Your comments on the phone, together with what I read in that file, are extremely interesting to us at ARC; it seems very relevant to our interests, and could be very compatible with activities to which we are already committed.

1

In view of the way it so fits our current roles and activities, and also in view of my disposable-energy situation, I am asking you to consider Dick Watson as a member of your Study Group instead of me.

2

The Workshop Utility mentioned in our recent papers is the foundation step toward our trying to encourage what we call "discipline- or mission-oriented communities" to collaborate via the supporting services of the Utility; and in particular we hope for communities whose common discipline or mission would be among those involved in the evolution of augmented knowledge workshops.

3

Our notion is to try facilitating the evolution rather than to be the evolvers; we see a very large and long-continuing job in the evolution of truly effective and coherent Workshops, something that no single group or company is likely to be able to do alone.

3a

We have already been looking for parties interested in what we call a SEAS Community (Software Engineering Augmentation System). These would be groups interested in developing and/or applying particular aspects of a Workshop designed especially to support teams of software engineers; and there would be an underlying commitment for the Community as a whole to be dedicated toward the "whole-workshop system."

3b

Sub-groups would naturally focus upon special aspects, e.g. team organization, management, specification and documentation, languages, debugging, verification and certification, maintenance, etc.; and the aim is for the Community to deliver application-oriented service in support of at least one coherent model of a Workshop that integrates special developments and analysis from each of these Workshop facets, so that the evolution of each facet would be guided and evaluated by actual application experience of a whole system.

3c

Anyway, your thinkpiece sounds extremely compatible in spirit. We are perhaps oriented more heavily than you toward the pragmatic end of Workshop possibilities -- we want to enlist into the Community a number of working teams who are willing to try successive stages of Workshop systems in doing their work (applications in COBOL, FORTRAN, PL-1, or etc.); and one of the few conditions we plan to impose upon the Community (i.e. we'll give unstinting support if ...) is that it

Responding to Bob Balzer (17118,), nominating Dick Watson to represent me/ARC in IPT's Automatic Programming Study Group, and briefly describing the SEAS Community plan

guide its evolutionary development/analysis energies in the way R&D engineers do, toward the apparent highest-payoff improvements in realistic application, with as much attention given to measurement and analysis as to invention and development.

4

We have assumed that at some point there would be interest and products from the higher-level tool builders -- the AI community. We'd hoped that the AP Project would eventually produce some people interested in transferring their products along toward the Applied R&D end of things by means of participating in the SEAS Community, and we have envisioned some eventual APP-SEAS confluence. It would be exciting if eventual came sooner.

4a

But we don't want to misinterpret your thinkpiece, and anyway the whole spirit of our commitment to a set of bootstrapping communities is toward supporting rather than pushing -- so we'll offer our help in studying approaches toward your goals, and be very pleased if there is profitable overlap in approach and delighted to engage in whatever collaborative endeavors result.

4b

All of our software people are quite interested in the SEAS thing: Ken Victor, Harvey Lehtman, and Charles Irby have been the most active in planning, and Dick Watson (besides having a solid computer-science background, and being responsible for the special-community clientele coming aboard our Utility) has the central responsibility within ARC for coordinating specific steps toward the SEAS Community. Note that Jim Mitchell and Peter Deutsch at Xerox PARC are long-time collaborators with us, and I have included them in the circulation of these two Journal items (the previous one was a sort of paraphrasing note on your call -- 17118,1).

5

You will find relevant discussion in some of our documents (including the recent NCC paper). I will have a complete set of the following sent to you:

6

Augmentation Research Center, ONLINE TEAM ENVIRONMENT: NETWORK INFORMATION CENTER and COMPUTER AUGMENTED TEAM INTERACTION, Final Report on project RADC-TR-72-232, June 1972 (Journal -- 13041,)

6a

See especially Branch (13041,4d2), pp. 87-96h, for some detailed specifics of local SEAS developments; and note the heavy emphasis throughout on "team augmentation," including collaborative dialogue, management, etc.

6a1

D. C. Engelbart, COORDINATED INFORMATION SERVICES for a DISCIPLINE- OR MISSION-ORIENTED COMMUNITY, paper presented at the

Responding to Bob Balzer (17118,), nominating Dick Watson to represent me/ARC in IPT's Automatic Programming Study Group, and briefly describing the SEAS Community plan

Second Annual Computer Communications Conference, San Jose, California, 24 January 1973. (Journal -- 12445.)

6b

This paper is explicitly oriented toward the basic potential that we see for special communities being supported by a set of common "workshop facilities." Besides the generally useful support as described in Branches 4 through 10, the SEAS Community would have the "Special Knowledge Work By Individuals and Teams" feature of Branch 11 oriented for software engineering.

6b1

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

6c

Note from Branch 1a2d that SEAS is a specific part of our IPT-proposed activity; and also note that the IPT work is directly oriented toward supporting collaborative application through the Network. Also, our Workshop Utility plan is described in Branch 2; it seems to be coming off with ever-growing clientele interest.

6c1

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.)

6d

We hope that there is plenty of obvious relevant interest expressed here.

6d1

17409 Distribution

James C. Norton, Richard W. Watson, Robert M. Balzer, Michael D. Kudlick, Charles H. Irby, Harvey G. Lehtman, Kenneth E. (Ken) Victor, James G. Mitchell, L. Peter Deutsch,

Leveling directives

I have discussed this with Meyer, but wanted to document it:

A number of directives have global effects (or excessively limited effects) when they should be under "level" (or interval) control. The two that come to mind are Iovr (which really represent the entire class of indentation directives) and Grab.

I want the statment I am numbering with Pxn, etc. to be indented so the numbers stick out. But I do not want sub-statments to be:

```
XXXXX...  
  XXXXX...  
    XXXXX...
```

which is very poor on the eyes.

17410 Distribution

Diane S. Kaye, Harvey G. Lehtman, Charles H. Irby,

more imnls notes.

Charles -- several notes about imnls that I only just noticed:

if you have view v (no refresh) set and then switch to u, the next command causes a complete refresh, even tho it would normally (if you had already been in "u") not.

Selective refresh often causes the last statement on the screen to be refreshed along with the one changed. It seems to depend upon how far down the screen the last statement is. (very strange.)

17411 Distribution

Diane S. Kaye, Harvey G. Lehtman, Charles H. Irby,

Auto-updating

Today has been instructive. Like an idiot, I had been working along (very long) making many changes to my file and never doing any updates. The Partial copy got clobbered and I lost all that work.

It occurred to me that, besides my poor memory, the problem was that updating, an essentially computer (as opposed to being natural to human procedures) oriented task, had to be remembered by me. That is, I have to remember to do something that tends to be unnatural to my (I don't think I'm strange) style.

Therefore, I suggest that there be some degree of auto-updating. Minimally, this would have an "Update?" query on logout (at least it would catch one file) and/or as part of every Load File and/or after the Partial Copy gets to be a certain size.

17412 Distribution

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

Cataloguing etc.

Jeanne -- Two important questions about cataloging:

How difficult would it be to have catalogue entries be a Branch, rather than the current restriction of having to be on a single statement? Being able to break an entry onto several statement (sub-statments) would greatly increase the readability.

Also, how difficult would it be to modify some of the 'Titles'? That is, the current codes seem to cover most (if not every) FUNCTION of cataloguing, but the NAMES you use for some of them are clearly specific to the ARC. It would be necessary for us to use them to be able to give different titles.

thanks. (hope the weather up there isn't as hot and smoggy as down here).

bye. --dave

17413 Distribution
Jeanne B. North,

Survey Format and Documentation

This is the information you requested.

Survey Format and Documentation

Introduction

1

For some months, MIT-DMCG and UCLA-NMC have been running automatic surveys of the availability of the various hosts on the ARPA Network. Based on the experience we have had, we have attempted to lay out a set of specifications for such SURVEY programs. The intent of this document is to present, to the network community, proposed specifications for a standard Host Survey mechanism.

1a

This RFC is not being published so that people will read it and implement programs to perform the Survey function (many people are already upset at the number of Surveys being performed). Rather, we are proposing this standardization for criticism by interested parties so that they will be satisfied with the few Surveys which are implemented.

1b

In addition to defining the polling mechanism, we will also propose a mechanism by which the data collected by the polling hosts can be retrieved by interested parties.

1c

General Comments

2

A SURVEY program is one which regularly polls the availability of some subset of the hosts on the Network. It should employ a specific means of ascertaining availability, record the results of that polling in some standard form and make that data available to interested parties via some standardized mechanism.

2a

There will be a few special terms used in the following discussions. They are defined here.

2b

PROBE.... the act of ascertaining the availability of any particular host

2b1

POLLSET.. An ordered set of PROBES, covering some subset of the existing hosts, PROBING each host in that set only once

2b2

The Method of Probing

2c

To ascertain the availability of a host, one should attempt to accomplish ICP to his socket 1 (His Telnet Logger). This might seem unfair to sites which do not offer server Telnets, but we feel that it is reasonable.

2c1

Polling Specifications

3

The rate at which PROBES and POLLSETS are made is left to the

Survey Format and Documentation

discretion and convenience of the polling site (or to the extent that pollees are willing to be probed). 3a

In order for a host to be categorized "UP", he must complete ICP. (ie the poller must have made connections to the server Telnet. 3b

The response time of that (the tested) host, measured in tenths of a second, is the measured lag between the initial RFC (an RTS to his socket 1) and its matching RFC (an STR). 3c

A host is to be timed out if any single transaction in the ICP takes more than thirty (30) seconds. 3d

States assigned to hosts 4

A host is assigned (as a result of a PROBE) a state between 0 and 7. 4a

0 HSTNP Host was not polled. 4a1

1 HSTDD Host dead (IMP type 7 received). 4a2

2 NCPNR NCP no response (timeout waiting for first STR). 4a3

3 LGRNR Logger no response (any subsequent timeout). 4a4

4 LGRRJ Logger rejecting (a CLS was received before ICP was completed). 4a5

5 LRGUP Logger up (ICP completed). 4a6

6 to be assigned. 4a7

7 UNABL Unable to poll host (IMP type 9 received). 4a8

Data Format 5

In order that the raw data be readable by programs written in higher level languages and by human users, the data should be made available in fixed format ASCII character strings delimited by CRLF (rather than the currently popular binary records in wierd machine oriented formats). 5a

The collected data should be made available by POLLSETs. The data from each POLLSET should be in the following form: 5b

A record containing the date and time of the POLLSET. 5b1

mm,dd,yyyy,hh,mm 5b1a

Survey Format and Documentation

where mm is the month. dd is the day of the month. yyyy is the year. hh hours(0-23) and mm is the minutes(0-59).

