MAP 30-JAN-74 09:37 21673

CCL Non-status

Hi--
Knowing how busy I've been with other things which have shorter fuses than CCL, I can't chide too hard, but so far there have been only two direct responses to my proposal of a couple of weeks ago. (In case some didn't even get the proposal, it was basically to split the existing draft into half a dozen areas and have people volunteer to do an iteration--aimed at being a member of a series of related documents rather than a single intimidating monolith--as a sensible way to approach the distributed design problem.) There have also been two indirect responses (a chat with Jon Postel and whatever the file Bob Thomas has contains--which I hope to find out about as soon as I learn how to pick it up without an account on his machine). However, nothing has been heard from the other half (or more) of the group--either volunteering for an area or arguing for a different approach to the general problem. Therefore, PLEASE at least let me know what you'E UP TO AND WHETHER YOU DISAGREE OR AGREE WITH THE STRATEGY, so that Charles Irby and Nancy Neigus (the two direct respondants) can be told whether or not to charge ahead with the stuff they volunteered to deal with.
Of course, if you disagree with the strategy, alternatives would certainly be in order, as it's the only one I can think of which results in an equitable division of labor.
muted cheers, map
p.s., do let me know if you don't know what the six areas are. 1

CCL Non-status

(J21673) 30-JAN-74 09:37; Title: Author(s): Michael A. Padlipsky/MAP ; Distribution: /CCL ; Sub-Collections: NIC CCL; Clerk: MAP;

Regarding link syntax as echoed in reponse to commands using links: this constant feedback could have a definite molding effect on users, especially people learning the system. For this reason, I think we should encourage a certain form by not placing a space between the link's delimiters and its contents and by using angle brackets instead of parentheses. 1

(J21674) 30-JAN-74 09:49; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /NEWNLS KEV; Sub-Collections: SRI-ARC NEWNLS; Clerk: KIRK;

KIRK 30-JAN-74 09:54 21675

Two very little features to make NLS a more sophisticated text handler

1. Change BW (backspace word) to work like backspace word instead of backspace visible.

2. Allow a visible that contains a hyphen to break at the hyphen when it is located at the end of a line. 1

KIRK 30-JAN-74 09:54 21675

Two very little features to make NLS a more sophisticated text handler

(J21675) 30-JAN-74 09:54; Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /NP; Sub-Collections: SRI-ARC NP; Clerk: KIRK;

KIRK 30-JAN-74 10:09 21677

quit command

In being consistant with the subsystems and novice user naivete, there should be a quit Tenex command that would take you out to your higher level. Your higher level would be telnet, a superior NLS, or Logout. There should also be a quit Job command which would equal the Logout command. 1

quit command

(J21677) 30-JAN-74 10:09; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: KIRK;

JHB MDK 30-JAN-74 10:24 21678

Change of Journal Delivery Default to Online

Please comment; if we do not hear anything to the contrary we will implement this change.

JHB MDK 30-JAN-74 10:24 21678

Change of Journal Delivery Default to Online

Mike Kudlick has suggested, and I heartily concur, that the default setting in the Ident system for mail delivery be changed to online only. In this way, some of the workload on the NIC would be reduced from the numbers reported in "NIC Mail Distribution Activity 1973", (GJOURNAL, 21624,1:w). Those persons desiring hardcopy (and not having their own printing capability) would have to make a decision, hopefully asking some questions about need and value.
We will have to make an announcement of the change, and allow sufficient time for those who want mailed hardcopy to notify the NIC. 1

JHB MDK 30-JAN-74 10:24 21678

Change of Journal Delivery Default to Online

(J21678) 30-JAN-74 10:24; Title: Author(s): James H. Bair, Michael D. Kudlick/JHB MDK ; Distribution: /KWAC RWW MDK ; Sub-Collections: SRI-ARC KWAC; Clerk: JHB ;

KIRK 30-JAN-74 10:29 21679

Inconsistency in noun-type keywords

Charles,
If "To" is legal as a noun-type command-word in the "Quit" command, what is the reasoning for commands like "Split Window Vertically" when "Split (window) Vertically" would make the command easier to use? You told me the reason was because "Vertically" was not a noun. "To" is also not a noun. 1

KIRK 30-JAN-74 10:29 21679

Inconsistency in noun-type keywords

(J21679) 30-JAN-74 10:29; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /CHI NP; Sub-Collections: SRI-ARC NP; Clerk: KIRK;

JBN 30-JAN-74 11:52 21681

Sample of Mal Sent Through TELNET to the Network Journal

This message was inserted using TELNET and sent 1

though the Network Journal 2

JBN 30-JAN-74 11:52 21681

Sample of Mail Sent Through TELNET to the Network Journal

(J21681) 30-JAN-74 11:52; Title: Author(s): Jeanne B. North/JBN ;
Distribution: /RWW ; Sub-Collections: SRI-ARC; Clerk: JBN;

Network User Feedback System Report

USING Note # 10

NIC # 21683

J. Calvin (CASE-10)
D. Crocker (UCLA-NMC)
J. Iseli (MITRE-TIP)
A. Rosenfeld (CASE-10)
6 FEB 74

Recommendations for a Network User Feedback System

1

PREFACE

2

For a network (or any other service) to be viable, its users must have a reasonable degree of satisfaction with the service being provided. A major factor, in having a broad base of satisfied users, is having a responsive mechanism through which those users can communicate their ideas and complaints to those providing service(s). In this report we propose such a mechanism, called a Network User Feedback System. 2a

This report is intended as an initial stimulus to the development of a network user feedback mechanism. As such, it outlines a generic structure, points out several of the critical human factors, then proposes interim measures involving minimum implementation effort. 2b

> Preliminary effort would be directed towards gaining experience with a simple feedback mechanism, in order better to evaluate, test, and formulate design concepts and implementation strategies for the evolution of the general network mechanism. 2b1

For those attempting to design and implement the Feedback system -- or anyone involved with "user-support" -- the key philosophical approach we recommend is indicated in the Human Factors Considerations section of this report. It is best satisfied by prefacing all discussions with the question: "What is ideal from the perspective of a human end-user?" 2c

> Many relevant concerns, suggested by that approach, are not addressed in this report. Most of those concerns are discussed in the USING Network Service Definition Committee Report. In all cases, the proposed Feedback Service should satisfy the ideal conditions detailed in that report. 2c1

This report is the product of the Users Interest Working Group (USING) Feedback Mechanisms Committee. We would like to thank Nancy Neigus (BBN-NET), Susan Poh (MITRE-TIP) and Jon Postel (MITRE-TIP) for their suggestions. 2d

INTRODUCTION 3

This report, in outline form, presents: 3a

1. Recommendations 3a1

   These recomendations should suggest a model to be reviewed and revised, prior to development of a more complete implementation specification. Discussion is separated into near, intermediate and long terms. 3a1a

2. Human factors considerations 3a2

   Some psychological constraints are considered in this section. This includes such things as mechanism response time and response language. 3a2a

3. List of factors defining problem domain 3a3

   The listed index provides a statement on characteristics of the "feedback" addressed in this report. We expect the list to be revised, in the future. 3a3a

4. Discussion of feedback system elements 3a4

   This section will address the major components required to implement a network user feedback system. The components will be defined generically in order to outline the overall structure. 3a4a

RECOMMENDATIONS 4

This section preceeds the others to provide a focus for the proposed approach to developing a network wide feedback mechanism. Ensuing sections serve to define the problem and outline a general structure for a solution. This section provides an approach to the general solution, involving a phased incremental program of trial implementation and development, experimentation, analysis, and design. 4a

An Aside (almost) 4b

In this report, we do no say very much about getting servers to act upon user feedback. This is primarily because the issues resolve themselves fairly simply. 4b1

One issue is the maintenance of lists of people responsible for making changes (or getting them done). This is purely clerical and requires no further comment. 4b1a

The other issue is actually getting those people to respond. This subdivides into Cooperation, if the server personnel are so inclined, and Enforcement, if the server personnel are not inclined to cooperate but those who provide them with money are. 4b1b

In either case, the feedback system can do little more than keep track of who is responsive and who is not. 4b1c

Near Term 4c

This phase is intended to occur within the first few months and to require minimum effort in the implementation of preliminary functions through the use of existing network capabilities and the creation of inter-subsystem interfaces. 4c1

The preliminary capability will be devoid of most elements described in the design of a generic feedback mechanism. 4c2

In particular, the data directory [see (elements) for description of system elements] will not be developed and a fixed distribution control mechanism will be employed. Further, the capability will accept feedback input from any host on the network supporting the network mail protocol and provide feedback to submitors of transactions, but will not [NOT] automatically direct the input transactions to their appropriate sources on a distributed basis. 4c2a

Rather, the SRI-ARC NLS capability will be employed to ingest the submitted user transactions into designated NLS files that will be manually perused by designated individuals who in turn will manually develop the feedback to the users. 4c2b

