Scheduled Software Maintenance

This is a reminder that Network Software Maintenance is scheduled
between the hours of 0700 and 0900 (Eastern Time) on Tuesday, 9 April
1974.  Although software releases are checked out as much as possible
in the BBN test cell, there are sometimes problems of scale  which
are not detected until after a release; hence there is a small but
finite possibility that the software will be troublesome for a few
hours after the scheduled release.
Sincerely,
Alex McKenzie (for the Network Control Center)

1

Scheduled Software Maintenance

(J30406)    4-APR-74 08:01;    Title: Author(s): Alex A, McKenzie/AAM;
Distribution: /NLG RADC; Sub-Collections: NIC NLG RADC; Clerk: AAM;

istaffnotes/4 April

Don,t be late on AFSC due dates                                                 1

There are 12 engineering slots gs-11 in NCA                                     2

The replies on the IG no notice inspection are due to aggie by 11
AprilTom you will have to push us                                               3

We have been advised to start the paper work on RAY he may make it
before JULY and shortly after looks like a for sure                             4

We have to brief Helimier here on the 15 and 14 of May and the 5550
program or 6,3 in Washington on the 9th I belivie,                              5

   In that regard the steering committee has been abolished and
   RADC/IS is in charge of the project,                                         5a

      The question as to what is the purpose of next weeks briefing
      on security was brought up,It may be a must for someone like
      Bill Rzepka to attend along with roger ,                                  5a1

   It was also stressed that a Col Whiticaker is really pushing for a
   heavy program in Software reliability and production,he works for
   Helimier and feels that our 6,3 program should be just that,                 5b

I brought up the question of who was going to do the penetration
studies for the Multics plan                                                    6

   A Barnum insist that we will provide the people but ESD must
   provide the direction Bill and I will have to work this one out,             6a

The radc mis was brought up .The div wants a transition meeting where
the facility can insure us that every thing is working on the CMS and
PMS files,                                                                      7

   I brought up for instance that it was my understanding that the
   terminals had some han ups Capt Stionson insure me that the
   problem has been resoloved,                                                  7a

We will be asked by Dan Richards for sure to provide inputs to him on
what we have done or could do for the spo programs as they are
briefied at AFSC headquaters,It seems that the SPO dir4ector is
required to have a special slide is all of his r3eviews,They have a
schedule which will be put in the system,I think we will make To
responsible to remind us which program is being briefed                        8

Apparently,Roger Shell is trying to get us to sponser some work by
Cheetam in OS dev,As every one know we have been drummed out of there
a number of times Bill patterson has to prepare a reply which should
reflect our postion not only for us but AFSC in general whatever we

istaffnotes/4 April

say,He will contact Bill Rzepka possibly for his opinion or any one
else that wants to take a shot at it.After my stint i Boston i am not
so sure our current postion of hands off the os is very realistic as
about every pne but us makes allkinds of MODS to their OS.          9

Does anyone have a report on a system called MIDIMS by GE,Bill   .
Patterson has lost it and it belongs to the library.              10

istaffnotes/4 April

(J30407)  4-APR-74 10:14;   Title:  Author(s): John L. McNamara/JLM;
Distribution: /RADC; Sub-Collections: RADC; Clerk: JLM;
Origin: <MCNAMARA>STAFFNOTES.NLS;2, 4-APR-74 10:08 JLM ;

test of mail system                                                        1

(J30409)    4-APR-74 14:42;    Title: Author(s): John R, Pickens/JRP;
Distribution: /JRP; Sub-Collections: NIC; Clerk: JRP;

Table of Contents View of Sorted Home T/A Comments

I thought you might be interested in seeing these (?)  The comments
themselves are in files (useques,) and (impacts,).  I can't believe
how much time we could have saved if we'd done it right the first
time.