5b1b

A record for each host probed. Each record being of the form:

5b2

###,s,ttt

5b2a

where ### is the three digit decimal host number. s is the state and ttt is the response time in tenths of a second.

5b2a1

the end of the POLLSET is denoted by a record with the host number -1

5b3

Or the FORTRAN formats for those records:

5c

(MONTH, DAY, YEAR, HOURS, MINS) (I2, I1X, I2, I1X, I4, I1X, I2, I1X, I2)

5c1

(HOSTNUM, STATE, RESP) (I3, I1X, I1, I1X, I3)

5c2

Mechanism for retrieval of collected data.

6

Desired attributes of the retrieval mechanism.

6a

Any interested party should be able to access the data.

6a1

The host who collected the data should only be responsible for it until it has been officially archived.

6a2

This is raw data and as such, the process that transmits it needn't be a sophisticated one. All it will do is transmit unarchived pollsets, from the oldest to the newest. Some other process will work the data into meaningful tables and make it available to interested parties by host, by date, by state, by poller or however else he wants to see it.

6a3

Proposal for a retrieval method.

6b

The process desiring raw data (maybe the archiver, maybe just a random process) will ICP to socket decimal 243 at the polling site.

6b1

The transmitting process at the polling site will ascertain (by socket numbers) if the requesting process is the official archiving process.

6b2

The transmitting process will

6b3

If there is no unarchived data (or all unarchived data has

Survey Format and Documentation

already been sent to this receiver durring this connection) close the connections.

6b3a

If there is unarchived data (or data not yet transmitted to this receiver) immediately commence transmission of the oldest unarchived pollset not yet transmitted to this process (durring this connection).

6b3b

After having transmitted the entire pollset, the transmitting process will wait for an acknowledgement from the receiving process.

6b4

If the receiving process received the entire pollset correctly and has put it where he wants it, he will send the single character ACK, and the transmitting process will commence transmission of the next pollset of data (go to 6b3).

6b5

If the receiving process has reason to believe that the data was not received correctly, he can send a NAK and the transmitting process will retransmit that pollset.

6b6

If the receiver sends an ACK and he was recognized as the official archiver, the transmitting process is no longer responsible for the last pollset transmitted and should never transmit that pollset again.

6b7

Should the receiver close the connection at any time, the transmitting process will merely reset itself (I'm not sure what that means either). Any pollsets deleted because ACKs were received after their transmission will remain deleted.

6b8

This is a tentative proposal being submitted to all interested parties. It is realized that this document is not a comprehensive one and that there are many disadvantages to the above recommendations. Any reactions to this document and its contents would be greatly appreciated.

7

17414 Distribution
Abhay K. Bhushan,

** 17415

Please Disregard Weather Data Base Working Group Note 1 sent to you
by mistake.

17415 Distribution

John E. Winter, Allen M. Peterson, Robert S. Leonard, C. Tucker
Battle, Charles J. Shoens, Robert B. Wagner, Stanley J. Goodman, J.
Neil Birch, David L. Anderson, Carroll Wayne Keilers, A. J. Deex,

Looking at the Design Review Process

What do you think?

Looking at the Design Review Process

Looking at the Design Review Process

1

My purpose

2

Early last February Dick Watson launched the team game as a "temporary" process, subject to evolution, of course. See (Ijournal,14164,). I was very willing to play it, and felt it looked like an appropriate thing to try. I am interested in finding out what work has been reviewed, approved and undertaken as a result. I am interested in pushing us to look at whether it "works". I know very little about your experience, so in the old analysis/review spirit I'll throw mine out in the hopes of getting some response, the general idea being, I suppose, that we experiment on ourselves and that our purpose is to do what WORKS.

2a

Much of what I have to say comes across pretty negative. And, certain people may think I am making them wrong. Really, I want to be able to use the Journal for my viewpoints, even when it isn't all positive. This is just how I feel. I am being exactly as negative as I want to be and not secretly holding my real opinions back. I really do appreciate working for an organization where there are ways of expressing yourself about the operation of the organization.

2b

My Team Experience

3

I am aware of membership on the teams listed below, and will share my own biased point of view about what, if anything, is happening. Parentheses indicate my type of involvement.

3a

1) Calculator (design, implementation)

3a1

Efficient meetings, implementation WORK accomplished, manuals written, and that's all. For months, some barrier unknown to me has been between getting it implemented and getting it OUT.

3a1a

2) Novice Expert (design pusher, probably implementation)

3a2

Meetings, general concepts discussed, 50% of my team left ARC (making meetings more efficient), one general position paper and two specific action papers released for review. Our last paper is hanging in limbo - needs definitive review. Then implementation depends on outcome of another team (command language).

3a2a

Attended Command Language teams a lot too. Accomplished a

Looking at the Design Review Process

large amount of review under Dave Hopper's good leadership, but more than a little stuck in how to document it and lay it on the world. Seems to need power from above to resolve conflicting viewpoints. 3a2b

3) Documentation (review) 3a3

I read the Primer as requested by MFA. That is the total extent of my experience with that team. 3a3a

4) Getting DNLS out into World (design) 3a4

Martin Hardy and Don Andrews are really doing nice work. I have been to 2 meetings. This team seems to have little overhead, and it does real WORK. I hope to participate too someday, maybe as display code modifier. 3a4a

5) Journal 3a5

Jim White leads meetings well. Good WORK has been done on network mail. It was discussed very little in our numerous meetings, just allowed to proceed on its own. 3a5a

I have had 2 areas of design responsibility and neither are exactly nurturing me. SNDMSG in NLS is in limbo, and I am expecting somebody to review the ACTION feature. (I must be doing something wrong.) 3a5b

My Point of View 4

Results 4a

In this team game, I define results as design documents, reviewed proposals, implementations underway or finished. 4a1

Observations 4b

1) Meetings - I most enjoy my job when I have some magic balance between meetings, big implementation projects, bug fixing, and document writing. Teams, I think, are affecting this balance. It is very nice to attend meetings which achieve results. Sometimes this happens. 4b1

We are improving our meeting technology, I think. Some problems I've noticed in this area are down around Kindergarten level, and some require a lot of talent to overcome. 4b1a

Looking at the Design Review Process

* remembering meetings - some people (myself included) occasionally figure the Holy Ghost will tear them away from their terminal when IT is about to start. 4b1a1

* being on time (if it happens, we're all surprised) 4b1a2

* staying on purpose (how to shut up very nice members who marathon on a different vector) 4b1a3

* handling decisions such as - do you have a quorum when half the group can't make it at the last minute? Sometimes it's pointless to go on but we do, maybe because we probably won't get our terminals back now that we've given them up. 4b1a4

**The rules indicate to me that when the design team has invested the effort necessary to take responsibility for a written proposal, the design team members, who are not listed as members of the review team, should not attend review meetings. People around here often like to have someone present and convince in lieu of their reading a carefully prepared document. Documents are also good for keeping meetings on purpose. 4b2

2) Constipated Teams - Here at ARC I have had the opportunity to experience designs changing while I implement them. Usually, I take responsibility for the fact that I started too soon. Since we've paid a certain overhead to play the team game, I now choose to implement only designs which are really approved, when it pertains to team items. It is more fun that way and more efficient and rewarding. 4b3

Before teams were started, I understood that one of the purposes was to create a healthy backlog of approved designs. Implementers could then grab as many of these projects as they chose to handle at a time. I personally don't see this and I feel we've spent a fair amount of time by now. Has it happened? Should it happen? One thing is certain, design teams are not being held back by a scarcity of suggestions for future implementation. 4b4

3) Roles with respect to NLS - In order to be doing the job right, Teams should be providing a way for non-programmers to have some effect on how programming resources are spent. I have talked to several people who seem constantly frustrated about this. (And, I'm not the right person for them to complain to.) As Dick's document points out, suggestions coming in to teams from outside should be acknowledged (and I don't see that happening). Maybe acknowledgement is all they

Looking at the Design Review Process

will get, and they are just deluded into thinking they can have an effect in certain areas of NLS development.

4b5

Having just reread Dick's document, I feel personally like I've ignored the responsibility to send certain designs out to what he calls "appropriate people" and that I should have called for suggestions from everybody in some areas. (Who, besides the Review Team is appropriate?)

4b6

Summary

5

Some of this activity is producing really good work, as far as I can see. I really don't know if this is in spite of or because of the team game.

5a

I find some of it very unrewarding - such as the strange "states" my efforts result in, states other than those listed above as "results". And, I feel like this must be due to my misunderstanding or unwillingness to follow the rules, or maybe inappropriateness of aspects of the proposed temporary game. What do you think?

5b

Looking at the Design Review Process

(J17416) 21-JUN-73 19:23; Title: Author(s): Diane S. Kaye/DSK;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: DSK;
Origin: <KAYE>TEAMS.NLS;5, 21-JUN-73 19:02 DSK ;

DNLS CALCULATOR USER GUIDE

This file for printing. Current copy maintained as
(userguides,calculator-dnls,).