To facilitate the implementation of this trial network user feedback first increment, the following Idents will be created at the NIC to allow host feedback systems (NOT humans) to employ the network mail facilities as the distribution mechanism (These idents will be transparent to users and merely provide a convenient distribution mechanism): 4c3

netgripes : For the repository of user transactions reporting system bugs. 4c3a

netcomments : For the repository of user transactions directed towards the improvement of network subsystems, network user interfaces, or user requirements satisfaction. 4c3b

Farther, TIP-RSEXEC will employ a feedback command to submit network comments. This command is distinct from the existing RSEXEC Gripe command, which results in comments being directed to a terminal at the NCC. The following represents a description of the feedback command parts: 4c4

Feedback<cr> 4c4a

(Date:) [supplied by system] 4c4a1
(From:) [supplied by system, if possible] 4c4a2
(Subject:) 4c4a3
(Type of comment:) [bug/suggestion/
gripe [network/system/subsystem]/
unknown/other] 4c4a4
(Network online address:) [supplied by system, if possible] 4c4a5
(Phone number:) 4c4a6
(Degree of urgency:) 4c4a7
(Type of response desired:) [none/acknowledgement/
action to be taken] 4c4a8
(message:) 4c4a9

Message types Bug, Suggestion, Gripe and Other will be directed through network mail to NIC journal idents: NETGRIPES, NETCOMMENTS, NETGRIPES, and NETCOMMENTS, respectively. Gripe[network] will, of course, also be sent to the NCC. 4c4b

A NIC L10 program will be developed to extract and summarize these submissions into NLS files, in the NIC directory <USING>, for subsequent analysis. 4c4c

Creation of this software, and perusal and redistribution of feedback that is received, will require at least one full-time person. The tasks can be divided among parts of several people. 4c5

Intermediate Term 4d

The intermediate phase, expected to require six months, is intended to produce a detailed design of the network user feedback mechanism and an implementation plan for that mechanism. It is envisioned that the design, proposed in this report, will be analyzed for appropriateness, as experience is gained during the near-term phase. 4d1

The design effort will be guided by a desire to integrate the system with related site-specific efforts. Further, special attention will be directed towards a design that allows incorporation of new capabilities. 4d2

The feedback system will, itself, allow its designers to monitor the reactions of its users. 4d2a

The Intermediate term will probably require an additional full-time person, since the tasks taking place during the short-term will be continuing. 4d3

At the terminus of this phase, a full design and implementation plan will be reviewed by a committee designated by ARPA-IPT. 4d4

Long Term 4e

This phase will begin at the completion of the intermediate phase effort. Its goal will be to use previous experience to implement the system designed during the intermediate phase. 4e1

Once this effort reaches equilibrium, it will probably only require one full-time person. 4e2

HUMAN FACTORS CONSIDERATIONS 5

In the preface of this report, we said that we were concerned with "satisfied users". This automatically puts us into the fuzzy realm of psychology. (We say "fuzzy" because there are currently no adequate and concise theories around which we can organize our thoughts.) In this section, we will simply list those system behavioral parameters we know to be important to satisfying users. 5a

It must be easy for users to input their ideas and complaints. 5b

1. Assorted media must be available to the user; for example: telephone, U.S. Mail, SNDMSG, Nic Journal. 5b1

2. The user should not have to work very hard to use the feedback mechanism. 5b2

That is, simply typing one command, to start a comments-gathering program, is better than having to log off a site, close your connection to it, open another connection, log on to the new site, and then (finally) type a command that starts the program. 5b2a

For interactive feedback systems, such as telephones and querying programs, important information should automatically be asked for. For an example, see the (Recommendations) section. 5b2b

The user should receive a meaningful response in a reasonable amount of time. 5c

1. A user must get some kind of response immediately (instantaneously, if the transaction medium is telephone or Tenex-type link; within one day, if the medium is Network mail). 5c1

Even a simple restatement of the problem (to show some level of comprehension) with an explanation that no immediate solution is apparant, but that the user will be contacted when one is, is better than an overly slow response, as long as the user feels that something is happening and that he is not being deferred. 5c1a

If possible, the expected sequence of events, leading to the resolution of the problem or implementation of the suggestion, should be told to the user. That way, the user can reasonably know what to expect, rather than have to guess at whether it is necessary to bother someone, again. 5c1b

2. The user should be kept informed of developments. 5c2

This applies both to a user's being informed of actions involving a specific suggestion/complaint he generated and to general user awareness of what kinds of events are taking place. This latter activity is most often accomplished thru a newsletter. 5c2a

3. The general effect of user's input should be told him. 5c3

At the very least, this gives the user a sense of importance (good psychology) and encourages him to provide more suggestions (useful for knowing what improvements need to be made). 5c3a

Interactions should be in a form appropriate to the user. 5d

1. Since users' states of knowledge are quite disparate, it is extremely important to help them verbalize their complaints and suggestions and, in general, to attend to the vocabulary used when dealing with them. 5d1

Often, this means that the initial contact person (e.g., consultant) needs to mediate between the user and any additional staff, such as systems programmers. 5d1a

2. Also, documentation and announcements must be carefully written for their intended audience. It would be useful for documents to begin with a statement of reader-knowledge that is presupposed. 5d2

LIST OF FACTORS DEFINING PROBLEM DOMAIN 6

1. Participants -- Generators and receivers of feedback (This will be expanded upon by the USING Definition of Users Committee.) 6a

Humans 6a1
Managers 6a1a
Technicians 6a1b
Applications programmers 6a1c
Consultants 6a1d
End-Users 6a1e
Feedback system software 6a2

2. Transaction-types 6b

Bug reporting: User identification of problems 6b1
Resources status: Query by users and reporting by servers 6b2
Suggestions: User suggestions for enhancements to existing services and creation of new services 6b3
Information-dissemination: General notices from servers to users 6b4
Other: Catch-all category 6b5

3. Media for providing and receiving feedback 6c

Network 6c1
U.S. Mail 6c2
Telephone 6c3
Face-to-face 6c4
Grapevine : Path of communication is usually untraceable 6c5

4. Transaction-mode 6d

Interactive 6d1
Deferred 6d2

5. Transaction-flow 6e

One-way -- No response required 6e1
Multi-way 6e2

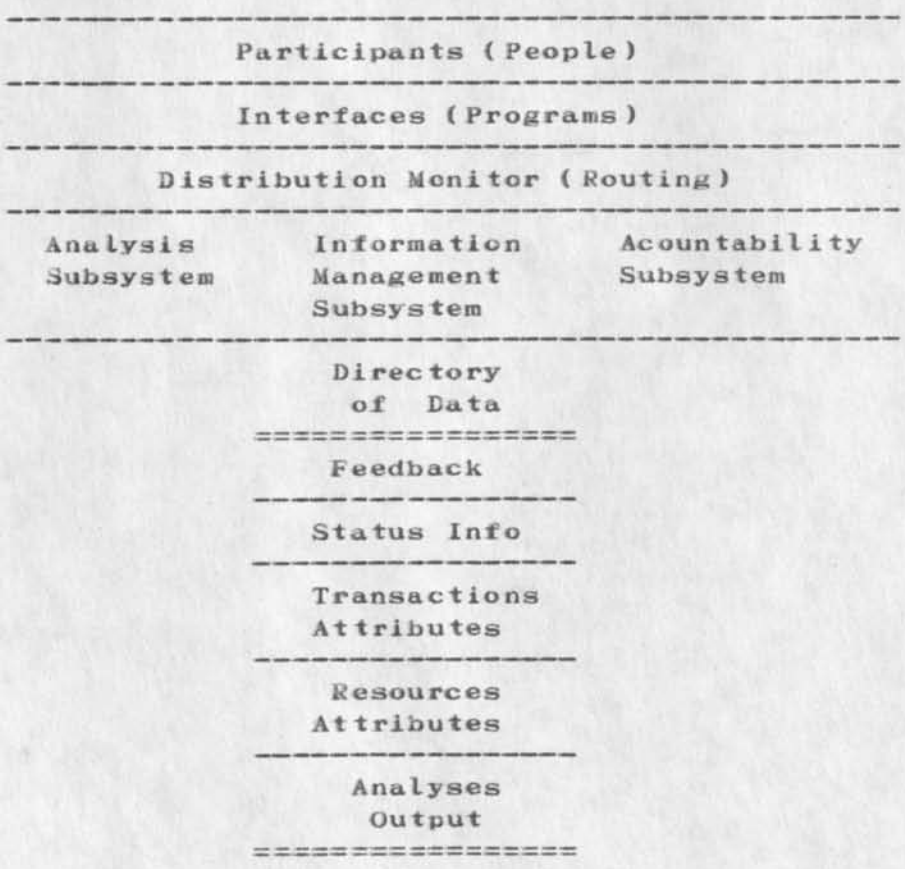
6. Importance 6f

Deadline (Useless, if not processed before specified time) 6f1
Urgent 6f2
Average 6f3
Minimal 6f4