Table of Contents View of Sorted Home T/A Comments

Table of Contents View of Sorted Home T/A Comments

Table of Contents View of Sorted Home T/A Comments


(J30410)  4-APR-74 15:13;  Title:  Author(s): Michael T. Bedford/MIKE;
Distribution: /LHD MIKE; Sub-Collections: NIC; Clerk: MIKE;

Chagne to Telenet INWG mailing list

Larry, Chris, Barry:                                                                          1

   I am pruning INWG list a little and wondered if it is sufficient
   to include Barry only (or Larry or Chris), or whether you all feel
   the need to get the INWG stuff direct? Reply to CERF@ISI or via
   NIC [ident VGC]. Unless I hear otherwise, I will leave Larry and
   Chris off.                                                                                 1a

   Vint                                                                                       1b

Chagne to Telenet INWG mailing list

(J30411)  4-APR-74 18:26;   Title:  Author(s): Vinton G, Cerf/VGC;
Distribution: /LGR CBN BDW; Sub-Collections: NIC; Clerk: VGC;
Origin: <SU-DSL>MSG,NLS;2, 4-APR-74 18:25 VGC ;

BNR INWG mailing list change

Larry, Chris, Barry:                                                      1

    I am pruning INWG list a little and wondered if it is sufficient
to include Barry only (or Larry or Chris), or whether you all feel
the need to get the INWG stuff direct? Reply to CERF@ISI or via
NIC [ident VGC]. Unless I hear otherwise, I will leave Larry and
Chris off.                                                               1a

    Vint                                                              1b

Ottfried and Bill:                                                       2

    Is it sufficient for Alex Curran to be on the INWG mailing list or
should I keep your names on also? If I hear nothing, I will keep
Alex Curran only.                                                        2a

    Vint Cerf                                                         2a1

BNR INWG mailing list change

(J30412)   4-APR-74 18:31;   Title:  Author(s): Vinton G. Cerf/VGC;
Distribution: /OR WWC; Sub-Collections: NIC; Clerk: VGC;
Origin: <SU-DSL>MSG,NLS;2, 4-APR-74 18:25 VGC ;

Changes to INWG list (idents left out)


Marcia, retain lgr, or, wwc, cbn, wbb, until further notice and
cancel Keith Sandum (KNS). I have sent messages to lgr, et al to ask
whether i can take them off the list. Vint                              1

Changes to INWG list (idents left out)


(J30413)    4-APR-74 18:33;    Title:  Author(s): Vinton G. Cerf/VGC;
Distribution: /MLK; Sub-Collections: NIC; Clerk: VGC;

CCL comments

To the members of CCL:
    I have made a few comments of the previous discussion,  THey may
be found in day-ccl.nls or day-ccltext.txt both under the illinois
directory,   Actions are desired,
John                                                                1

CCL comments

(J30414)    4-APR-74 19:33;    Title:  Author(s): John D. Day/DAY;
Distribution: /CCL; Sub-Collections: NIC CCL; Clerk: DAY;

Request for evaluation of three UTAH people

Barry: Can you give me a capsule comparison of the academic and
research capacities of Jim Clark, Ed Catmull and Fred Parke? They are
being considered for Stanford Appointments and we can use some
further opinion of these three candidates. Thanks, Vint [CERF@ISI]          1

1

Request for evaluation of three UTAH people

For Sucollection and Comments Commands in Forward

I just had occasion to add a recently sent journal item to a
subcollection, if I could, I can't tell you how many time I have had
that wish before,  Likewsie when I have sent something to some one by
secondary distribution I have wished to explain who sent it and why,          1

On occasion I have resubmitte a journal item, giving it a new number,
in order to distribute it with an explanantion or too get it into a
subcollection, but that strategy seems awkward and expensive,                 2

This is a plea that "forward" in "readmail" include a subcollection
and a comments field,                                                          3

For Sucollection and Comments Commands in Forward

(J30416)  5-APR-74 11:54;   Title:  Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /NEWNLS MDK JBN JEW; Sub-Collections: SRI-ARC NEWNLS;
Clerk: DVN;

funds

Barnum, Nelson & Panara had a meeting on 2 April regarding main
thrust of the reply.