**-73 11:18 17418

DNLS CALCULATOR USER GUIDE

SRI-ARC

12 JUL 73

Augmentation Research Center

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

DNLS CALCULATOR USER GUIDE

TABLE OF CONTENTS

GENERAL DESCRIPTION.....	2
Introduction.....	2A
Accumulator Mode.....	2B
The Calc File.....	2C
USING THE CALCULATOR.....	3
Entering The Calculator.....	3A
Selecting An Accumulator.....	3B
Displaying Accumulator Values.....	3C
Specifying The Format Of Numbers.....	3D
Arithmetic Operations.....	3E
Storing Accumulator Values In Files.....	3F
Copying The Calc File.....	3G
Leaving The Calculator.....	3H
COMMAND SUMMARY.....	4
Entering The Calculator.....	4A
Selecting An Accumulator.....	4B
Displaying Accumulator Values.....	4C
Specifying The Format Of Numbers.....	4D
Arithmetic Operations.....	4E
Storing Accumulator Values In Files.....	4F
Copying The Calc File.....	4G
Leaving The Calculator.....	4H
ERROR MESSAGES.....	5
Need a larger window - type CA.....	5A
Calculator unable to continue.....	5B
Unable to reopen CALC-ident file.....	5C
No saved accumulators found-type CA.....	5D
Bad CALC-ident file, unable to go on--type CA.....	5E
Format too small for input.....	5F
Format too small for accum	
Format Reset to Default.....	5G
Illegal Number.....	5H

DNLS CALCULATOR USER GUIDE

GENERAL DESCRIPTION

2

INTRODUCTION

2a

The Calculator is a self contained subsystem of NLS. It adds, subtracts, multiplies, and divides like a desk calculator. Operands are entered from the keyboard either directly as numbers or indirectly as simple arithmetic expressions (e.g. $2 \times 4.6 / 5.123$). The user may leave the Calculator, use other NLS commands, and then return to the Calculator and continue work there just as though his original session had not been interrupted.

2a1

The Calculator is called from NLS and has its own commands which are specified and executed in much the same way as other NLS commands.

2a2

ACCUMULATOR MODE

2b

The current Calculator operates in "Accumulator" mode which permits the user to add, subtract, multiply and divide. The operation is recorded in the Calculator file and the results may be stored in a user file. The user may request various number formats, keep several running totals in separate accumulators, and enter simple arithmetic expressions as if they were numbers.

2b1

Input data is shown in the literal area of the display. When any operation is completed, the operator and number will appear as the last item in the user's Calculator file. The display name area shows the resultant value of the accumulator.

2b2

THE CALC FILE

2c

When a user first enters the Calculator system, it finds or creates a file named "CALC-ident.NLS" in the user's directory.

2c1

'ident' is the IDENT of the current NLS user and is included in the file name to avoid conflict among users sharing a common directory.

2c1a

This file records the "history" of the user's work in the Calculator like the tape of an adding machine. It saves each arithmetic operation and records subtotals and totals where desired. This history may carry through many Calculator sessions.

2c2

DNLS CALCULATOR USER GUIDE

The user has the option of seeing his CALC file as he works in the Calculator system. If he chooses to see his file, his display area will be split vertically and the CALC file will appear to the left of his current NLS file(s). If he does not want the CALC file displayed, it is still updated by subsequent operations in the Calculator.

2c3

The CALC file is a standard NLS file. All items are first level statements. The Calculator marks the beginning of each session with a line of asterisks. The file may be printed as any other NLS file. However, the CALC file should never be edited outside the Calculator system. The file may be copied to another NLS file which may be freely edited by the user.

2c4

DNLS CALCULATOR USER GUIDE

USING THE CALCULATOR

3

ENTERING THE CALCULATOR

3a

The Calculator is entered with the Goto Calculator command:

3a1

g[oto] c[alculator] CA

3a1a

[Split which Window ?] BUG/n[o Split]

3a1b

Responding to "Split which Window ?" with a BUG selection causes the system to execute a vertical split of the display area containing the cursor. The resultant area is loaded with the Calculator file. Responding with "n[o]" leaves the display area as is and, although the CALC file is not displayed, it is updated.

3a2

[accumulators cleared ?] n[o]/CA

3a2a

The user must respond CA unless he is returning from a previous Calculator session. "n[o]" causes the system to retrieve all ten accumulator values stored in the CALC file from the previous Calculator session. If there was no previous session, a "n[o]" response causes an error that terminates the Calculator session.

3a3

[Initializing Calculator]

3a3a

[File Verify in Progress]

3a3b

The system searches for a CALC file in the user's directory; if none exists, it creates one for him.

3a4

If the accumulators are being cleared and the CALC file already exists in the user's directory at entry the system also asks:

3a5

[File Cleared?] n[o]/y[es]/CA

3a5a

A 'no' response preserves CALC file entries from previous sessions and inserts a line of asterisks to mark the beginning of the current session. 'yes' clears the record. (It is recommended that the file be cleared from time to time to save directory space.)

3a6

[Accumulator Submode Using 1]

3a6a

DNLS CALCULATOR USER GUIDE

The initial value of accumulator 1 is displayed in the name area.

3a7

SELECTING AN ACCUMULATOR

3b

There are ten accumulators available to the user. The default accumulator is 1. Any of the others may be selected with the command:

3b1

u[se accumulator #] NUMBER CA

3b1a

All subsequent operations are performed on the accumulator specified by NUMBER (a digit from 1 to 10) until it is changed with another 'use accumulator' command. The values in the other nine accumulators remain unchanged.

3b2

DISPLAYING ACCUMULATOR VALUES

3c

The current values of all ten accumulators may be listed by the command:

3c1

l[ist Accumulators] CA

3c1a

A second CA will remove the accumulator information from the screen.

3c2

SPECIFYING THE FORMAT OF NUMBERS

3d

The user may specify the format of numbers stored in his CALC file and of accumulator values stored in other NLS files with the "Format" command.

3d1

f[ormat] CA
 [# of digits after decimal ?] (NUMBER CA)/CA
 [# of digits before decimal ?] (NUMBER CA)/CA
 [insert commas?] n[o]/y[es]/CA
 [right justify?] n[o]/y[es]/CA
 [\$ to left of number?] n[o]/y[es]/CA

3d1a

The default number format is right-justification, 2 digits to right of the decimal and up to 9 to the left, no commas, and no dollar sign.

3d2

The total number of printing digits allowed in a number is 11. Within this limit only 5 can follow the decimal. If the user attempts to enter a number containing more digits to the left of the decimal point than the current format specifies or, if the current accumulator rises above the

DNLS CALCULATOR USER GUIDE

current format specification, an error message is displayed and the operation not performed.

3d3

ARITHMETIC OPERATIONS

3e

All arithmetic operations are performed on the value in the current accumulator. An arithmetic operation requires as input an optional operator followed by a signed or unsigned number or an accumulator designation (see --3e5). The number may be entered directly from the keyboard, indirectly as a simple arithmetic expression, or selected by the cursor (BUG) from any of the displayed files. Accumulator designations (# ACUM-NUMBER) can only be entered from the keyboard.

3e1

If no operator is given, the system adds the number to the accumulator.

3e2

The input is handled as follows:

**3e3

The number is displayed in the literal area.

3e3a

The number is reformatted according to the current format specifications.

3e3b

The number and its operator (if any) is entered into the CALC file.

3e3c

The designated arithmetic operation is performed on the value stored in the accumulator.

3e3d

The old accumulator value is replaced with the result of the arithmetic calculation.

3e3e

The new accumulator value is displayed in the name area.

3e3f

OPERATORS

3e4

Operators are always entered directly from the keyboard and followed by an operand. Valid operators include:

3e4a

NULL or SP or a or +	add to accumulator	3e4a1
s or -	subtract from accumulator	3e4a2
m or * or x	multiply the accumulator by	3e4a3
d or /	divide the accumulator by	3e4a4

DNLS CALCULATOR USER GUIDE

NUMBERS

3e5

Examples of valid numbers recognizable to the Calculator are:

3e5a

123456	-123456	123456-	3e5a1
123.12	\$123.00	.12345-	3e5a2
123,456	(\$1,123,123)	12,123.123+	3e5a3
.1	.12-	0.11	
+1			3e5a4

In addition to these types of numbers, the user may treat the values of any of the ten accumulators as operands. '# followed by the accumulator number means "the value in that accumulator". When the user types "#", the system responds with "Accumulator Number", after which you may give the number (from 1 to 10).

3e5b

ARITHMETIC EXPRESSIONS

3e6

To enter a simple expression precede the operand with a 'v'.

3e6a

v[alue of] EXPRESSION CA/OPERATOR CA/CD 3e6a1

For example, if the user enters

3e6b

V[alue of] 6*5/2+3-4 CA * CA 3e6b1

the system will evaluate the expression and display '14' in the name area.

3e6c

'14' followed by an asterisk will be entered in the CALC file.

3e6d

The value in the current accumulator will be multiplied by 14 and the result will replace the previous accumulator value.

3e6e

The new accumulator value will appear in the name area.

3e6f

TOTAL

3e7

The current accumulator value may be copied to the end of the CALC file by the command

3e7a

t[otal] CA 3e7a1

DNLS CALCULATOR USER GUIDE

CLEAR	3e8
The command	3e8a
c[lear accumulator] CA	3e8a1
resets the value of the current accumulator to zero. The values of all but the current accumulator remain unchanged.	3e8b
STORING ACCUMULATOR VALUES IN FILES	3f
The user can copy the formatted current accumulator to any NLS file by either an 'Insert' or a 'Replace'.	3f1
INSERT: i[nsert accumulator after] ENTITY BUG CA	3f2
REPLACE: r[eplace] ENTITY BUG CA	3f3
Both commands operate the same as the normal NLS 'Insert' and 'Replace' commands do. Valid NLS entities include number, word, statement, visible, etc. The displayed accumulator value replaces or is inserted after the entity selected by BUG.	3f3a
COPYING THE CALC FILE	3g
The Calculator depends on the information, structure, and format in and of the CALC file. It is not possible to use the Calculator if this file has been changed in any way. Therefore, the capability has been provided to the user to make a copy of the file without leaving the Calculator system. This is done with the command	3g1
w[rite File filename ?] FILENAME CA	3g1a
This command creates a new file in the user's directory that is an exact copy of the current CALC file. The new file may then be edited in any way the user desires.	3g2
"Write File" also clears the CALC file of all entries. Therefore any subsequent "Write File" makes a new file containing only those entries since the most previous "Write File".	3g3
LEAVING THE CALCULATOR	3h
There are two methods of leaving the Calculator, 'Quit Return' and 'Quit'.	3h1

DNLS CALCULATOR USER GUIDE

QUIT RETURN

3h2

Quit Return is employed when the user wishes to do something else, either in NLS or the EXEC, and then return to the Calculator and resume where he left off.