FEEDBACK SYSTEM ELEMENTS 7

This section presents a view of a generic network user feedback system by identifying its major elements. We wish to repeat that though we consider such issues important, time constraints do not allow us to be concerned, here, with implementation [or detailed design] issues, such as whether the mechanisms are centralized or distributed. Rather, we wish to give some flavor of what the components of a feedback system might be. 7a

System Pictorial Overview: 7b



Description of Feedback System Structure Entities 7c

1. Interfaces 7c1

This component depicts the assorted collection of interfaces [TIPS, IMPS, terminals, programs, etc.] required to provide participants with access to and response from assorted elements of the network user feedback system. 7c1a

2. Distribution Monitor 7c2

The Monitor mechanism ensures proper distribution of transaction data, feedback system responses and intra-system messages., 7c2a

3. Information Management 7c3

The information management subsystem is intended to perform all the data management functions required by the total feedback system. General information management issues will be more completely considered by the USING Information Management Committee. It will manage: 7c3a

Directory 7c3b

The directory will contain entries pointing to elements of the other data bases in the system and their distribution/location attributes. 7c3b1

Data-bases 7c3c

(1) Feedback 7c3c1

The Feedback data base contains copies of the actual messages passed through the system. 7c3c1a

(2) Status: A Dynamic Resources Map 7c3c2

This data-base is envisioned as a status map of Network systems, subsystems, and human participants. The map will provide indications of current and projected status. 7c3c2a

For example, if a service were temporarily unavailable due to hardware malfunction, the map would so indicate and provide an estimate of when the system would next become available. Also, the map, where possible, should be able to project availability for instances where preventive maintenance and other routine down-time is scheduled. 7c3c2a1

(3) Transactions Attributes 7c3c3

Different types of transactions, and the individual cases within types, have distinct properties. The list of mailboxes to receive a certain type of transaction (e.g., bug reports) would be one such property. Appropriate response latency (days, for feedback received thru U.S. Mail, hours, for feedback received thru FTP Mail) would be another such property. The Transactions Attributes data-base will contain all such descriptor information. It will be used by the Distribution Monitor and by the Analysis Subsystem. 7c3c3a

(4) Resources Attributes 7c3c4

This consists of a directory of network resources. This information is used by the Distribution monitor and during generation of the Status data. The attributes of each resource are included. For example, responsible person, status and location of resource, etc. 7c3c4a

(5) Analysis 7c3c5

This data base contains appropriate summarizations of transaction data, as filtered by the analysis module. 7c3c5a

4. Analysis Subsystem 7c4

This subsystem will produce standard statistical summaries of feedback transactions, as well as reports of problem resolutions. Factors analyzed will include Type of feedback, Identity of originator or feedback, Time-to resolution, Satisfaction of user, Server effort required, etc. 7c4a

5. Accountability Subsystem 7c5

This subsystem monitors feedback messages' response time (notifying responsible persons of overdue responses) and attempts to guarantee that response-sequences are complete (if not satisfactory). 7c5a

Network User Feedback System Report

(J21683) 1-FEB-74 14:56; Title: Author(s): Jim O. Calvin, David H. Crocker, Jean Iseli, Al J. Rosenfeld/JOC DHC JI AJR; Distribution: /USING USERS JCRL MLK(Note that this has already been distributed to USING and USERS); Keywords: Users Feedback; Sub-Collections: NIC USING USERS; Clerk: DHC;

SRL 30-JAN-74 12:58 21685

Should NEWNLS stuff be acknowledged?

I distributed this to those who have contributed and those who have an interest in this. Feel free to distribute it to anyone else.

Should NEWNLS stuff be acknowledged?

Use of the feedback mechanism for comments on the new command language has been good and an important input to the programmers. 1

To this point there has been no attempt to acknowledge comments or what action was taken. 2

Is this practice satisfactory for you, and if not, what kind of acknowledgment would you like to see. 3

This file will be eventually replacing the NP and BUGS file so I suppose we should also consider other users and what they might like to see. 4

SRL 30-JAN-74 12:58 21685

Should NEWNLS stuff be acknowledged?

(J21685) 30-JAN-74 12:58; Title: Author(s): Susan R. Lee/SRL;
Distribution: /DVN JMB KIRK PR(fyi) JHB(fyi); Sub-Collections: SRI-ARC;
Clerk: SRL;
Origin: <LEE>BLAP.NLS;1, 30-JAN-74 12:53 SRL ;

smoking

i am becoming increasingly sensitive to tabacco smoke. not only has the surgeon general determined that smoking is a danger to the smokers health, he has determined that tobacco smoke is dangerous to the non-smokers health as well. Thus when you smoke in my presence you are not only being self destructive, you are also adversly affecting my health. Thus i request that you will refrain from smoking in my presence (especially in my office). I suggest that smoking be prohibited in tip room and at all meetings i am requested to attend.

1

smoking

(J21686) 30-JAN-74 15:40; Title: Author(s): Jonathan B. Postel/JBP; Distribution: /MITRE-TIP; Sub-Collections: NIC MITRE-TIP; Clerk: JBP;

Problem with Privacy Bit in File Header

I have allocated a bit in the file header for privacy. But the following problem arises. If I attempt to make an unlocked file private -- open, set bit, close -- the change is lost as soon as the file is closed, because the file header page was mapped in copy-on-write, and simply gets thrown away at close time. Of course, if I touch a data page before I close the file, or if the file is locked before I open it, my set bit lives permamently as it should. This same problem is shared, as you would expect, by ANY command which modifies the file header, e.g. Change Ownership, Change Name Delimiters. What's the general solution? Map the file header page in shared and read-only so a write-interrupt is generated when I touch the page and a PC thus created, and if so, does WRPI have to be changed to check for page 0?

Problem with Privacy Bit in File Header

(J21687) 30-JAN-74 16:13; Title: Author(s): James E. (Jim) White/JEW; Distribution: /CHI BUGS; Sub-Collections: SRI-ARC BUGS; Clerk: JEW;

Against Feedback for Now

Please don't give me feedback on all the flack I have been sending you!
These days, we are going though a kind of debugging of newnls. Most suggestions are really notices of what the sender thinks are bugs either in the code or in his view of the was the system responds to the user.
As we get more settled, the situation will be different, suggestions will be more constructive and long term. Then it might be useful to give feedback. Perhaps request fo feedback should be some kind of option.

Against Feedback for Now

(J21688) 30-JAN-74 20:04; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: DVN;

Scenarios for Sending to, and Retrieving From, Network Journal

Note that this scenario does not cover sending a FILE to the Network Journal by FTP and does not cover retrieving any FILE SENT BY FTP to the Journal.

Scenarios for Sending to, and Retrieving From, Network Journal

Network users may send mail through the Network Journal using SNDMSG, TELNET, or FTP. The mail is converted at SRI-ARC into NLS files, journalized, and sent to specified recipients. These files may be retrieved by recipients, using FTP.

Conventions: System responses are given in [ ]. Nonsignificant system responses are omitted.
JEW is user, MDK and RWW are addressees.
Note: Network Journal is invoked by a / in the user-name field.

SNDMSG to be Recorded in the Network Journal
Use SNDMSG procedures, except: insert sender's ident and a / before addressee idents in [Users:] e.g. JEW/MDK@NIC
To combine Journal SNDMSG with SNDMSG to others, add others after commas, e.g. JEW/MDK@NIC, PRATT@ISI

TELNET Messages to be Recorded in the Network Journal
[@] TELNET <CR>
[User Telnet x.x DATE ....]
[#] NIC <SP> FTP <CR> [is complete.#]
MAIL <SP> JEW/MDK RWW <CR> (pause)
[350 Type mail, ended by a line with only a "."]
Re: Title of Message <CR>
First line of message <CR>
second line of message <CR> ...etc.
. <CR> (pause)
[256 Mail completed successfully]
<↑Z>
[#] DISC <CR>
[#] QUIT <CR>

FTP Use in Sending to, and Retrieving From, Network Journal
[@] FTP <CR>
[HOST FTP User process x.xx.x]
[*] CONN <SP> NIC <CR>
[Connection opened]
[*< SRI-ARC FTP Server x.xx.x - at DAY DATE TIME]
---Sending a Message---
[*] QUO <ALT> MAIL <SP> JEW/MDK RWW <CR>
[*] (pause) Type mail, ended by a line with only a "."]
[*] QUO <ALT> Re: Title of Message <CR>
[*] QUO <ALT> First line of message <CR>
[*] QUO <ALT> second line of message <CR> ...etc.
[*] QUO <ALT> . <CR> (pause)
[*< Mail completed successfully]
---Retrieving a File Sent by TELNET or SNDMSG---
[*] LOG <SP> ANONYMOUS <SP> ARC <CR>
[*] GET <SP> <journaldirectory>number.NLS;xnls <CR>
[to local file <dir>filename <CR> [New File] <CR>
[< image retrieve of <JOURNAL>number.NLS; started]
[< transfer completed]
---
[*] DISC <CR>
[*] QUIT <CR>