funds

Subject: Allocation of funds for PE63728F (samso/dyt Ltr dtd 26 mar 74)                                                                                          1

To: SAMSO/(dyt/lt col butler) Los Angeles AFS, po box 92960
Worldway Postal Center  Los Angeles, CA   90009                          2

The effort RADC proposed for Aerospace Corp. for software error
data collection and analysis is a necessary basic ingredient of
our long range objective to establish an Air Force Software Error
Analysis Facility. We are particularly interested in analyzing
the error classification system developed by Aerospace Corp.               2a

As Mr. Tomaini and Mr. Nelson of the Information Sciences Division
discussed with SYT personnel and Dr. H. Hecht at SAMSO during the
week of 18 March, a positive source of error data has been
identified by RADC. This source is TRW and there is no reluctance
on their part to supply this data since the receipient has been
identified as Aerospace Corp.                                              2b

We are aware of your interest in modifying for JOVIAL/J-4 the
automatic verification system being developed by RADC and intend
to propose it as new effort during our internal program review.
Since our funds are limited, we suggest you also try to find a
fund source at SAMSO and keep us informed of your progress.                2c

RADC welcomes any further discussion you may desire on the above
subject; however, we are convinced that our proposed approach will
indeed serve to meet Air Force requirements.                               2d

Our coordination with SAMSO on the Aerospace efforts was
accomplished with your predecessor, Lt Col T. Yamamoto and the DYT
contact, Maj L. Fry. We feel that our discussions with you since
your arrival have been necessary to insure continuity when the
63728F funds become available.                                             2e

FOR THE COMMANDER                      cy AFSC/(DLCE/Lt Col McGinnis
                                          AFSC/XRF
                                          SAMSO/(TM/Mr. Aichinger)         2f

Subject: Allocation of funds for PE 63728F                                 3

To: RADC/IS                                                                4

Your letter, 13 Feb 74, to SAMSO/TM started a planned allocation
of resources for Aerospace MTS contract services for FY 75. This
office has serious reservations as to the desirability of
expending the limited resources of PE 63728F on an effort with the
high risk and limited benefit offered by continuation of the
Aerospace effort. During FY 74, this effort produced no practical

1

funds

results due to the complete absence of data to input to an
analysis.  Unless a positive source of error data can be
identified by RADC, the FY 75/76 results can be expected to be the
same.                                                                    4a

In SAMSO's limited evaluation, other efforts in the V and V area
do offer more positive benefits.  The channeling of additional
funds into the procurement of tools should be discussed before
positive decisions are made.                                             4b

Responsible personnel in SAMSO/DYT have not coordinated on the
proposed 63728 actions.  (Reference paragraph 2, of attached
letter.)  Recommend a review of this overall effort be conducted
to determine the proper allocation of resources to meet the Air
Force requirements.                                                      4c

funds

(J30418)  5-APR-74 13:34;    Title:  Author(s): Joe P. Cavano/JPC;
Distribution: /ARB(Please review and comment on reply to SAMSO letter.
Should DO be on coordination?  Copy also sent to Tomaini/Nelson for
comments.) FJI(Please forward to Dick Nelson for his comments.);
Sub-Collections: RADC; Clerk: JPC;
Origin: <CAVANO>ANYTHING.NLS;1, 5-APR-74 12:25 JPC ;

Marcia--

   I would appreciate it if you would send me one copy each of NIC
#14135, 21256, and 22152 (RFC's 451, 608, and 625).  Thanks much.