3h2a

q[uit] r[eturn] CA

3h2a1

This command causes the system to save all accumulator values and the current format specification before leaving the Calculator.

3h2b

The display area containing the CALC file and the CALC file itself are locked. Therefore, NLS commands effecting this display area or changing the CALC file contents may not be used.

3h2c

The user may execute any other NLS functions he desires including viewing the CALC file. When he next issues the Goto Calculator command his accumulators and format specifications will be exactly as when he left and the system will not prompt with the questions about new accumulators and file clearing.

3h2d

QUIT

3h3

Quit also saves all current accumulators values but indicates that the user is not planning to return to the Calculator with the expectation of resuming his previous state.

3h3a

q[uit] CA

3h3a1

The system resets the display to erase the CALC file from the screen.

3h3b

When the user next enters the Calculator he will be asked if he wishes new accumulators and to clear the file.

3h3c

DNLS CALCULATOR USER GUIDE

COMMAND SUMMARY

ENTERING THE CALCULATOR

g[oto] c[alculator] CA 4a
 [Split which Window ?] BUG/n[o Split] 4a1
 [New Accumulators;] n[o]/CA 4a2
 [Initializing Calculator] 4a3
 [File Verify in Progress] 4a4
 [File Cleared?] n[o]/y[es]/CA 4a5
 [Accumulator Submode Using 1] 4a6
 [Starting Accumulator value: NUMBER] 4a7
 4a8

SELECTING AN ACCUMULATOR

u[se accumulator #] NUMBER CA 4b
 4b1

DISPLAYING ACCUMULATOR VALUES

l[ist Accumulators] CA CA (to clear display) 4c
 4c1

SPECIFYING THE FORMAT OF NUMBERS

f[ormat] CA 4d
 [# of digits after decimal - NUMBER] (NUMBER CA)/CA
 [# of digits before decimal - NUMBER] (NUMBER CA)/CA
 [insert commas?] n[o]/y[es]/CA
 [right justify?] n[o]/y[es]/CA
 [\$ to left of number?] n[o]/y[es]/CA
 4d1

ARITHMETIC OPERATIONS

v[alue of expression] EXPRESSION CA/OPERATOR CA/CD 4e
 t[otal] CA 4e1
 c[lear accumulator] CA 4e2
 4e3

STORING ACCUMULATOR VALUES IN FILES

INSERT: i[nsert accumulator after] ENTITY ADDRESS CA 4f
 REPLACE: r[eplace] ENTITY ADDRESS CA 4f1
 4f2

COPYING THE CALC FILE

w[rite File filename ?] FILENAME CA 4g
 4g1

LEAVING THE CALCULATOR

q[uit] r[eturn] CA 4h
 q[uit] CA 4h1
 4h2

DNLS CALCULATOR USER GUIDE

ERROR MESSAGES

	5
Need a larger window - type CA	5a
Explanation: The display area selected ("bugged") by the user is too narrow. The selected area must be at least 44 characters wide.	5a1
User Action: Type CA and (1) reenter the calculator and select a larger area, or (2) move the display boundaries to make the desired area larger and then reenter the Calculator.	5a2
Calculator unable to continue	5b
Explanation: This message is always preceded by a message defining the error condition.	5b1
User Action: After correcting the condition that caused the error, reenter the calculator.	5b2
Unable to reopen CALC-ident file	5c
Explanation: Following a "Write" file command, a system error has occurred which makes it impossible to continue updating the CALC-ident file. The message will be followed by the message "Calculator unable to continue".	5c1
User action: Return to the Exec (control-c), reset, enter NLS, and start over.	5c2
No saved accumulators found-type CA	5d
Explanation: The user responded "no" to the system prompt "Accumulators cleared?". However, there were no accumulators stored in the CALC-ident file from a previous session.	5d1
User Action: Type CA and reenter the calculator and this time tell the truth.	5d2
Bad CALC-ident file, unable to go on--type CA	5e
Explanation: A system error has made the CALC-ident file unusable.	5e1
User action: Type CA, enter the Exec (control-C) and delete both the CALC-ident file and it's partial copy, if any.	

DNLS CALCULATOR USER GUIDE

- 'Continue' to NLS, and reenter the Calculator. The system will create a new CALC-ident file. 5e2
- Format too small for input 5f
- Explanation: A number has been bugged or entered from the keyboard which contains more digits to the left of the decimal than allowed by the last format specified by the user. 5f1
- User Action: (1) Change the format to accomodate the number, or (2) enter a smaller number. 5f2
- Format too small for accum
Format Reset to Default 5g
- Explanation: As the value of the current accumulator has exceeded the maximum number of digits to the left of the decimal allowed in the current format, the format parameters have been reset to the default values. 5g1
- User Action: (1) Reset the format to accomodate the accumulator, (2) 'Clear' the accumulator, or (3) proceed using the default format. 5g2
- Illegal Number 5h
- Explanation: (1) The format of the keyed or 'bugged' operand is incorrect, or (2) the format of a target number is incorrect in an Insert Number or a Replace Number command. 5h1
- User Action: Check the Calculator Users' Guide (,3e5) for proper number formats and repeat the command. 5h2

DNLS CALCULATOR USER GUIDE

INDEX

accumulator,
 clear (3e8)
 displaying values (3c)
 selection (3b)
 storing in NLS files (3f)
 storing in CALC files (3e7)
 mode (2b)
 addition operators (3e4a1)
 arithmetic operations (3e)
 CALC file (2c) (3a2) (3d1) (3f)
 CALC-ident (2c1)
 Calculator (2a1) (3)
 clear accumulator (3e8)
 commas (3d1a) (3d2)
 copying
 the accumulator (3f1)
 the CALC file (3g1) (3f1)
 decimal, digits before and after (3d1a) (3d2)
 default
 accumulator (3b1)
 format (3d2)
 digits before and after decimal (3d1a) (3d2)
 division operators (3e4a4)
 dollar sign (3d2)
 display,
 accumulator (3a7) (3c)
 CALC file (2c3) (3h2c)
 input data (2b2)
 Split (3a2)
 editing and the Calc file (2c4) (3g2)
 entering the Calculator (3a)
 error messages (3a3) (3d3) (5)
 expressions, arithmetic (3e6)
 format (3d) (3e3b) (3h2b) (3h2d)
 Goto Calculator (3a1)
 ident (2c1a)
 initializing the Calculator (3a2a)
 Insert Accumulator (3f1)
 justification (3d1a)
 listing accumulator values (3c)
 messages, error (5)
 multiplication operators (3e4a3)
 null operator (3e4a1)
 numbers
 format of (3d)
 examples of valid (3e5)

DNLS CALCULATOR USER GUIDE

operands (2a1) (3e1)
operator (3e1) (3e4) (3e6a1)
printing (3d3)
 the Calc file (2c4)
quitting the Calculator (3h1)
 quit return (3h2)
 quit (3h3)
records, Calculator (2c2)
Replace Accumulator (3e1) (3f3)
resetting the Accumulator to 0 (3e8b)
resuming in Calculator (3h2a)
retrieving Accumulator values (3a3)
Return, Quit (3h2)
returning to Calculator (3a3)
right-justification (3d2)
saving all accumulator values (3h2b)
SP operator (3e4a1)
space operator (3e4a1)
splitting the display area (2c3) (3a2)
storing accumulator values (3a3) (3d1)
structure of the CALC file (2c4)
subtotals (2c2)
subtraction operators (3e4a2)
unsigned numbers (3e1)
value of current accumulator (3e1)
verify, CALC file (3a2b)
Write File (3g1a)

DNLS CALCULATOR USER GUIDE

(J17418) 11-JUL-73 11:18; Title: Author(s): Stanford Research
Institute /ESRI-ARC; Distribution: /NDM; Sub-Collections: SRI-ARC;
Clerk: NDM;
Origin: <USERGUIDES>JCALC-DNLS.NLS;8, 27-JUN-73 15:49 NDM ;

17418 Distribution
N. Dean Meyer,

TNLS CALCULATOR USER GUIDE

This file for printing. Current on-line copy maintained as
(userguides,calculator-tnls,).

**-73 11:28 17419

TNLS CALCULATOR USER GUIDE

SRI-ARC

12 JUL 73

Augmentation Research Center

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

TNLS CALCULATOR USER GUIDE

TABLE OF CONTENTS

GENERAL DESCRIPTION.....	2
Introduction.....	2A
Accumulator Mode.....	2B
The Calc File.....	2C
USING THE CALCULATOR.....	3
Entering The Calculator.....	3A
Selecting An Accumulator.....	3B
Listing Accumulator Values.....	3C
Specifying The Format Of Numbers.....	3E
Controlling Feedback To The Terminal.....	3D
Arithmetic Operations.....	3F
Storing Accumulator Values In Files.....	3G
Copying The Calc File.....	3H
Leaving The Calculator.....	3I
COMMAND SUMMARY.....	4
Entering The Calculator.....	4A
Selecting An Accumulator.....	4B
Listing Accumulator Values.....	4C
Specifying The Format Of Numbers.....	4D
Controlling Feedback To The Terminal.....	4E
Arithmetic Operations.....	4F
Storing Accumulator Values In Files.....	4G
Copying The Calc File.....	4H
Leaving The Calculator.....	4I
ERROR MESSAGES	5
Calculator unable to continue.....	5A
Unable to reopen CALC-ident file.....	5B
No saved accumulators found-type CA.....	5C
Bad CALC-ident file, unable to go on--type CA.....	5D
Format too small for input.....	5E
Format too small for accum	
Format Reset to Default.....	5F
Illegal Number.....	5G

TNLS CALCULATOR USER GUIDE

GENERAL DESCRIPTION

2

INTRODUCTION

2a

The Calculator is a self contained subsystem of NLS. It adds, subtracts, multiplies, and divides like a desk calculator. Operands are entered from the keyboard either directly as numbers or indirectly as simple arithmetic expressions (e.g. $2 \times 4.6 / 5.123$) or as TNLS addresses (e.g. $.3 + 2w$). The user may leave the Calculator, use other NLS commands, and then return to the Calculator and continue work there just as though his original session had not been interrupted.