21690 Distribution
Richard W. Watson,

JBN 30-JAN-74 21:16 21689

Scenarios for Sending to, and Retrieving From, Network Journal

(J21689) 30-JAN-74 21:16; Title: Author(s): Jeanne B. North/JBN;
Distribution: /RWW JEW; Sub-Collections: SRIARC NIC ; Clerk: JBN;
Origin: <NIC-WORK>NETJOURSCEN.NLS;11, 30-JAN-74 21:05 JBN ;

SScenario for Network Journal

The scenario is journalized, but sent only to you and JEW. 1
We cannot yet send a file through FTP, nor can we retrieve a 2
message sent through FTP. You should be able to retrieve 3
this, sent through TELNET, as well as link to it. You may have 4
noted you cannot link to Journal messages you got through FTP. 5

JBN 30-JAN-74 21:38 21690

SScenario for Network Journal

(J21690) 30-JAN-74 21:38; Title: Author(s): Jeanne B. North/JBN ;
Distribution: /RWW ; Sub-Collections: SRI-ARC; Clerk: JBN;

Contract Requirements for Technical Report Summary

TECHNICAL REPORT SUMMARY 1

Each Technical Report will include a report summary. This summary, prominently identified, should normally not exceed a few pages. The purpose of the project must be specified, together with a description of important equipment purchased or developed, if any, and the conclusions reached by the contractor. The most important single feature of this summary is that it must be meaningful to readers who are not specialists in the subject matter of the contract. 2

The requirement for careful preparation cannot be over-emphasized as thissummary will often provide the basis for decisions on the continuity of a project. The contractor must recognize that his achievements are quite often surveyed by Department of Defense staff who function at a level that precludes a thorough review of detailed reports. 3

Where appropriate, references should be made to more detailed sections of the report in order to guide those who may prepared to spend the the additional time reqired to develop a more complete and professional understanding of the accomplishments. 4

The report summary should include the following information for each experiment or program* 5

1/1. Technical problem 6

2. General methodology (e.g., literature review, laboratory experiment, survey, field study, etc.) 7

3. Technical results 8

4. Dod implications 9

5. Implications for further research (if an) 10

6. Special comments (if any) 11

Contract Requirements for Technical Report Summary

(J21691) 30-JAN-74 21:52; Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /JNB RWW JCN DPCS; Sub-Collections: SRI-ARC DPCS; Clerk:
DVN;
Origin: <LEAVITT>TRS.NLS;1, 24-JAN-74 12:11 KIRK ;

JBN 31-JAN-74 08:15 21692

Comments on <kudlick>help

Mike-
<kudlick>help is splendid, I find. The two-levels-of-information format is appealing. I find one mistake: <ALT> will complete the abbreviated command, <SP> will not, so you might want to change that instruction.
Jeanne

1

JBN 31-JAN-74 08:15 21692

Comments on <kudlick>help

(J21692) 31-JAN-74 08:15; Title: Author(s): Jeanne B. North/JBN;
Distribution: /MDK JAKE MLK; Sub-Collections: SRIARC NIC ; Clerk: JBN;

This is my first attempt at the letter-writer since your message of 1/23.

I was away on a brief vacation to the East Coast this past week, so haven't had time to experiment yet.

Part of the problem is that the documentation I'm working with (which is maintained by Leroy Richardson here) is dated Sept. 71 and corresponds only vaguely to the current system. Who should I contact about updating our documentation in hard copy ?

I do think I'm about ready to come up again to get a thorough indoctrination into NLS, having experienced enough of what a new user might encounter. Best days for me are Fridays or Mondays (in that order) -- in particular, Feb. 8, 15, 11, or 18 would be good. Is there someone else I should contact about that ?

I have, incidentally, figured out the CA business, and the Null File, etc.

I'm beginning to be impressed by the power of the system, if not by its "transparency". But a proper introduction would no doubt help.

In any case, thanks for your continuing help. I realize this sort of thing is bothersome and a far-from-optimal use of your time; about the only thing to be said for this mode is that it simulates a naive user trying to get onto a system and relying on expert personal help to supplement scanty (or in this case voluminous but outdated) documentation.

I guess I'll abort this (as explained in my message via SNDMSG). However, I'll try to send it via Journal just for the practice.

(J21694) 31-JAN-74 13:06; Title: Author(s): Jeff G. Rothenberg/JGR;
Distribution: /CHI JGR; Sub-Collections: NIC; Clerk: JGR;
Origin: <USC>TRIAL.LETTER;1, 31-JAN-74 10:00 JGR ;

From: Padlipsky.CompNet at MIT-Multics
Date: 01/31/74 1621-edt 1

To: All USINGers 2

A Thought About Drafts 3

It is a very good thing that several drafts have been generated for consideration by the Group. It is, however, a very annoying thing that the drafts are so hard to access. That is, after waiting long real times to get the draft from the NIC under ";xnls" conversion, what I get (if nobody has crashed in the meantime) is a file which still is cluttered with .Grab's and .Split's -- and, embarrassingly enough to a one-time FTP Committee member, out of which I have to edit the octal 37's that are being used in it to denote end of line instead of the 15/12 sequence which is supposed to be used. Even though people on TENEX's don't face the last (37's) problem, the duration of xnls and the presence of control requests confront everybody who isn't willing to expend the time and turmoil involved in doing a direct login and an Output Device Teletype. 4

To combat this silliness, I suggest we adopt a Group policy that drafts be furnished in ASCII, suitable for direct FTPing. Those who use NLS should do an Output Sequential (or an Output Device Teletype, if that can be done into a file and avoids the 037 problem) -- or whatever other NLS function is appropriate -- to eliminate the inefficiency of making each prospective reader have to sweat out the xnls conversion. Further, if there's no way of generating files without the 37's, the author should take care of them -- again on the theory that doing it once is better than doing it n times. 5

Note that even if there's some mysterious conversion I don't know about which would eliminate the 37's and the .Grab's, it's still inefficient and inconvenient to have each reader perform it.
Also, those who prefer their own runoff-like mechanisms to NLS are going to be furnishing ASCII anyway, so why not get some commonality?
After all, if we're supposed to be worrying about user convenience, why not start with our own? 6

cheers, map 7

(J21696) 31-JAN-74 13:27; Title: Author(s): Michael A. Padlipsky/MAP
; Distribution: /USING ; Sub-Collections: NIC USING; Clerk: MAP;

KEV 31-JAN-74 13:54 21697

links

please read the syntax branch of <VICTOR>LINKS.NLS. Note the changes to filspc. This was done as a result of talks with JEW and to allow for files on other than tenex hosts which have unknown file naming conventions or for users wishing wierd file names. let me know what you think of it. i just about have the parser written and debugged 1

KEV 31-JAN-74 13:54 21697

links

(J21697) 31-JAN-74 13:54; Title: Author(s): Kenneth E. (Ken) Victor/KEV; Distribution: /CHI; Sub-Collections: SRI-ARC; Clerk: KEV;

KEV 31-JAN-74 14:34 21698

more link ambiguities

statement names can apparently contain $(LD/ '- / '' / '@)
problem is these are ambiguous with character searches,, etc. in a
cae "#$%& 1

KEV 31-JAN-74 14:34 21698

more link ambiguities

(J21698) 31-JAN-74 14:34; Title: Author(s): Kenneth E. (Ken) Victor/KEV; Distribution: /CHI; Sub-Collections: SRI-ARC; Clerk: KEV;

NDM 31-JAN-74 14:51 21699

Wrong Line Breaks

Something weird is happening in TNLS line breaking. It is wrapping around when I know that it shouldn't. View (energy,dsadata,4a2c1a). I would appreciate any enlightenment you might offer. --Dean 1

Wrong Line Breaks

(J21699) 31-JAN-74 14:51; Title: Author(s): N. Dean Meyer/NDM;
Distribution: /CHI HGL DSK; Sub-Collections: SRI-ARC; Clerk: NDM;

KIRK 31-JAN-74 15:21 21700

Response to Susan's (21685,)

Your message asking whether NEWNLS stuff should be acknowledged is a good idea. It didn't mention the alternative of each user being able to easily find out what happened to his suggestion by going to the NNLS file, so you should judge the responses you get accordingly. I think you know my feelings, but I'll restate them here for the record. I think it would be nice to be able to get a message telling me the status of each of my suggestions each step along it's way to implementation, rejection, or the limbo of contention. However, this expensive service (even if pared down to a minimum single message acknowledging reciept) should only be undertaken if enough of a person's time (10-50% ?) to do it right has been allocated by analysis, operations, development or whoever. Until this time has been made available, I think we should concentrate on making the feedback mechanism as accomodating as possible for someone to find what happened to their suggestion on their own. 1