                                        --Mark                    1

(J30419) 5-APR-74 14:12; Title: Author(s): Mark C. Krilanovich/MCK;
Distribution: /MLK; Sub-Collections: NIC; AccessList: MLK MCK; Clerk:
MCK;

incasting

TITLE:
COMMENT:
AUTHOR(S):PF
DISTRIBUTION:
SUBCOLLECTION:
CLERK:PF
GO.                                                                          1

TITLE:
COMMENT:
AUTHOR(S):PF
DISTRIBUTION:
SUBCOLLECTION:
CLERK:PF
GO.                                                                          2

from PF to LHD, re:incasting audio-visual.........WDEA, KSH, Charlie
Harris and I saw the audio-visual from 3:00 to 4:00 on Fri., April 5.
Harris mentioned that the producer's quoting of Bell that the
telephones could be used for polling very easily was not attributable
to him. Anderson brought out the point that he was skeptical whether
we could get away with 1% sample. Harris thought maybe we could just
tell the public that we can't go to 100% penetration. KSH brought out
the possible negative implications and mentioned that possibly we
should get Naisby to try to arrange possible field trial in
conjunction with boadcasting industry. In light of this unexpected
audience with 2 vp's I'll keep the projectors here another few days
in case word of mouth brings us some more viewers of the
presentation...Phil                                                          3

incasting

(J30420)  5-APR-74 14:41;   Title:  Author(s): Phil Feldman/PF;
Distribution: /PF LHD; Sub-Collections: NIC; Clerk: PF;

test of newsndmsg

1 2 3 4                                                                          1

John                                                                             2

test of newsndmsg

(J30421)  5-APR-74 16:47;    Title:  Author(s): John R, Pickens/JRP;
Distribution: /RFB; Sub-Collections: NIC; Clerk: JRP;

msg to day

John,  who do I call to find out about availablity of an ANTS
interface (hardware and/or specs.)  ?      Rosy                              1

msg to day

(J30422)   6-APR-74 13:01;   Title: Author(s): Al J, Rosenfeld/AJR;
Distribution: /DAY; Sub-Collections: NIC; Clerk: AJR;

THIS IS A DEMO MESSAGE TO TRY TO SEE IF THE NETWORK MAIL DELIVERY
WILL WORK, THIS MESSAGE WAS SEND ON 05-APR-74 1517  BY GSG,.,OUR
SYSTEM SEEMS TO BE UP AND RUNNING TSO I HOPE IT GETS THERE AT ONE
TOME OR ANOTHER, IF WE ARE UP WHEN IT HAPPENS.,WELL, GOOD LUCK.,,BYE          1

(J30423)   6-APR-74 15:21;   Title:  Author(s): Geoffrey S.
Goodfellow/GSG; Distribution: /GSG; Sub-Collections: NIC; Clerk: GSG;

Hi Jennings, I am trying something new here, from the computer center
here in menlo park at sri-ai, where i am doing things now,  I hope
that you were not scard when you saw this letter, and probly had no
idea that it was from me,...I sent an artical earler this week from
and ACT progam that isaw that last time I was up to S,f,  It tells
about Hong Kong from the turis point of view, and has some spicial
sections on shoping, thaat I knew that you wold be interested in
seeing, also some tips about spending mony are included along with
the rest...Please write as soon as you get this letter, so that I
know that it got there, this is the first time that i have tried it,
and hope that it will work,,,I was windering, did you ever get my 2
casette tapes that I sent over to you at Christmas time?  i have head
no word from you about them, and was wondering if they got swpied in
the mail, oh andDon and me sent some more of your stuff over by sea
mail last week, hope it makes it,,,last week the drama club did this
years melodrama, it was fantastic, of course i got front row seats,
and we even invied Joe to come down and see it also, which of course
he did, but we also asked FR, John to join us also, but it was
suppose to be a surpize that Jow was coming, and Bering spoild it all
by telling him, and he wouldn't sit with us,,,Also, how lucky you are
tht you did not come back, now you don't have to do the history term
paper, that is duw on the 23'rd of April,  and of course more than
half the class has not even started yet,,,Well, i better get back to
work, write soon and take care,,,              [Geoff]                      1

1

(J30424)   6-APR-74 15:35;   Title:   Author(s): Geoffrey S,
Goodfellow/GSG; Distribution: /JKU; Sub-Collections: NIC; Clerk: GSG;

Alan -- where is the current draft of the Helpdoc report? Dave.          1

(J30425)   6-APR-74 15:44;   Title: Author(s): David H. Crocker/DHC;
Distribution: /ARH; Sub-Collections: NIC; Clerk: DHC;

SUBMISSION OF MESSAGE THROUGH SNDMSG,

- - - -                                                                    1

IS IT POSSABLE?                                                            2

-------                                                                    3

SUBMISSION OF MESSAGE THROUGH SNDMSG.