2a1

The Calculator is called from NLS and has its own commands which are specified and executed in much the same way as other NLS commands.

2a2

ACCUMULATOR MODE

2b

The current Calculator operates in "Accumulator" mode which permits the user to add, subtract, multiply and divide. The operation is recorded in the Calculator file and the results may be stored in a user file. The user may request various number formats, keep several running totals in separate accumulators, abbreviate feedback to the terminal, and enter simple arithmetic expressions as if they were numbers.

2b1

THE CALC FILE

2c

When a user first enters the Calculator system, it finds or creates a file named "CALC-ident.NLS" in the user's directory.

2c1

'ident' is the IDENT of the current NLS user and is included in the file name to avoid conflict between users sharing a common directory.

2c1a

This file records the "history" of the user's work in the Calculator like the tape of an adding machine. It saves each arithmetic operation and records subtotals and totals where desired. This history may carry through many Calculator sessions.

2c2

TNLS CALCULATOR USER GUIDE

The CALC file is a standard NLS file. All items are first level statements. The Calculator marks the beginning of each session with a line of asterisks. The file may be printed as any other NLS file, However, the CALC file should never be edited outside the Calculator system. The file may be copied to another NLS file which may be freely edited by the user.

2c3

TNLS CALCULATOR USER GUIDE

USING THE CALCULATOR

	3
ENTERING THE CALCULATOR	3a
The Calculator is entered with the Goto Calculator command:	3a1
g[oto] c[alculator] CA	3a1a
[New Accumulators;]n[o]/y[es]/CA	3a1b
Unless the user is returning from a previous Calculator session, he must respond with 'yes' or CA. "n[o]" causes the system to retrieve all ten accumulator values stored in the CALC file from the previous Calculator session. If there was no previous session a "n[o]" causes an error that terminates the Calculator session.	3a2
[Initializing Calculator]	3a2a
[File Verify in Progress]	3a2b
The system searches for a CALC file in the user's directory; if none exists, it creates one for him.	3a3
If the accumulators are being cleared and the CALC file already exists in the user's directory at entry the system also asks:	3a4
[File Cleared?] n[o]/y[es]/CA	3a4a
A 'no' response preserves CALC file entries from previous sessions and inserts a line of asterisks to mark the beginning of the current session. 'yes' clears the record. (It is recommended that the file be cleared from time to time to save directory space.)	3a5
[Accumulator Submode Using 1]	3a5a
[Starting Accumulator value: NUMBER]	3a5b
SELECTING AN ACCUMULATOR	3b
There are ten accumulators available to the user. The default accumulator is 1. Any of the others may be selected with the command:	3b1

TNLS CALCULATOR USER GUIDE

u[se accumulator #] NUMBER CA 3b1a

All subsequent operations are performed on the accumulator specified by NUMBER (a digit from 1 to 10) until it is changed with another 'use accumulator' command.. The values in the other nine accumulators remain unchanged.

3b2

LISTING ACCUMULATOR VALUES

3c

The current values of all ten accumulators may be listed by the command:

3c1

l[ist Accumulators] CA

3c1a

SPECIFYING THE FORMAT OF NUMBERS

3d

The user may specify the format of numbers stored in his CALC file and of accumulator values stored in other NLS files with the "Format" command.

3d1

f[ormat] CA

[# of digits after decimal ?] (NUMBER CA)/CA

[# of digits before decimal ?] (NUMBER CA)/CA

[insert commas?] n[o]/y[es]/CA

[right justify?] n[o]/y[es]/CA

[\$ to left of number?] n[o]/y[es]/CA

3d1a

The default number format is right-justification, 2 digits to right of the decimal and up to 9 to the left, no commas, and no dollar sign.

3d2

The total number of printing digits allowed in a number is 11. Within this limit only 5 can follow the decimal. If the user attempts to enter a number containing more digits to the left of the decimal point than the current format specifies or, if the current accumulator rises above the current format specification, an error message is printed and the operation is not performed.

3d3

CONTROLLING FEEDBACK TO THE TERMINAL

3e

When each arithmetic operation is complete, the calculator prints out the formatted operand followed by the operator and the new value of the current accumulator.

3e1

This feedback can be suppressed by the command:

3e2

TNLS CALCULATOR USER GUIDE

f[ormat] f[eedback] CA 3e2a

[Abbreviated Feedback ?] n[o]/y[es]/CA 3e2b

'yes' stops the printing of the formatted operand, the operator, and the new accumulator value. 3e3

The value of expressions entered by the user is typed prior to the confirming CA. 3e4

To see the value of the current accumulator give the 'Total' command. 3e5

ARITHMETIC OPERATIONS 3f

All arithmetic operations are performed on the value in the current accumulator. An arithmetic operation requires as input an optional operator followed by a signed or unsigned number or an accumulator designation (see --3f5). The number may be entered directly from the keyboard, indirectly as a simple arithmetic expression, or indirectly as a TNLS address expression. Accumulator designations ('# ACUM-NUMBER) can only be entered from the keyboard. 3f1

If no operator is given, the system adds the number to the accumulator. 3f2

The input is handled as follows: 3f3

The number is reformatted according to the current format specifications. 3f3a

The number and its operator (if any) is entered into the CALC file. 3f3b

The designated arithmetic operation is performed on the value stored in the accumulator. 3f3c

The old accumulator value is replaced with the result of the arithmetic calculation. 3f3d

The reformatted number, the operator, and the new accumulator value are printed at the terminal unless the user has suppressed feedback (see 'FEEDBACK' above). 3f3e

TNLS CALCULATOR USER GUIDE

OPERATORS 3f4

Operators are always entered directly from the keyboard and followed by an operand. Valid operators include: 3f4a

- NULL or SP or a or + add to accumulator 3f4a1
- s or - subtract from accumulator 3f4a2
- m or * or x multiply the accumulator by 3f4a3
- d or / divide the accumulator by 3f4a4

NUMBERS 3f5

Examples of valid numbers recognizable to the Calculator are: 3f5a

- 123456 -123456 123456- 3f5a1
- 123.12 \$123.00 .12345- 3f5a2
- 123,456 (\$1,123,123) 12,123.123+ 3f5a3
- .1 .12- 0.11 3f5a4
- +1

In addition to these types of numbers, the user may treat the values of any of the ten accumulators as operands. '# followed by the accumulator number means "the value in that accumulator". 3f5b

ARITHMETIC EXPRESSIONS 3f6

To enter a simple expression precede the operand with a 'v'. 3f6a

v[alue of] EXPRESSION CA/OPERATOR CA/CD 3f6a1

For example, if the user enters 3f6b

V[alue of] 6*5/2+3-4 CA * CA 3f6b1

the system will evaluate the expression and type '14'. 3f6c

'14' followed by an asterisk will be entered in the CALC file. 3f6d

The value in the current accumulator will be multiplied by 14 and the result will replace the previous accumulator value. 3f6e

ADDRESS EXPRESSIONS 3f7

Although operators must be entered directly from the

TNLS CALCULATOR USER GUIDE

keyboard, operands (numbers) may be entered by supplying their TNLS addresses. 3f7a

The user informs the Calculator that an address expression is being used by typing ' '. Any valid TNLS address expression may follow the ' '. A '/' at the end of the address will produce normal TNLS feedback (7 characters before and 8 characters after the character addressed). 3f7b

TOTAL 3f8

The current accumulator value may be copied to the end of the CALC file by the command 3f8a

t[otal] CA 3f8a1

The formatted value will be typed whether feedback has been suppressed or not. 3f8b

CLEAR 3f9

The command 3f9a

c[lear accumulator] CA 3f9a1

resets the value of the current accumulator to zero. The values of all but the current accumulator remain unchanged. 3f9b

STORING ACCUMULATOR VALUES IN FILES 3g

The user can copy the formatted current accumulator to any NLS file by either an 'Insert' or a 'Replace'. 3g1

INSERT: i[nsert accumulator after] ENTITY ADDRESS CA 3g2

REPLACE: r[eplace] ENTITY ADDRESS CA 3g3

Both commands operate the same as the normal NLS 'Insert' and 'Replace' commands do. Valid NLS entities include number, word, statement, visible, etc. Any valid NLS address expression is acceptable, including links. 3g3a

Typing a backslash character prints the statement in the active file pointed to by the current address marker. 3g3b

TNLS CALCULATOR USER GUIDE

COPYING THE CALC FILE

3h

The Calculator depends on the information, structure, and format in and of the CALC file. It is not possible to use the Calculator if this file has been changed in any way. Therefore, the capability has been provided to the user to make a copy of the file without leaving the Calculator system. This is done with the command

3h1

```
w[rite File filename ?] FILENAME CA
```

3h1a

This command will create, in the user's directory, a new file that is an exact copy of the current CALC file. The new file may then be edited in any way the user desires.

3h2

"Write File" also clears the CALC file of all entries. Therefore any subsequent "Write File" makes a new file containing only those entries since the most previous "Write File".

3h3

LEAVING THE CALCULATOR

3i

There are two methods of leaving the Calculator, 'Quit Return' and 'Quit'.

3i1

QUIT RETURN

3i2

'Quit Return' is employed when the user wishes to do something else, either in NLS or the EXEC, and then return to the Calculator and resume where he left off.

3i2a

```
q[uit] r[eturn] CA
```

3i2a1

This command causes the system to save all accumulator values and the current format specification before leaving the Calculator.

3i2b

QUIT

3i3

Quit also saves all current accumulators values but indicates that the user is not planning to return to the Calculator with the expectation of resuming his previous state.

3i3a

```
q[uit] CA
```

3i3a1

When the user next enters the Calculator he will be

TNLS CALCULATOR USER GUIDE

asked if he wishes new accumulators and to clear the
file.