KIRK 31-JAN-74 15:21 21700

Response to Susan's (21685,)

(J21700) 31-JAN-74 15:21; Title: Author(s): Kirk E. Kelley/KIRK; Distribution: /DVN JMB PR JHB SRL NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: KIRK;

DHC 31-JAN-74 16:06 21701

Extending FTp-submitted Journal Mail Headers

Jim -- Has any thought been given to having FTP submitted Journal mail have its header 'statement' parsed for Nic #, RFC #, etc?. Offhand, it seems like it should be a fiarly simple task, since you already parse for Title. Dave. 1

DHC 31-JAN-74 16:06 21701

Extending FTp-submitted Journal Mail Headers

(J21701) 31-JAN-74 16:06; Title: Author(s): David H. Crocker/DHC;
Distribution: /JEW; Sub-Collections: NIC; Clerk: DHC;

JBN 31-JAN-74 16:52 21702

Corrected Information About FTP Scenario (21688,)

Dick-
Jim White corrected my assumptions about what was happening in the FTP,
and it now appears that any means of submission can be retrieved by FTP
if the Journal accepts the mail as a file rather than as a message, and
that the Journal does make a file of anything longer than one line. I have not rejournalized the scenario, since only the label on the FTP retrieval branch was incorrect.
Jeanne

1

JBN 31-JAN-74 16:52 21702

Corrected Information About FTP Scenario (21689,)

(J21702) 31-JAN-74 16:52; Title: Author(s): Jeanne B. North/JBN;
Distribution: /RWW JEW MDK; Sub-Collections: SRIARC NIC ; Clerk: JBN;

DVN 31-JAN-74 16:57 21703

Problem in Show Directory,Suggestion for finer profiles

When I attempted a show directory everything for (gjournal,8221) it told me repeatedly "incorrect filename".
I find prompting a pain in most commands, but I got lost in the comand above when I had all my options set down to minimum prompting, feedback, etc.. It would be nice if you could specify in your profile which cmmands you want which prompting in. Is that hard, easey? 1

DVN 31-JAN-74 16:57 21703

Problem in Show Directory,Suggestion for finer profiles

(J21703) 31-JAN-74 16:57; Title: Author(s): Dirk H. Van Nouhuys/DVN; Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: DVN;

JEW 31-JAN-74 17:01 21704

LOCAL STRING watchamacallit [Idunkno]

Throughout NLS, one encounters string declarations of the form: 1

    LOCAL STRING stringname [500]; 1a

where 'stringname' is designed to hold a particular type of string -- a filename, an ident file entry, etc. 2

In general, such a string has a characteristic maximum length, either fixed for all time (as is the case with filenames), or possibly varying in time (as with ident file entries). 3

Typically, the programmer guesses at an appropriately large maximum length and codes it explicitly in the declaration. Our's must be the only large system in existence where such practices are tolerated. I just made a change to the ident system which invalidated several routines' assumptions about the maximum size of an ident file entry, and had to discover those bugs the hard way, one at a time. 4

Wouldn't it be nice if one could declare a maximum string length with a declared symbol, in addition to with a self-defining term. Then such length dependencies would be explicit, and changeable by simply redefining the symbol and recompiling the affected files. How difficult a change to the L10 compiler is this, and isn't this the time to make it? 5

JEW 31-JAN-74 17:01 21704

LOCAL STRING watchamacallit [Idunkno]

(J21704) 31-JAN-74 17:01; Title: Author(s): James E. (Jim) White/JEW; Distribution: /NPG NP; Sub-Collections: SRI-ARC NPG; Clerk: JEW;

JCN 31-JAN-74 21:16 21705

Reply to (21678,) on Hardcopy vs Online Defaults for Delivery of Journal Documents

Mike and Jim: I want to talk about the proposed ident default to online change. I'm wondering about your ideas concerning the present identfile entries, many of whom are people we are keeping track of and who may never have online access. I can't see us going out to them and asking hardcopy or not. I do see the need to keep from sending hardcopy to those who can get onlne delivery somewhere and also see the rising cost of hardcopy mailing. We did make the hardcopy system available as much for our own convenience as the addressees. I'm sure Doug has some ideas on this too. Perhaps meet sometime next week? Jim Norton 1

JCN 31-JAN-74 21:16 21705

Reply to (21678,) on Hardcopy vs Online Defaults for Delivery of Journal Documents

(J21705) 31-JAN-74 21:16; Title: Author(s): James C. Norton/JCN; Distribution: /DCE JHB MDK RWW JEW CHI; Sub-Collections: SRI-ARC; Clerk: JCN;

ADO 31-JAN-74 22:03 21706

FTP and MP

This is prompted by Jon's note, but has been on my mind for some time. 1

JEW's mail protocol had to borrow some FTP commands in order to have the equivalent of the MLFL command available. I think the way this should work is that MAIL could either be invoked from within FTP, giving access to the mail protocol with the current values of the FTP transfer parameters in effect (in which case the FILE command would be allowed, and when given, the effect of MLFL would take place, with the transfer parameters in effect at entry to the MP), or else from the top level (whatever that might be,) in which case only the TEXT command would be allowable, ie when invoked from without the FTP environment, only the non FTP type of mail input would be allowed. 2

Wouldn't it be appropriate to authorize some very limited subset of the MP as official rather than reinstate the old commands which it was designed to replace? Is there no interest in an executive protocol? 3

ADO 31-JAN-74 22:03 21706

FTP and MP

(J21706) 31-JAN-74 22:03; Title: Author(s): A. D. (Buz) Owen/ADO; Distribution: /JBP MCK JEW; Keywords: FTP MP protocol; Sub-Collections: NIC; Clerk: ADO;

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

23 JAN 74
SRI-ARC 21587

Proposal For Research
SRI No. ISU 73-175 (revised)

A KNOWLEDGE WORKSHOP FOR THE NAVY: AN EXPERIMENT IN TECHNOLOGY TRANSFER

Part One--Technical Proposal

Prepared for:

Information Systems Branch
Office of Naval Research
Department of the Navy
Arlington, Virginia 22217

Attn: Mr. A. Kenneth Showalter

Submitted by:

R. W. Watson, Assistant Director
Augmentation Research Center

J. C. Norton, Assistant Director
Augmentation Research Center

Approved:

D. C. Engelbart, Director
Augmentation Research Center

Bonnar Cox, Executive Director
Information Science and Engineering Division
Stanford Research Institute

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

23 JAN 74
SRI-ARC 21587

Proposal For Research
SRI No. ISU 73-175

A KNOWLEDGE WORKSHOP FOR THE NAVY: AN EXPERIMENT IN TECHNOLOGY TRANSFER

Part Two--Contractual Provisions (revised)

Prepared for:

Information Systems Branch
Office of Naval Research
Department of the Navy
Arlington, Virginia 22217

Attn: Mr. Kenneth Showalter

JCN RWW 31-JAN-74 22:14 21707

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

rww jcn of (19938,) Contractual Revision

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

First 7 statements are blank to keep same statement umbers of the original document (19938,)

1
2
3
4
5
6
7
8

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

A KNOWLEDGE WORKSHOP FOR THE NAVY: AN EXPERIMENT IN TECHNOLOGY TRANSFER

PART TWO--CONTRACTUAL PROVISIONS 9

I ESTIMATED TIME AND CHARGES 10

It is proposed that the research work outlined herein by Stanford Research Institute be performed during a period of 12 months, starting 2 January 1974. 10a

Pursuant to the provisions of ASPR 16-206.2, attached is a cost estimate and support schedule in lieu of the DD Form 633-4. Also enclosed is a signed form complete except as to the "Detail Description of Cost Elements." 10b

II GOVERNMENT-FURNISHED EQUIPMENT 11

The performance of the proposed work will involve the use of government-furnished equipment covered by Air Force (RADC) Contract No. F30602-72-C-0313. 11a

III REPORTS 12

A Final Technical Report will be submitted upon completion of the work. 12a

IV CONTRACT FORM 13

It is requested that any contract resulting from this proposal be awarded on a cost-plus-fixed-fee basis as a supplemental agreement to Contract No. N00014-70-C-0302. 13a

V ACCEPTANCE PERIOD 14

This proposal will remain in effect until 15 February 1974. If consideration of the proposal requires a longer period, the Institute will be glad to consider a request for an extension of time. 14a

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

Cost Estimate:

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

COST ESTIMATE

(for the one year period starting 1/2/74)

Personnel Costs		
Prof	1154 hrs.	
Clerical	340 hrs.	
Total Direct Labor		10,407
Payroll Burden @ 28.0% *		2,914
Total Labor and Burden		13,321
Overhead @ 105% *		13,987
Total Personnel Costs		$ 27,308
Direct Costs		
Travel		$ 3,220
7 trips Wash DC @ 336 =	2,352	
28 Days Subsistence @ 31 =	868	
Seminar arrangements		2,000
(Demonstration equipment rental, shipping, communications)		
Report Costs		336
Total Direct Costs		$ 5,556
Total Estimated Cost		$ 32,864
Fixed Fee		2,300
TOTAL ESTIMATED COST PLUS FIXED FEE		$ 35,164

* See following Schedules

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

Cost Schedules:

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

SCHEDULE A

DIRECT LABOR

Direct labor charges are based on the actual salaries for the staff members contemplated for the project work plus a judgmental factor applied to base salary for merit increases during the contract period of performance. Frequency of salary reviews and level of merit increases are in accordance with the Institute's Salary and Wage Payment Policy as published in Topic No. 505 of the SRI Administration Manual and as approved by the Defense Contract Administration Services Region.