(J30426)  6-APR-74 15:45;   Title:   Author(s): Geoffrey S.
Goodfellow/GSG; Distribution: /GSG; Sub-Collections: NIC; Clerk: GSG;

Changing Byte Size and Link Number

Jon and others,
I don't exactly think the suggestion to allow changing byte size and
link number is wonderful, especially given the  potential races and
other difficulties which Jon has documented.  I also don't see  any
great and pressing need for the mechanism anyhow.  Still... its an
intreguing idea.
Regards,
Alex

1

Changing Byte Size and Link Number

(J30427)   8-APR-74 06:27;   Title: Author(s): Alex A, McKenzie/AAM;
Distribution: /CSK VGC DCW3 SDC2 BPC JDB DHC MAP JBP AAM;
Sub-Collections: NIC; Clerk: AAM;

5 April Meeting with Comm on AKW

This was the action I had to take as a result of our 3April meeting,

5 April Meeting with Comm on AKW

I met with Keynon & Crowley on 5 April and discussed with them our
problem of submitting the NLS Utility as a new start for Jan 75.
Keynon has ordered 3 TIs which he expects in shortly. Crowley is in
the process of setting up his organization and I gathered that Keynon
has just about sold him on the value of using AKW as a tool to help
him satisfy his reporting & documentation requirements in a timely
manner.                                                                    1

I told them of the degradation in response time we were experiencing
during the busy hours and that we also planned to submit a new start
for the mini investigation. They said that we could use them as
potential users on both 77's. I told them we would coordinate on 77's
before forwarding them to operations.                                      2

We discussed training of their troops and we agreed that "now" is a
good time to initiate the training. Crowley thinks it would be an
excellnnt time because he has assigned a Major who is also
familiarizing himself with all the documentation requirements for
ATEC.                                                                      3

I discussed the meeting with Ed Kennedy and he will prepare the 77's.
We did not discuss the coordination and I assume he will accomplish
this after reading this document. I also strongly recommend that we
start a program to train their people  and cooperate with them as
much as possible in their AFBITS work. I think that we can get
Operations to consider AKW (&/or the AKW/ARPANET combination) to be a
facility like the 635 with a couple of users. (I also understand that
Operations may be getting interested in the tickler and "calender"
(Stoney's idea) capability - we all know where this can lead once
they start looking into other uses.)                                      4

In summary:                                                                5

   a. We have two 77's to coordinate with Comm/ Keynon & Crowley.        5a

   b. We should begin training their troops.                             5b

   c. We should cooperate with them in AFBITS when possible.            5c

   d. If we get the utility thru this way as a new start, I think we
   are on our way to getting the utility to be considered as a
   facility similar to the 635 and therefore we will not have to do
   battle yearly. I also think it could lead to a RADC-Office-1.        5d

5 April Meeting with Comm on AKW

(J30428) 8-APR-74 06:52;   Title:  Author(s): Roger B. Panara/RBP;
Distribution: /JLM EJK DLS JPC ELF; Sub-Collections: RADC; Clerk: RBP;
Origin: <PANARA>COMMMTG.NLS;1, 8-APR-74 06:40 RBP ;

NOTE TO ROSY

Rosy,
   Good to hear from you.  To find out about an ANTS interface and
ANTS itself call Mike Sher at (217) 333-2979.
   John                                                                    1

NOTE TO ROSY

(J30429)    8-APR-74 08:03;    Title:   Author(s): John D. Day/DAY;
Distribution: /AJR; Sub-Collections: NIC; Clerk: DAY;

Jon:  I talked to Diana about about your copy of your thesis and she
said that she was sending one to you.  Intend to write letters,  I am
really busy at work.  Documentation backlog like you woundn't
believe.  Forget-me nots.  lynn                                       1