313b

TNLS CALCULATOR USER GUIDE

COMMAND SUMMARY

ENTERING THE CALCULATOR	4
g[oto] c[alculator] CA	4a
[New Accumulators;] n[o]/y[es]/CA	4a1
[Initializing Calculator]	4a2
[File Verify in Progress]	4a3
[File Cleared?] n[o]/y[es]/CA	4a4
[Accumulator Submode Using 1]	4a5
[Starting Accumulator value: NUMBER]	4a6
	4a7
SELECTING AN ACCUMULATOR	
u[se accumulator #] NUMBER CA	4b
	4b1
LISTING ACCUMULATOR VALUES	
l[ist Accumulators] CA	4c
	4c1
SPECIFYING THE FORMAT OF NUMBERS	
f[ormat] CA	4d
[# of digits after decimal - NUMBER] (NUMBER CA)/CA	
[# of digits before decimal - NUMBER] (NUMBER CA)/CA	
[insert commas?] n[o]/y[es]/CA	
[right justify?] n[o]/y[es]/CA	
[\$ to left of number?] n[o]/y[es]/CA	
	4d1
CONTROLLING FEEDBACK TO THE TERMINAL	
f[ormat] f[eedback] CA	4e
[Abbreviated Feedback ?] n[o]/y[es]/CA	4e1
	4e2
ARITHMETIC OPERATIONS	
v[alue of expression] EXPRESSION CA/OPERATOR CA/CD	4f
t[otal] CA	4f1
c[lear accumulator] CA	4f2
	4f3
STORING ACCUMULATOR VALUES IN FILES	
INSERT: i[nsert accumulator after] ENTITY ADDRESS CA	4g
REPLACE: r[eplace] ENTITY ADDRESS CA	4g1
	4g2
COPYING THE CALC FILE	
	4h

TNLS CALCULATOR USER GUIDE

w[rite File filename ?] FILENAME CA	4h1
LEAVING THE CALCULATOR	4i
q[uit] r[eturn] CA	4i1
q[uit] CA	4i2

TNLS CALCULATOR USER GUIDE

ERROR MESSAGES

- 5
- Calculator unable to continue 5a
- Explanation: This message is always preceded by a message defining the error condition. 5a1
- User Action: After correcting the condition that caused the error, reenter the calculator. 5a2
- Unable to reopen CALC-ident file 5b
- Explanation: Following a "Write" file command, a system error has occurred which makes it impossible to continue updating the CALC-ident file. The message will be followed by the message "Calculator unable to continue". 5b1
- User action: Return to the Exec (control-c), reset, enter NLS, and start over. 5b2
- No saved accumulators found--type CA 5c
- Explanation: The user responded "no" to the system prompt "Accumulators cleared?". However, there were no accumulators stored in the CALC-ident file from a previous session. 5c1
- User Action: Type CA and reenter the calculator and this time tell the truth. 5c2
- Bad CALC-ident file, unable to go on--type CA 5d
- Explanation: A system error has made the CALC-ident file unusable. 5d1
- User action: Type CA, enter the Exec (control-C) and delete both the CALC-ident file and it's partial copy, if any. 'Continue' to NLS, and reenter the Calculator. The system will create a new CALC-ident file. 5d2

TNLS CALCULATOR USER GUIDE

Format too small for input

5e

Explanation: A number has been addressed or entered from the keyboard which contains more digits to the left of the decimal than allowed by the last format specified by the user.

5e1

User Action: (1) Change the format to accomodate the number, or (2) enter a smaller number.

5e2

Format too small for accum

Format Reset to Default

5f

Explanation: As the value of the current accumulator has exceeded the maximum number of digits to the left of the decimal allowed in the current format, the format parameters have been reset to the default values.

5f1

User Action: (1) Reset the format to accomodate the accumulator, (2) 'Clear' the accumulator, or (3) proceed using the default format.

5f2

Illegal Number

5g

Explanation: (1) The format of the keyed or addressed operand is incorrect, or (2) the format of a target number is incorrect in an Insert Number or a Replace Number command.

5g1

User Action: Check the Calculator Users' Guide (,3e5) for proper number formats and repeat the command.

5g2

TNLS CALCULATOR USER GUIDE

INDEX

accumulator,
 clear (3f9)
 listing values (3c)
 selection (3b)
 storing in NLS files (3g)
 storing in CALC files (3f8)
 mode (2b)
 addition operators (3f4a1)
 address expressions (3f7)
 arithmetic operations (3f)
 backslash (3g3b)
 CALC file (2c) (3a2) (3d1) (3h)
 CALC-ident (2c1)
 Calculator (2a1) (3) (4a)
 clear accumulator (3f9)
 commas, insert (3d1a) (3d2) (4d1)
 controlling feedback (3e) (4e)
 copying
 the accumulator (3g1) (3h1)
 the CALC file (3h)
 decimal, digits before and after (3d1a) (3d2)
 default,
 accumulator (3b1)
 format (3d2)
 digits before and after decimal (3d1a) (3d2)
 displaying accumulator values (3c)
 division operators (3f4a4)
 dollar sign (3d2)
 editing and the Calc file (2c3) (3h2)
 entering the Calculator (3a)
 error messages (3a2) (3d3) (5)
 expressions, arithmetic (3f6)
 format,
 number (3d) (3f3a) (3i2b)
 CALC file (3h1)
 Goto Calculator (3a1)
 ident (2c1a)
 initializing the Calculator (3a2a)
 Insert Accumulator (3g1)
 justification (3d1a)
 levels in the CALC file (2c3)
 limit, printing digits (3d3)
 links in address expressions (3g3a)
 listing accumulator values (3c)
 messages, error (5)
 multiplication operators (3f4a3)

TNLS CALCULATOR USER GUIDE

- null operator (3f4a1)
- numbers,
 - format of (3d)
 - examples of valid (3f5)
- operands (2a1) (3e1) (3f7a)
- operators (3e1) (3f1) (3f4) (3f7a)
- printing,
 - the Calc file (2c3)
 - digits allowed in numbers (3d3) (3e3)
 - current statement (3g3b)
- quitting the Calculator (3i1)
 - quit return (3i2)
 - quit (3i3)
- records, Calculator (2c2)
- Replace Accumulator (3g1) (3g3)
- resetting the Accumulator to 0 (3f9a)
- resuming in Calculator (3i2a)
- retrieving Accumulator values (3a2)
- Return, Quit (3i2)
- returning to Calculator (3a2)
- right-justification (3d2)
- saving all accumulator values (3i2b) (3i3a)
- SP operator (3f4a1)
- space operator (3f4a1)
- storing accumulator values (3g)
- structure of the CALC file (3h1)
- subtotals (2c2)
- subtraction operators (3f4a2)
- suppressed feedback (3e2) (3f3e) (3f8b)
- unsigned numbers (3f1)
- value of current accumulator (3e1) (3e5)
- verify, CALC file (3f2b)
- Write File (3h1a)

17419 Distribution
N. Dean Meyer,

TNLS CALCULATOR USER GUIDE

(J17419) 11-JUL-73 11:28; Title: Author(s): Stanford Research
Institute /ESRI-ARC; Distribution: /NDM; Sub-Collections: SRI-ARC;
Clerk: NDM;
Origin: <USERGUIDES>JCALC-INLS.NLS;8, 28-JUN-73 12:01 NDM ;

exercise

We would like you to do some specific things with the following information to see how efficiently you operate in the AHI system. I hope the instructions are sufficiently clear so you will have no difficulty in understanding what you are to do.

1

This exercise was generated on the execuport terminal. There are no correct answers to any of the questions, but we do want get your general feelings. Try and work as rapidly as is comfortable for you. If you have time interruptions please note them.

2

Time started (?)

2a

I have been using the AHI system for 24 months.

2a1

When I am writing or editing a manuscript I feel very comfortable with the AHI language.

2a2

--strongly agree X agree --neutral --disagree --strongly disagree.

2a2a

Because the command language is very easy to use and remember for the most part.

2a2b

The AHI system is helpful in my everyday work.

2a3

--strongly agree X agree --neutral --disagree --strongly disagree.

2a3a

Time completed (?)

2b

17421 Distribution
James H. Bair,

Imlac Recreate Display Complaint

One answer to 17411

Imlac Recreate Display Complaint

Your observations illustrate the normal workings of selective refresh.

1

Anytime viewspecs change, complete reformat will take place on the next operation. This general rule, regardless of the type of the next operation, does not optimize each case. It does prevent all sorts of possible problems.

1a

Under certain circumstances, selective refresh has to reformat the last statement to avoid trouble in a few (currently) unforeseeable cases. Again, this WORKS, and at a large expense it could be smarter.

1b

I appreciate the fact that display inefficiencies are twice as annoying to IMLAC users as anyone else, and that anything we can do to improve that situation would certainly be worthwhile.

2

17424 Distribution

David H. Crocker, Diane S. Kaye, Harvey G. Lehtman, Charles H. Irby,

Documentation Remains Upon My Leaving

I leave the following:

1

About documentation in general, I have created a file in my directory called (auerbach,legacy,) which I hope makes some sense of the state of documentation. I have gone over it with Dean.

1a

The links in this file point to the directory <Userguides>.

1a1

About the Calculator documentation in particular:

1b

It is ready to go.

1b1

There are two versions of each Calculator document - one residing under the name "calculator-tnls(dnls)" and another "jcalc-tnls (dnls)"; the latter version is formatted for journal submission.

1b2

I was not able to journalize the documents as the Journal system was running with preassigned numbers only on Friday.

1b3

The TNLS version has a preassigned catalog number of 17419; the DNLS version, 17418.

1b3a

Dean has agreed to format the online version for hardcopy production. Some question exists as to whether it should be Commed or not - I don't know what your time constraints are.

1b4

If you have any questions, I think my new phone number is 257-6550.