SCHEDULE B

OVERHEAD AND PAYROLL BURDEN

The overhead and payroll burden rates have been quoted at our best estimate of anticipated 1974 expenses.

Rather than setting forth these specific rates, it is requested that contracts provide for reimbursement at billing rates acceptable to the Contracting Officer subject to retroactive adjustment to fixed rates negotiated on the basis of historical cost data. Included in payroll burden are such costs as vacation, holiday, and sick leave pay, social security taxes, and contributions to employee benefit plans.

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

SCHEDULE C

TRAVEL COSTS

Air fare is based on prices for travel to Washington D.C. at $336 round trip tourist established in the Official Airline Guide dated January 1, 1974.

Domestic subsistence rates and travel by private auto are established standards based on cost data submitted to and approved by DCAA.

SCHEDULE D

REPORT COSTS

Report costs are estimated on the basis of the number of pages of text and illustrations and the number of copies of reports to be produced, in accordance with the following rates per page which have been reviewed by DCAA:

Editing	$ 2.29
Composition	$ 2.22
Report coordination	.63
Proofreading	.92
Press/Bindery/Photography	.021 per impression

The following is a breakdown of the estimated cost of report production:

Printing, 49 pages at $ 6.06 per page = (including editing, composition, report coordination, proofreading)	$ 297
Press and bindery at $ .021 per printed page = (for 37 printed pages - 50 copies)	39
Total Estimated Report Costs	336

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

JCN RWW 31-JAN-74 22:14 21707

Proposal for Research No. ISU 73-175
(revises Part Two of 19938)

(J21707) 31-JAN-74 22:14; Title: Author(s): James C. Norton, Richard W. Watson/JCN RWW ; Distribution: /dce rww jcn ; Sub-Collections: SRI-ARC; Clerk: JCN ;
Origin: <NORTON>ONRREVCOSTS.NLS;1, 31-JAN-74 22:10 JCN ;

JCN RWW 31-JAN-74 22:22 21708

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

Revision of (18368,) Part Two Contractual Part at same scope of work as current project 1868. Technical portion of original ISU 73-128 is replaced by this continuation.

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

NETWORK INFORMATION CENTER AND
AUGMENTED KNOWLEDGE WORKSHOP DEVELOPMENT

CONTRACTUAL PROVISIONS 1

I PROPOSED CONTINUATION AND ESTIMATED TIME AND CHARGES 2

It is proposed that the research work now being performed by Stanford Research Institute under Contract F30602-72-C-031 be continued during the period starting 9 February 1974 and ending 30 June 1974. 2a

Pursuant to the provisions of ASPR 16-206.2, a cost estimate and support schedule are attached in lieu of the DD Form 633-4. Also enclosed is a signed form complete except as to the "Detail Description of Cost Elements." 2b

II GOVERNMENT-FURNISHED EQUIPMENT 3

The performance of the proposed work will involve the use of government-furnished equipment covered by Air Force (RADC) Contract No. F30602-72-C-0313. 3a

III REPORTS 4

The Final Technical Report on the above-referenced contract will be submitted 30 days after 30 June 1974. 4a

The Institute will submit management reports on a quarterly basis as under the present contract. 4b

IV CONTRACT FORM 5

It is requested that any contract resulting from this proposal be awarded on a cost-plus-fixed-fee basis as a supplemental agreement to Contract No. F30602-72-C-0313. 5a

V ACCEPTANCE PERIOD 6

This proposal will remain in effect until 8 February 1974. If consideration of the proposal requires a longer period, the Institute will be glad to consider a request for an extension of time. 6a

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

Cost Estimate:

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

COST ESTIMATE

(for the period from 2/8/74 to 6/30/74)

Personnel Costs			
Proj Supv	435 hrs.		
Senior Prof	840 hrs.		
Prof	12,330 hrs.		
Technical	1,260 hrs.		
Clerical	1,680 hrs.		
Total Direct Labor			112,600
Payroll Burden @ 28.0% *			31,528
Total Labor and Burden			144,128
Overhead @ 105% *			151,334
Total Personnel Costs		$	295,462
Direct Costs			
Travel		$	4,590
10 trips East @ 336 =	3,360		
30 Days Subsistence @ 31=	930		
20 Days Car Rental @ 15=	300		
Facility *			157,915
Report Costs			2,133
Total Direct Costs		$	164,638
Total Estimated Cost		$	460,100
Fixed Fee			27,606
TOTAL ESTIMATED COST PLUS FIXED FEE		$	487,706

* See following Schedules

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

Cost Schedules:

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

SCHEDULE A

DIRECT LABOR

Direct labor charges are based on the actual salaries for the staff members contemplated for the project work plus a judgmental factor applied to base salary for merit increases during the contract period of performance. Frequency of salary reviews and level of merit increases are in accordance with the Institute's Salary and Wage Payment Policy as published in Topic No. 505 of the SRI Administration Manual and as approved by the Defense Contract Administration Services Region.

SCHEDULE B

OVERHEAD AND PAYROLL BURDEN

The overhead and payroll burden rates have been quoted at our best estimate of anticipated 1974 expenses.

Rather than setting forth these specific rates, it is requested that contracts provide for reimbursement at billing rates acceptable to the Contracting Officer subject to retroactive adjustment to fixed rates negotiated on the basis of historical cost data. Included in payroll burden are such costs as vacation, holiday, and sick leave pay, social security taxes, and contributions to employee benefit plans.

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

SCHEDULE C

TRAVEL COSTS

Air fare is based on prices for travel to Washington D.C. at $336 round trip tourist established in the Official Airline Guide dated January 1, 1974.

Domestic subsistence rates and travel by private auto are established standards based on cost data submitted to and approved by DCAA.

SCHEDULE E

REPORT COSTS

Report costs are estimated on the basis of the number of pages of text and illustrations and the number of copies of reports to be produced, in accordance with the following rates per page which have been reviewed by DCAA:

Editing	$ 2.29
Composition	$ 2.22
Report coordination	.63
Proofreading	.92
Press/Bindery/Photography	.021 per impression

The following is a breakdown of the estimated cost of report production:

Printing, 300 pages at $ 6.06 per page = (including editing, composition, report coordination, proofreading)	$ 1,818
Press and bindery at $ .021 per printed page = (for 300 printed pages - 50 copies)	315
Total Estimated Report Costs	2,133

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

SCHEDULE F
FACILITY COSTS

SUMMARY:

$ 145,246	Equipment Cost
12,699	Maintenance and Operation
$ 157,915	Total Facility Costs

DETAILS:

Base Facility Support Details

Total Equipment Costs		$ 145,246
Computer Facility		$ 129,010
PDP-10 lease costs:		
Monthly: 4.75 Mo. @ $ 27,160		
(P.O. B13477) consisting of:		
Basic Facility (*)	$ 13,986	
DEC Disk Pack Equipment (**)	6,514	
DEC ME10 Memory (16k) Addition	1,250	
DEC Maintenance	5,410	
TOTAL	$ 27,160	

(*) Includes leased from DEC:
KA10 Arithmetic Processor
KM10 Fast Register
KT10A Dual Mem Protect Relocate
TM10A Mag Tape Control
TD10 DECTape Control
DC10A Data Line Scanner Control
TU30-B 7-Channel Mag Tape (two)
TU55 DECTape Transport (two)
DC10B 8-Line Group Unit
MA10 Core Memory (eight)
MC10 Memory Ports (24)

(**) Includes:
DF10 Data Channel (two)
RP02 Disk Controller (two)
RP02 Disk (six)

Other leased equipment 4.75 months $ 9,514

Dataphones (7)	$ 257	(329-8220-6)
Couplers (8)	120	(B94707)
Cassette Recorders (6)	687	(B55739)
T-I Terminals (9)	939	(B94691)
Total monthly rate	$ 2,003	

Telephone expenses $ 6,722

Lines to remote sites $ 2,532

Voiceline 4.75 months @ 365 /mo = 1,734
(PR 1KP1179)

Voiceline 4.75 months @ 168 /mo = 798
(PR 1KP1861)

NIC service $ 4,190

Fixed cost 4.75 months @ 132 /mo = 627
including
PA Answering Service @ $40 /mo
(B77425)
Enterprise Service @ $92 /mo
(SRI 23-70)

Toll calls 4.75 months at 750 /mo = 3,563
(based on operating experience with NIC costs)

Maintenance and Operation $ 12,669

Maintenance Materials $ 3,350

Such as:

Picture tubes (P.O.64901)	6 @	75=	450
Vidicons (P.O.66508)	6 @	150=	900
Other			2,000

(Actual components and costs will depend upon the results of further design work. This estimate is based upon previous experience in the field.)