(J30430)   8-APR-74 11:11;   Title:   Author(s): Lynn A, Rossiter/LYNN;
Sub-Collections: NIC; Clerk: LYNN;

HELLO YOGEN,
            THE WEATHER IN CLEVELAND IS PREDICTABLY HORIBLE,   BUUT II
AM ENJOYING THE VISIIT WIITH MY FAMILY,THIIS IS MAINLY A T ESDT TO
SEE IIF THE ONLIINE MAILBOX DEAL IS WORKING,   SEE YOU WED OR THURS,
CARL                                                                    1

(J30431)   8-APR-74 11:40;   Title: Author(s): Carl A, Sunshine/CAS;
Distribution: /; Sub-Collections: NIC; Clerk: CAS;

ONLINE MAIL TEST FROM CARL


HELLO YOOGEN,
          I AM ENJOYING MY VISIT TOP CLEVELAND AND THE FAMILY
ALREIGHT.  THIS IS PRIMARILY A TEST TO SEE IF OUR MAILBOXES HAVE BEEN
PUT ONLINE YET.  SEE YOU WED OR THURS.  CARL                                    1

ONLINE MAIL TEST FROM CARL

(J30432)   8-APR-74 11:50;   Title:   Author(s): Carl A. Sunshine/CAS;
Distribution: /YKD; Sub-Collections: NIC; Clerk: CAS;

CARL'S CLEVELAND TRIP

DEAR VINT,
        I ARRIVED IN CLEVELAND ALRIGHT, AND AM HAVING ANICE VISIIT
WITH MY FAMILY.  I ALSO HAD A SHORT TALK WITH AL ROSENFELD ABOUT THE
SITUATION AT CASE-10 WHICH WAS INTERESTING.THE ONLY PROBLEMS SO FAR
IS THAT MY GRANDMOTGHER, WHO HAS BEEN ILL HERE IN CLEVELAND FOR A
LONG TIME, DIED SUNDAY.  SO I WILL BE GOING TO NEW YOORKFOR THE
FUNERAL TUESDAY.  AS I SAID ,SHE WAS ILL AND MY FOLKS ARE TAKING
THINGS PRETTY WELL.  I STILL HPE TO RETURN WEDNESDAY, BUT MAY NOT
MAKE IT IN TIME FOR THE SEMINAR.  MORE THEN.  CARL                          1

CARL'S CLEVELAND TRIP

(J30433)   8-APR-74 12:01;   Title:  Author(s): Carl A. Sunshine/CAS;
Distribution: /VGC; Sub-Collections: NIC; Clerk: CAS;

alex:
the suggestion about change byte size and change link number were
made mostly in fun, so dont worry about my trying to get them into
any protocol spec.                                                      1

(J30434)  8-APR-74 13:28;  Title:  Author(s): Jonathan B. Postel/JBP;
Distribution: /AAM; Sub-Collections: NIC; Clerk: JBP;

Outline for a Form 77 if you need one.

Outline for a Form 77 if you need one.

FY                                        1a23

BPAC                                      1a24

PEC                                       1a25

FUND USER                                 1a26

LEAD DIV                                  1a27

PROJ                                      1a28

TASK                                      1a29

LINE NO                                   1a30

SOURCE                                    1a31

FUNDS                                     1a32

PR NO                                     1a33

CHG                                       1a34

Outline for a Form 77 if you need one.