1c

17425 Distribution

James C. Norton, N. Dean Meyer, Michael D. Kudlick, Dirk H. Van
Nouhuys,

Author Control of Distribution Media for Journal Mail

The following suggestion is based upon the assumption that the Journal delivers mail (essentially) by checking the delivery flags for each recipient, then putting a copy of the message into the appropriate queues, so that it will be 1) delivered into the person's initial file, and/or 2) printed when hard copies are produced and/or sent over the net.

It would therefore seem to me to be very easy to allow the author of a document the option of over-riding or limiting the distribution (both for himself and for the recipients). A modification to a person's ident-based delivery instructions (always, never, default) would let a person give or take away control of the medium to other people. (this doesn't sound clear at all.)

At delivery time, I should be able to say Medium Hard, Online and if the person has only Online turned on, but hasn't said 'never' for Hardcopy, he will get a hardcopy (tho he wouldn't, normally).

This last example is not random. I wanted to send a hardcopy to someone who has harcopy turned off.

17426 Distribution

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

tip program structure - preliminary

(tip) tip program structure	1
INITIALIZATION	1a
CLOCK	1b
INPUT	1b1
packs data into input buffers	1b1a
initiates echoes	1b1b
processes user commands	1b1c
OUTPUT (OUTIN)	1b2
outputs data to terminal	1b2a
2741 line protocol	1b2a1
echoes	1b2a2
command responses	1b2a3
net data	1b2a4
marks for pendin to send allocates	1b2b
TIMING	1b3
times 5 sec delay before carrier detect is believed	1b3a
times reverse break to 2741's	1b3b
BACKGROUND	1c
CONNECTION and HOST functions (PENDIN)	1c1
device related functions	1c1a
allocates	1c1a1
news	1c1a2
transfer data to iap	1c1a3
host related functions	1c1b
send erps	1c1b1

tip program structure - preliminary

send rsts	1c1b2
send rtps	1c1b3
send cls's for unsolicited rfc's and cls's	1c1b4
CONNECTION CONTROL (PROBCK)	1c2
sends rfc's and cls's for protocol fsm	1c2a
INITIAL CONNECTION PROTOCOL (LOGGER)	1c3
modem and liu control (modemc)	1c4
monitors carrier detect	1c4a
sets device rate and byte size	1c4b
restarts output	1c4c
accept data from imp (slurp)	1c5
not link 0	1c5a
copies data into output buffers	1c5a1
handles telnet protocol	1c5a2
link 0	1c5b
handles rfc's and cls's	1c5b1
handles eco's and rst's	1c5b2
handles allocates	1c5b3
counts ins's	1c5b4
OUTPUT	1d
SWAPS output buffers and restarts output	1d1

17427 Distribution

David C. Walden, Bernie P. Cosell,

As time goes on I find the little 3-character prompts in TNLS more and more annoying. They actively interfere with the smooth flow of thought and typing. For straight composition of documents, I now find TNLS only marginally preferable to TECO.

1

17429 Distribution

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

(J17429) 23-JUN-73 12:30; Title: Author(s): L. Peter Deutsch/LPD;
Distribution: /NP; Sub-Collections: NIC NP; Clerk: LPD;

I think the following facility might be of considerable value in the increasing applications of NLS to retrieve data from resource files: the possibility of jumping to a name that was not spelled quite right, i.e. allowing a modest number of missing or doubled characters, transpositions, or wrong characters. Warren Teitelman's LISP system has this ability -- in fact, it invokes it automatically if it fails to find an exact match -- and it is an enormous help.

1

17430 Distribution

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

(J17430) 23-JUN-73 12:34; Author(s): L. Peter Deutsch/LPD;
Distribution: /NP; Sub-Collections: NIC NP; Clerk: LPD;

Input Prompts

Peter, I am implementing a command to turn the input prompts off and on. -- Charles.

1

17431 Distribution
L. Peter Deutsch,

Input Prompts

(J17431) 23-JUN-73 17:20; Title: Author(s): Charles H. Irby/CHI;
Distribution: /LPD; Sub-Collections: SRI-ARC; Clerk: CHI;

BackSpace Word in Journal Titles

Dave, The Journal coughs whenever I do a backspace word while typing the TITLE. This causes an FST ENTRY NONEXISTENT message. -- Charles.

1

17432 Distribution
J. D. Hopper,

BackSpace Word in Journal Titles

(J17432) 23-JUN-73 17:23; Title: Author(s): Charles H. Irby/CHI;
Distribution: /JDH; Sub-Collections: SRI-ARC; Clerk: CHI;

Nancy,

Mike mentioned that you were concerned about the hostname conventions and listing. Sorry I lost touch with you on these. Steve Crocker told me that he had asked Vint Cerf to come up with naming guidelines. I mentioned to Steve that Dick Watson had done the same thing a couple of years ago, so the agreement was to get together with Vint and give him all the background information and input the NIC had. (This was the meeting we had here.) Vint will draft naming guidelines based upon what went before, and these will be made available to all interested parties - BBN, MITRE, RML, ARPA, and the NIC - for comment. After feedback has been incorporated an RFC and new hostname list will be issued. At the moment the matter is in Vint's hands. I'll let you know when we have heard from him. Hope this brings you up to date.

...Regards, JAKE

1

17433 Distribution
Nancy J. Neigus, Michael D. Kudlick,

(J17433) 24-JUN-73 15:27; Title: Author(s): Elizabeth J. (Jake)
Feinler/JAKE; Distribution: /NJN MDK(for your informmation);
Sub-Collections: SRI-ARC; Clerk: JAKE;

Did you Find What You Needed?

I am back at ARC this week where I can more easilly help you with finding documents etc. If you did not get what you needed last week, let me know.

1

17435 Distribution
Gary L. Bockweg,

Did you Find What You Needed?

(J17435) 25-JUN-73 09:20; Title: Author(s): Dirk H. Van
Nouhuys/DVN; Distribution: /GLB; Sub-Collections: NIC SRIARC ; Clerk:
DVN;

Trip Report: TNL5 Course in ARPA's Washington Office

Susan Lee and I flew to Washington Wednesday evening, May 30, to teach TNL5 at the ARPA office the following two days. Jim Norton spent the first three days of that week at the National Computer Conference in New York but joined us in Washington to help teach and for other purposes at the ARPA office. In addition to teaching the class, we were interested in Susan's seeing the office and meeting the people because she will be involved in Paul's analysis of their operations.

1

We originally believed the classes would be the three secretaries, Pam Cutler (PJK), Paula Kazanjian (PK2), and Pat Pigott, in the ARPA office; a programmer, Gary Bockweg (GAB) who works for Key Data in support of the ARPA office accounting; and Col. Russel's secretary from the Vela office.

2

However, Pat Pigott was quitting shortly so she usefully womaned the phones and Col. Russel's secretary was not available.

3

The course was somewhat stalled in the middle of the first day when the ARPA TIP broke down. Its breakdown was a mixed disaster. (It gave us the moral pleasure of saying things like, "You guys have a great system, but reliability...") We took the occasion to move the course from the ARPA office to a large empty room belonging to Key Data. Several phone lines in this room enabled us to continue work through MITRE and NBS TPs. Net net, I think it was worth the breakdowns to get Pam and Paula away from the immediate demands of their office.

4

In other respects the course ran smoothly considering the experience of people involved. Susan did well particularly considering she had no teaching experience and had not expectation of teaching NLS before previous wee. She was very appropriate for this group.

5

A couple of interesting lines of further development appeared through Gary Bockweg. First of all he became sufficiently interested to plan submitting a Key Data proposal to ARPA through NLS and I set up the output processor directives for a title page for him. Secondly, he discussed with Jim the possibility of integrating the system that Key Data has developed for the ARPA office with NLS. Key Data's system operates on a PDP-15 and communicates fairly easily with the TENEX file system. We can imagine, for instance, somebody writing a financial report for ARPA and transferring the figures back and forth to an NLS file by some simple mechanism.

6

The problem now is to keep Pam and Paula in practice. They will forget their NLS unless they have some real work to do with it. Please communicate with the ARPA office as much as possible via the journal.

7

17438 Distribution

Susan R. Lee, Peter Kirstein, Paula Kazanjian, George A. Borden,
James C. Norton, Paul Rech, Jerry Pipes,

DVN 25-JUN-73 10:37 17438

Trip Report: TNL5 Course in ARPA's Washington Office

(J17438) 25-JUN-73 10:37; Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /SRL PK PK2 GAB JCN PR JP; Sub-Collections: SRI-ARC;
Clerk: DVN;
Origin: <VANNOUHUYS>TRIPREPORT.NLS;3, 19-JUN-73 09:19 KFB ;

ARPANET NEWS June Issue Now in Query

An online, Query language, version of the June issue of ARPANET NEWS is now published. Entering NIC rather than NLS, and specifying "a" for ARPANET NEWS now leads you into the June issue. The versions for TNLS and for hardcopy printout are not yet ready. The versions of the May issue are on the way. -- Jeanne North