Other Operating Costs $ 9,319

Mag tape (SRI Comp Center)	40 @ $15	$ 600
NIC mailing costs =		2,969
Paper tape, printer paper,etc.=		1,000
Xerox for NIC dist		4,750

(These estimates are based upon initial and anticipated experience in NIC.)

23 JAN 74
SRI-ARC 21558

SRI Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

NETWORK INFORMATION CENTER AND AUGMENTED KNOWLEDGE WORKSHOP DEVELOPMENT

Prepared for:

Rome Air Development Center
Griffis Air Force Base
Rome, New York

Attn: Duane Stone

Submitted by:

R. W. Watson, Assistant Director
Augmentation Research Center

J. C. Norton, Assistant Director
Augmentation Research Center

Approved:

D. C. Engelbart, Director

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

Augmentation Research Center

Bonnar Cox, Executive Director
Information Science and Engineering Division
Stanford Research Institute

Proposal for Research No. ISU 73-128 (revised)
Extension of Contract F 30602-72-C-0313

(J21708) 31-JAN-74 22:22; Title: Author(s): James C. Norton, Richard W. Watson/JCN RWW ; Distribution: /dce jcn rww ; Sub-Collections: SRI-ARC; Clerk: JCN ;
Origin: <NORTON>IPTCOSTS.NLS;2, 28-JAN-74 14:09 JCN ;

CHI 1-FEB-74 06:03 21709

links, dae, statement names

Ken, a statement name must begin with an alpha. What is the ambiguity? unless you are woerried about juxtaposition problem, I dont see any difficulties. 1

links, dae, statement names

(J21709) 1-FEB-74 06:03; Title: Author(s): Charles H. Irby/CHI;
Distribution: /KEV; Sub-Collections: SRI-ARC; Clerk: CHI;

ARH 1-FEB-74 07:03 21710

Keep the ball rolling.

Right on brother i.e., I support Mike's comments on NLS output directives and the inconsiderate octal 37's.

Alan 1

ARH 1-FEB-74 07:03 21710

Keep the ball rolling.

(J21710) 1-FEB-74 07:03; Title: Author(s): Alan R. Hill/ARH;
Distribution: /USING; Sub-Collections: NIC USING; Clerk: ARH;

DVN 1-FEB-74 08:26 21711

For Occasional Verbose Feedback

Continuing the discusson between Smokey and I about how a experienced user gets feedback when he wants to use an unfamiliar command:
Execute Verbose could but him in the most verbose mode for all feed back for the single following command. 1

DVN 1-FEB-74 08:26 21711

For Occasional Verbose Feedback

(J21711) 1-FEB-74 08:26; Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: DVN;

DVN 1-FEB-74 09:06 21713

Group Maddness in COM and DPCS

I just discovered that Mike Kudlick and Jake Feinler are not in the DPCS or COM groups. That means several joural itmes that I thought I sent to them over the years didn't reach them. I have just secondarilly distributed to them the most important recent items. I have a strong belief that they were in those groups in the past. Amyway. Elizabeth is co-ordinator of both and I suggest she add them or ask Marcia to add them. 1

The COM group is, by the way, the subgroup of DPCS that includes only people who still work here. 2

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Group Maddness in COM and DPCS

(J21713) 1-FEB-74 09:06; Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /DPCS COM JAKE MDK; Sub-Collections: SRI-ARC DPCS COM;
Clerk: DVN;

Commas and Markers

I just discovered that markers survive Update Compact. Great 1

In old TNLS a marker will work as part of a link to antohter file but not as a separate part of the address. E.G. A:(dvn,#j) will get you my journal branch but A: (dvn,) #j will get you #j?. 2

In XNLS on the other hand, markers will work as button down typeins, but not at all in links...which somewhat diminishes the value of their survival in Update Compact. 3

From time to time I have had such a long link e. g. (xjournal,12345,1ab) that the disply won't make a reasonable line because it breaks only at invisisbles. If the display looked for ', as well it would save us an occasional really ugly screen. 4

You might or might not want long numbers with commas to be broken. If you did not want them broken it would be easey to check if a comma were in a number. 4a

In understand that Kirk has suggested display lines break at hyphens. I second that . 5

DVN 1-FEB-74 09:40 21714

Commas and Markers

(J21714) 1-FEB-74 09:40; Title: Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: DVN;

udef 2
- - - -

The following are some "things people do with computers": 1

1. Source program file creation, modification, deletion. 2

Either interactively (editor) or batch (deck submission). 2a

2. Data file creation, modification, deletion. 3

User-created (character), program created (binary). 3a

3. Object program library creation and maintenance. 4

Compiling into specified library, use of generations of program changes, object module patching. 4a

4. Specification of files for program I/O. 5

Allocation of space, communication with various languages. 5a

5. Program compilation. 6

Optimization options, listing control, subroutines. 6a

6. Program loading (linkage editing). 7

Control of library search, specification of physical arrangement of modules, handling of "common". 7a

7. Program execution. 8

Calling main program, parameter passing. 8a

8. Program debugging. 9

Display of variables and registers, dumps, setting of variables and registers, stopping and restarting, break- points. 9a

9. Control of devices. 10

Tapes, disks, printers, readers, volume mounting. 10a

10. Sharing of files. 11

Access control, sharing by list, naming conventions. 11a

11. Program-program interprocess communication. 12

Naming conventions, command communications, data communications, control of receipt of messages. 12a

12. User-user interprocess communication. 13

Naming conventions, "linking" versus "sending a single message". 13a

13. Use of system control characters. 14

Interrupt, interrogation, input editing. 14a

14. Obtaining system status information. 15

Performance, other users, configuration. 15a

15. Obtaining usage status information. 16

Memory allocated, cpu time, charges, file storage used. 16a

16. Interrupt handling. 17

I/O, user-generated, machine-generated, interprocess, timer. 17a

17. Controlling system operating modes. 18

Keyboard mode, translations, message suppression, control of prompting. 18a

18. File archiving. 19

Automatic and/or user-controlled, restoring files. 19a

19. Initiation and control of nonconversational jobs. 20

Creating a job from a terminal session, "detaching" a terminal from a task, monitoring and controlling such a task. 20a

20. Definition of user-written commands. 21

Naming, parameter passing, sharing such commands, use of libraries. 21a

21. System tailoring. 22

Synonyms for commands, defaults for parameters, use of user-supplied messages. 22a

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22. Reporting of problems. 23

On-line versus off-line, system problems, application program problems. 23a

23. Message delivery. 24

Submission, notification, delivery (on-line, off-line). 24a

24. Access to "help" facilities. 25

On-line, off-line, consultant, scenarios. 25a

For the following application areas, I have listed the numbers from the above list of things that users in that class would be interested in: 26

Program preparation (interactive). 27

(novice) 1,2,3,4,5,6,7,13,14,24
(normal) 1,2,3,4,5,6,7,8,13,14,15,16,17,24
(expert) 1,2,3,4,5,6,7,8,11,13,14,15,16,17,20,21,22,24 27a

Program preparation (batch). 28

(novice) 1,2,3,4,5,6,7,24
(normal) 1,2,3,4,5,6,7,8,14,15,16,24
(expert) 1,2,3,4,5,6,7,8,11,14,15,16,22,24 28a

Execution of locally developed programs (programs written by or for the local user for which expertise exists locally).
(novice) 2,4,6,7,15
(normal) 2,3,4,6,7,9,10,14,15,17,18
(expert) 2,3,4,6,7,9,10,14,15,17,18,19,20,21 29

Execution of remotely developed programs (application packages). 30

(novice) 2,4,7,15,22
(normal) 2,4,7,9,10,14,15,17,18,22
(expert) 2,4,7,8,10,14,15,17,18,19,20,21,22 30a

Teleconferencing. 31

(novice) 12,13
(normal) 12,13,17
(expert) 12,13,17,21 31a

Use of "mail" services 32

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(novice) 23
(normal) 1,13,17,23
(expert) 1,13,17,21,23 32a

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NJN 1-FEB-74 11:37 21719

udef 2
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(J21719) 1-FEB-74 11:37; Title: Author(s): Nancy J. Neigus/NJN ;
Distribution: /NJN ; Sub-Collections: NIC; Clerk: NJN;

udef 1
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A Slightly Different Outlook on the User Community 1

This view of the User population is based on access to computing functions, in particular to the ARPANET. Some of the access is very narrow (in reality most, in the current state of the Network); some uses the (potential) distributed resource abilities of the net. 2