(J30436)  8-APR-74 15:15;    Title:  Author(s): Edmund J. Kennedy/EJK;
Distribution: /DLS RBP JPC ELF RJC AAC; Sub-Collections: RADC; Clerk:
EJK;

Tom Boynton
Jerry Burchfiel
Dave Crocker
Ken Pogran

25 January 1974          1

## Recommendations of the ANTS Advisory Committee

2

This report is the result of a three-day meeting between the authors
(the ANTS Advisory Committee, commissioned by Steve Crocker of
ARPA-IPT) and the Network Terminal Systems (NTS) ANTS development
group at the University of Illinois.          3

It should be noted that all participants felt that the meeting was
exceptionally productive, especially when considered in light of the
original sense of pessimism -- due to a history of poor communication
-- with which we all entered the meeting.          4

The focus of the report is upon ANTS development, as related to its
general usefulness to the ARPA community. We do not express any
opinion concerning NTS general research into such areas as
networking, distributed computation, or operating systems.          5

We believe that ANTS is an excellent general purpose Network access
device and that it offers a good base upon which to build specialized
network access facilities.          6

Ideally, we would like ANTS to become a highly developed and
extremely reliable system with full exploitation of its potential.
We believe that the community of potential ANTS users, outside of
ARPA, should share in the costs of ANTS development. We strongly
recommend, however, that ARPA at least provide sufficient support to
the ANTS project to insure that the Network access needs of the ARPA
community are met.          7

  As this implies, we feel that ARPA's investment to date, in ANTS,
  will be justified when the initial Mark II ANTS is delivered. The
  Committee was favorably impressed with the ANTS system design.          7a

    It is recommended that a second ANTS Users Meeting take place
    two months after UCLA-NMC accepts delivery of it's Mark II
    Telnet ANTS system, with the acceptance criterion to be a
    maximum of two software crashes per 24 hour period.          7a1

  The development of the PEESPOL language is felt to have
  contributed greatly to the cleanliness and extensibility of the
  system.          7b

The minimally complete ANTS project effort, that we strongly advise
be supported, is detailed below. we would like to see the additional
support that will make the system considerably more useful to the
ARPA community.                                                          8

    Some sites acquiring ANTS will have requirements beyond the basic
    ANTS system. Sites should individually contract for PDP-11
    hardware, any ANTS system software extensions -- such as device
    drivers not part of the standard system -- and, after fiscal 1974,
    actual ANTS system distribution/acquistion.                         8a

    We suggest that it be made very easy for sites to access UCSD, so
    that, as an alternative to contracting with Illinois, they can
    create their own ANTS modules. Modules developed by individual
    sites should be maintained in a library at UCSD.                    8b

We recommend that ANTS development activities, for the rest of fiscal
1974, be ranked in priority as follows:                                  9

    Terminal Handler (Ascii), Ersatz Machine Protocol, NCP, Telnet,
    ICP, FTP (User & Server), NETRJE, cross-net Debugger, Device
    drivers for RF11, DH11, RK11, Gould 5000, LP11, DL11, DC11, DJ11,
    TM11, Gould 4800, CD11, and a limited TC11, Extended Telnet,
    Documentation, 2741 handler, Fancy terminal support, Command
    completion, Extension to PEESPOL (separate module compilation,
    taking advantage of processor model, and padding branches),
    Extended FTP, and an Imlac device driver.                          9a

    PDP-11 code for the cross-network debugger is currently available
    from BBN. Documents created and/or completed should cover the
    ANTS User Interface, an overview of the ANTS system, an ANTS
    Programmer's Guide -- to include a list of system primitives -- an
    ANTS Operator's Manual, an ANTS Installation Manual, a "How to get
    started at UCSD" Cookbook, a PEESPOL reference manual -- to
    include a complete index and an alphabetized BNF listing -- and
    continued production of the ANTS User Group Newsletter.            9b

In addition, we strongly recommend a two-year follow-on contract at a
level of 6 1/2 to 8 3/4 total person years. However, we feel that a
total support level up to 17 1/2 person years would be justified.
Approximately two-thirds of the recommended ARPA contract effort
should occur during fiscal 1975.                                        10

    Since the recent Advisory Committee meeting with the ANTS group
    proved to be quite valuable, we recommend future meetings,
    semiannually.                                                     10a

Supported activities should include:                                        11

    total
    person
    yrs,
    ------                                                 12

1, 2      Documentation and user support of ANTS group activities.      12a

2, 1 1/2  Changes and future developments to Network protocols,
        including Host-Host, ICP, Telnet (user), FTP (user &
        server), RJE (user), NGP, and others to be specified by the
        Advisory Committee.                                          12b