1

17439 Distribution

Edward L. Glaser, Thomas M. Marill, T. E. Cheatham, James W. Forgie, Keith W. Uncapher, Edward A. Feigenbaum, Leonard Kleinrock, William K. Pratt, David C. Evans, Douglas C. Engelbart, Bertram Raphael, Daniel L. Slotnick, Jeanne B. North, C. D. (Terry) Shephard, Maurice P. Brown, Robert L. Ashenhurst, Rein Turn, Mark Medress, Franklin Kuo, Howard Frank, Robert L. Fink, Glenn J. Culler, Frank S. Cooper, Bruce G. Buchanan, Kenneth L. Bowles, Morton I. Bernstein, Paul Baran, Saul Amarel, Roy C. Amara, John E. Savage, Butler W. Lampson, William R. Sutherland, Thomas G. Stockham, Gene Raichelson, Michael O'Malley, Peter G. Neumann, Marvin Minsky, Robert E. Millstein, J. C. R. Lickliger, Robert M. Balzer, Herbert B. Baskin, Robert P. Abbott, Peter Kirstein, William B. Kehl, Roland F. Bryan, James G. Mitchell, Jeanne B. North, Allen Newell, John McCarthy, Lawrence G. Roberts, Frank E. Heart
 Connie Hoog, Leonard B. Fall, James A. Blumke, David Hsiao, Michael L. Marrah, Vinton G. Cerf, Richard G. Powell, Gerald L. Kinnison, Paul Baran, Henry Chauncey, J. T. Sartain, Robert N. Lieberman, Ralph Alter, Nils Maras, Philip H. Enslow, Robert M. Dunn, Joseph B. Reid, William T. Misencik, Toshiyuki Sakai, Louis Pouzin, Yngvar Lundh, Robert H. Hinckley, Marvin Zelkowitz, Don D. Cowan, Louis F. Dixon, Michael O'Malley, Peter Kirstein, David J. Farber, Dave Twyver, Art J. Bernstein, Dave E. Liddle, A. Kenneth Showalter, D. D. Aufenkamp, Derek Leslie Arthur Barber, Tjaart Schipper, Richard M. Van Slyke, E. M. Aupperle, Hubert Lipinski, Robert F. Hargraves
 J. A. Smith, Leina M. Boone, Diana L. Jones, Nancy J. Neigus, Terry Sack, Frances A. (Toni) McHale, Lucille C. (Lucy) Gilliard, Gil Falk, Ed J. Collins, Gary Blunck, John F. Heafner, Kathy Beaman, David J. King, C. Jane Moody, Sue Pitkin, Jerry Fitzsimmons, Gregory P. Hicks, Gloria Jean Maxey, Roberta J. Peeler, Craig Fields, Ermalee R. McCauley, Margaret Iwamoto, Dee Larson, Robert E. Doane, Brenda Monroe, Jeanne B. North, Pam J. Klotz Cutler, Barbara Barnett, Stan Golding, Steve G. Chipman, John P. Barden, Martha A. Ginsberg, Shirley W. Watkins, Linda M. Connelly, Janet W. Troxel, Connie D. Rosewall, Linda M. Webster, Anita L. Coley, Carol J. Mostrom
 Michael J. Romanelli, Ronald M. Stoughton, A. D. (Buz) Owen, Robert L. Fink, Jaacov Meir, Jeanne B. North, Steve D. Crocker, Thomas F. Lawrence, John W. McConnell, James E. (Jim) White, A. Wayne Hathaway, Patrick W. Foulk, Richard A. Winter, Harold R. Van Zoeren, Alex A. McKenzie, Joel M. Winett, Abhay K. Bhushan, Thomas N. Pyke, B. Michael Wilber, Edward A. Feigenbaum, Robert T. Braden, James M. Pepin, Barry D. Wessler, John T. Melvin, Paul M. Rubin, Paula L. Cotter, O. A. Hansen, H. A. Thompson, Dan Dechatelets, Nancy C. Thies, Travis L. Greening, Robert Silberski, Marcia Lynn Keeney, Diane M. MacNeil, W. A. Martin, Margaret A. (Maggie) Bassett
 David J. King, William L. Andrews, Milton H. Reese, Kenneth M. Brandon, Lou C. Nelson, Jeffrey P. Golden, Richard B. Neely, Dan Odom, Ralph E. Gorin, Robert G. Merryman, P. Tveitane, Adrian V. Stokes, David L. Retz, Reg E. Martin, Gene Leichner, Gil Falk, Jean Iseli, Jed E. Donnelley, William Kantrowitz, Michael S. Wolfberg, Yeshiah S. Feinroth, James Hurt, Anthony C. Hearn, Eric F. Harslem, Robert M. (Bob) Metcalfe, Bradley A. Reussow, Daniel L. Kadunce, George N. Petregal, Michael B. Young, Michael A. Padlipsky, Schuyler

Stevenson, L. Peter Deutsch, John Davidson, Thomas O'Sullivan, Sol F.
Seroussi, Scott Bradner, Robert H. Thomas, John C. Thomas

ARPANET NEWS June Issue Now in Query

(J17439) 25-JUN-73 10:53; Title: Author(s): Jeanne B. North/JBN;
Distribution: /NLG NSAG NAG PI NIC; Sub-Collections: SRI-ARC NLG NSAG
NAG PI NIC; Clerk: JBN;

SRI/TYMSHARE MEETING

jim,I want to be sure that the Fri ,June 29 MEETING is still ok.
please let me know asap. thanks mike

1

17442 Distribution
James C. Norton,

One man's opinion of NIC/Query

The NIC/Query language is distressingly verbose. I wanted to read various things in the ARPANET News and got a canned message telling me how to return to the contents (which wasn't even necessary to access other items) at the end of querying every item. I suggest that the implementor of NIC inform himself about the ZOG system built by CMU, which I feel provides a more reasonable user interface.

1

17443 Distribution

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

See Coward Cop Out of Elephant Meeting

Thanks a lot for your invitation to the elephant meeting, but I'm afraid I couldn't understand it. I specialize in the feet of the Serenia myself, and, while I'm always interested in possible synergy with neighboring disciplines, I'm sure the language of pachadermologists wouldn't penetrate my thick hide.

1

Thanks again.

1a

17444 Distribution

Robert J. Husby, Nancy J. Freece, Steven F. Holmgren,

COM Status Through June 18: Monospacing Works, Underlining Doesn't, Graphics Remain Untried, and a Hint of Competition from Alphanumerics

Early in the week of May 28, I sent to DDSI a file which contained directives, as I supposed, to set aside space and call for photographs in an effort to test the graphics system (IJOURNAL, 16962, 1:w). I also talked to Paul Johnson about files that had been sent to them earlier in May or late April and which we had not received. He said that he had not run those files because he was working out the bug which caused graphics art fonts to be spaced strangely when they were supposed to be mono-spaced.

1

The proofs of those accumulated files were mailed to us June 6, but although we had asked DDSI after the previous delay to send them UPS airmail to Kay Byrd, they sent them by ground U.S. mail to me and they arrived June 13. In these proofs underlining occurs as a thin line through the lower part of the character. They also contain certain errors that Dean Meyer reports are his own specification. Otherwise they look very good and in fact the mono-spacing problem appears to be solved.

2

Tuesday of this week (June 12) I telephoned Paul Johnson (seeking the proofs which were in transit) and discussed with him the trial graphics file. To make a long story short, I had screwed up the photo directive. As a result we will get back proofs of the file with the correct spacing for the pictures, but no pictures. The proofs will be valuable since the file is a sample segment of our last important report, (Journal, 13401,) and, if the type faces and layout is o.k., we know the graphics are the only remaining stumbling block. I probably will not have time to respecify the photos correctly until I return from Boston week after next.

3

I was a little disheartened after our extensive discussion of graphics cycle to hear Paul say, when I mentioned the halftones, "You mean you want me to send it to a printer?"

4

In addition to testing the graphics cycle, that file was the first execution of the "." directive. The DOTSPLIT directive allows you to insert a set of dots between something like a heading in a table of contents on the left and a statement number on the right without worrying about the change in number of dots created by changes in type face or size. As Walter built the DOTSPLIT directive, each dot is generated as a separate line segment. As Walter anticipated, handling some 100 such line segments on a page (a table of contents) is a lot of work for the DDSI machine. Paul Johnson reports that bystanders thought the machine was broken and that tiny light leaks in the chamber, normally trivial, because the film moves through so rapidly, contaminated the table of content page because it had to sit in the camera so long. His complaints seemed to be legitimate and I have asked Elizabeth and Harvey to try to make DOTSPLIT work in some other fashion.

5

COM Status Through June 18: Monospacing Works, Underlining Doesn't, Graphics Remain Untried, and a Hint of Competition from Alphanumeric

Paul Johnson asked us a favor. They have 3 pages of material that they would like us to put on-line, format, and return to them for processing in their system. I said we would be glad to do that and asked Dean to handle the formatting next week. 6

Paul Johnson said he had fixed the underlining problem in the meantime. 7

In short the problems get smaller and smaller, but we still do not have a production system. 8

On Friday Tony Sunley of Alphanumeric called me. He had hear of us through Nelson Lucas, the able graphic artist in charge of printing at ISI. Alphanumeric has a good reputation in this field. Sunley wanted to know if they might print for us. I said I doubted if it would be easy, but that I would send him the specs Walter had given DDSI (Journal,14093,) and let them consider weather they wanted to make a proposal. 9

COM Status Through June 18: Monospacing Works, Underlining Doesn't,
Graphics Remain Untried, and a Hint of Competition from Alphanumerics

(J17445) 25-JUN-73 21:07; Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /NDM RWW DCE JAKE JCN MDK EKM; Sub-Collections: DPCS
SRI-ARC; Clerk: DVN;
Origin: <VANNOUHUYS>COMSTATUS.NLS;4, 25-JUN-73 21:01 DVN ;

secondary distribution bug

I tried to do a secondary distribution on 17443 (a message) and got an error message stating "No such document."

1

17446 Distribution

J. D. Hopper, Diane S. Kaye, Harvey G. Lehtman, Charles H. Irby,

Some More Documents on ARC Training and Documentation

Duane Stone's Comments on My Review and Suggestions About Training are in (journal,16639,). Marilyn's Plan for documentation is in (journal,14595,). She left an excellent description of how our documentation now stands in (auerbacch,legacy,)

1

17447 Distribution

Mario C. Grignetti, Mario C. Grignetti,

Response to request for Journal article addresses

This is a response to your request for Journal article addresses. 1

Unfortunately we (LLL-RISOS) are not yet NIC users. Therefore online delivery to our initial file is impossible. 2

We do desire to continue receiving hard copy delivery of the Journal articles addressed to us. 3

About network delivery of Journal articles. 4

When we become NIC users, we will desire online delivery to our initial file instead of network delivery. 4a

In the mean time: 4b

Our system won't be on the net until the end of September. Until at least that time the only people here desiring network delivery of Journal articles are: 4b1

Jed Donnelley (JED) our technical liason 4b1a

Liena boone (LMB) our station agent 4b1b

If it is possible to have only one copy of everything that is directed to either of us sent to RISOS@ISI, that would be preferred. 4b2

If not then JED's Journal mail can be sent to JED@BBN with Liena's still going to RISOS@ISI. 4b3

17448 Distribution
James E. (Jim) White,