1. Single host users 3

a. Local user - A user with a direct line into the only computer he uses. E.g. the company computer. Network help programs, etc. probably have no dealings with this type of user; service computer is responsible. 3a

b. Semi-local - A user dialing in to the computer, e.g. a local service computer across town. Same as 1a essentially. 3b

c. Remote-local (remote interactive) - Access to computer is through TIP or ANTS where user does not have computing facilities on his end of the connection. User problems and issues, in this case, are the responsibility of the Service computer group, and some network group, e.g. TIP group, ANTS group, NCC or other subnetwork group. 3c

d. Remote batch - This currently would mean an RJE device dialed directly into some computer site. In the future, RJE devices will be able to be attached to both the ANTS and the TIP. When that occurs the responsibility for user issues will lie with with those support groups, and to a lesser extent with the service site. 3d

2. Multi-host from Primary-site users - This group has a primary local computer of the sort described in 1a through 1c, but uses other computational facilities on the net to a lesser extent. 4

a. TELNET access - The primary Host's user-TELNET program is used to access other computers much as in case 1c. The motivation might be to use a resource not available on the primary site, such as NLS at the NIC, or ALGOL at UCSD. The responsibility in this case would lie with the two Host computers, and with the overseeing network group. 4a

b. Function-oriented protocol access - The user would need to use other protocols, such as FTP or RJE, to accomplish work on other computers. For example, a file prepared on Tenex might be FTP'ed to MUltics to use their RUNOFF, or to another site that has a desired applications package, such as

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simulations subroutines. This would require additional responsibility on the part of the site that performs the user end of the protocol. 4b

c. Multi-server access - This is a generalization of 1c, such that the TIP or ANTS user shares his work among many sites, and may not have a primary site. This is the group that a network help and feedback facility can best service. 4c

3. Distributed resource use from Primary site - The user accesses resources from other computers but his primary computer does all the work. The user never really sees the other computers involved, and always interacts in the language of his primary computer. A current example is shipping Journal mail to and from the NIC, or using the Tenex RJS subsystem to do RJE to CCN. A future example is RSEXEC. In this case the responsibility lies entirely with the primary site. Of course, cooperation among the sites is essential for the distributed system to work. 5

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NJN 1-FEB-74 11:39 21720

udef 1
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(J21720) 1-FEB-74 11:39; Title: Author(s): Nancy J. Neigus/NJN ;
Distribution: /NJN ; Sub-Collections: NIC; Clerk: NJN;

MDK 1-FEB-74 12:01 21721

HELP as an NLS command

Charles ... Please consider this suggestion as a kind of strong
"lobbying" (I really would like to see it happen):
Add this command to NLS:
*HELP <CA>
which would be identical in function to
*GOTO HELP <CA>
and would be recognized in expert mode by the letter "H"
My reasoning is that HELP as a command is what one uses in FTP,
TELNET, RSEXEC, and maybe other subsystems here and elsewhere,
and I think it would be extremely useful as well as consistent
for NLS users to be able to type H for HELP when they're in need,
without having to remember (or even know) that it's GOTO HELP.
What do you think ? ... Mike 1

MDK 1-FEB-74 12:01 21721

HELP as an NLS command

(J21721) 1-FEB-74 12:01; Title: Author(s): Michael D. Kudlick/MDK; Distribution: /CHI NEWNLS RWW; Sub-Collections: SRI-ARC NEWNLS; Clerk: MDK;

KIRK 1-FEB-74 12:03 21722

BUG in the freeze statement command

The freeze statement command in the new system (and old) allows a place for specifying viewspecs, but when I specify the viewspecs "of" the frozen statement is not displayed. 1

KIRK 1-FEB-74 12:03 21722

BUG in the freeze statement command

(J21722) 1-FEB-74 12:03; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /NEWNLS; Sub-Collections: SRI-ARC NEWNLS; Clerk: KIRK;

NP for an Offquota command

The equivalent of an Offquota command (for the group allocation system) is needed to maintain the first-on, last-off convention and make cooperation among members of each group much less painful. This would allow you to keep your place in the offquota stack when another member of your group is scheduled to be onquota. Currently when you are automatically made onquota, you must log out to allow a scheduled person to log in.

1

KIRK 1-FEB-74 12:28 21723

NP for an Offquota command

(J21723) 1-FEB-74 12:28; Title: Author(s): Kirk E. Kelley/KIRK;
Distribution: /NP JCN; Sub-Collections: SRI-ARC NP; Clerk: KIRK;

JBN 1-FEB-74 13:38 21724

Subscriptions received at ARC, and Announcement of Routing Provision

ARC subscribes to a number of periodicals. For a short time ARC published a bulletin of the items of possible interest in these issues as received. This effort could not be continued, and at present most of these publications are merely checked in and filed in the "Reading Area". 1

For a time, the contents pages of the more substantive periodicals were copied and posted. This effort received little attention, and at present the board on which they were posted is in semi-darkness. If you would like the practice continued, let JBN know. 2

This is a list of periodicals being received. If you would like to have any of these routed to you before they are filed, please inform Carol, and she will see that your name is recorded for this. 3

If more than one person wants to see a periodical, the first one requesting will see it first. The copy will go out with all names on it, and should be forwarded by the person receiving. 4

If there are other publications you would like ARC to subscribe to, please tell JBN. 5

Business & Society Review/Innovation 6

Communications of the ACM 7

Computer 8

Computers and the Humanities 9

Computerworld 10

Datamation 11

DEC Systems Bulletin 12

Electronics 13

Finite String 14

FIPS Publications 15

Fortune 16

Futures Conditional 17

The Futurist 18

Government Reports Announcement 19

IBM Computing Report 20

IEEE Trans. on Information Theory 21

IEEE Trans. on Systems, Man, & Cybernetics 22

International Journal of Computers and Information Sciences 23

International Journal of Man-Machine Studies 24

Journal of the American Society for Information Science 25

Linguistics in Documentation 26

Microform Review 27

Modern Data 28

Naval Research Reviews 29

Networks 30

On-Line, News of Educational Uses of Computers Among Michigan Colleges and Universities 31

PEN, Peninsula Electronics News 32

Psychology Today 33

Reason 34

Reprographics 35

Science 36

Science and Government Report 37

Spectrum 38

Telesis 39

Technology Review 40

Urban Telecommunications Forum 41

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Subscriptions received at ARC, and Announcement of Routing Provision

(J21724) 1-FEB-74 13:38; Title: Author(s): Jeanne B. North/JBN;
Distribution: /SRI-ARC; Sub-Collections: SRI-ARC; Clerk: JBN;
Origin: <NORTH>SUBSNOTICE.NLS;1, 1-FEB-74 13:09 JBN ; .LBS;

DCE 1-FEB-74 14:13 21725

ARC meeting Mon 4 Feb at 1330

There will be an all-ARC meeting Mon 4 Feb at 1330. Subjects: general status; DEIS action; report from Dick, Paul, and Charles about the IPTO Management Systems Technology program-planning meeting in Cambridge 31 Jan and 1 Feb. RSVP to Jeanne Leavitt. Doug 1

DCE 1-FEB-74 14:13 21725

ARC meeting Mon 4 Feb at 1330

(J21725) 1-FEB-74 14:13; Title: Author(s): Douglas C. Engelbart/DCE; Distribution: /SRI-ARC JML(Jeanne: compile expected attendance list by Mon 1130); Sub-Collections: SRIARC RC SRI-ARC; Clerk: DCE;

MAP 1-FEB-74 14:16 21726

neted goodies

Hi--
in <mit-multics>usage at NIC there is supposed to be an iteration of the NETED usage document (and hence of the spec). i've edited out all backspaces and underscores, in deference to other peoples' systems' assumptions, and changed tabs to 10 spaces. note that it's meant for line printer output, so each line begins with 20 spaces and pages are separareted by formfeeds (14(8)). if you will be printing it out on a system which doesn't like such things, i'd suggest changing the 20 sps to 5 when you get it there, and if need be the formfeeds to some appropriate number of newlines (i think 6).
cheers, map
p.s. I think I've learned a way of taking care of leading sps and the ff's in future but won't re do this time unless I hear that everybody hates the form it came out in.
p.p.s. non-tenex users, beware: I SUP"SPECT THAT EVEN THIS ROUTE MIGHT somehow have been corrupted by 37's as newlines, but am far too pooped to xfer the thing back to check.
p**3.s. i promise the next iteration will be distributed in a form more convenient to pick up--provided i get input on what that is. for that matter, i think i'll send out hard copy next time.
re-cheers, m

1

MAP 1-FEB-74 14:16 21726

neted goodies

(J21726) 1-FEB-74 14:16; Title: Author(s): Michael A. Padlipsky/MAP
; Distribution: /NETED ; Sub-Collections: NIC NETED; Clerk: MAP;