3, 1      ANTS reliability enhancements.  (A maximum rate of one
        software crash per three weeks is desired.)  Development of
        diagnostics tools should be part of this effort.             12c

4.  1/2  Improvements to the UCSD PEESPOL compiler, in order to
        improve ANTS code efficiency.  The range of work we would
        like to see includes creating the ability to compile
        modules separately (probably available by fiscal 1975),
        modifying the compiler to generate clean PAL code, as well
        as to generate Network standard (yet to be defined) object
        code file, and the writing of a PEESPOL-to BCPL conversion
        program.                                                     12d

5.  1/2  Reporting to a standard data-base, ANTS utilization and
        performance metering of such things as bandwidth limits by
        line and by entire system, connect hours, and ports used,
        Expertise available from other Network projects (such as
        the Tenex and Multics groups) should be exploited.           12e

6.  1/2  ANTS group involvement in Network-wide PDP-11 developments,
        such as specification of a standard object-file format and
        standard cross-network debugger.                             12f

7.  1/2  Researching and utilizing Network system support facilities
        (e.g., develop, with TIP group, conventions for reloading
        and reporting; use of Network Control Center).               12g

And hopefully will support:                                                 13

1.  1/2  Performance enhancements, as dictated by activities in
        items 5, 6 and 7 above.                                      13a

2.  1/4  Involvement in any network activities in accounting and
        authorization.                                               13b

3.  1/2  Enhancements to user-level terminal support (e.g.,
        automatic paging and simulated form-feeds).                  13c

4.   1/4   Improvements to the PDP-11 Imp interface and transfer of
           fabrication and maintenance to DEC (though it would be
           convenient for the ANTS group to have supply of all three
           varieties of interfaces on hand.                          13d

5. 1      Device drivers for DEC RP03, XY11, Versatec, PLATO and
          others to be specified by the Advisory Committee           13e


We believe it is not immediately critical that ARPA centrally
support:                                                             14


1. An ANTS directory file system.                                   14a

2. General PEESPOL language developments, except as directly useful
   for ANTS performance improvements.                               14b

3. Host service functions (RJE, Mail, Telnet servers).              14c

4. Front-end development.                                           14d


The Committee would like to see a general increase in, or creation
of, Network-wide activity in the following:                         15

1. A PDP-11 Interest Group.  Examples of its concerns would be
   standardized network loaders, Object-file format and
   Cross-compilers, as well as organization of a software library.  15a

2. Expansion of the role of the Network Control Center, to include
   its monitoring of ANTS, Tenex and other service sites.           15b

3. Network System Reliability Interest Group (invitation to Telnet
   and PCI should be considered).                                   15c

4. A Network User's Introduction (the New User's handbook recommended
   by USING).                                                       15d

Recommendations of the ANTS Advisory Committee


(J30437)  8-APR-74 19:53;   Title:  Author(s): Thomas L. Boynton, Jerry
D. Burchfiel, David H. Crocker, Kenneth T. Pogran/TLB2 JDB DHC KTP;
Sub-Collections: NIC; Clerk: DHC;

CCN NETED - AN INVITATION

| | |
|---|---:|
| Greeting, fellow NETEDers-- | 1 |
| CCN'S NETED is (hopefully) debugged, and implementing the current | 2 |
| spec in full, I would like to encourage one and all to log on and | 3 |
| let me know the results.  The logon procedure is as follows: | 4 |
| ... | 5 |
| you:      (connect to UCLA-CCN) | 6 |
| US:       ENTER SERVICE OR 'HELP' | 7 |
| you:      tso | 8 |
| US:       ENTER LOGON | 9 |
| you:      logon arp/arpa | 10 |
| US:       READY | 11 |
| you:      neted | 12 |
| US:       ENTER FILE NAME: | 13 |
| you:      (It should be familiar from here on...) | 14 |
| ... | 15 |
| A help listing may be obtained by entering HELP after the monitor | 16 |
| prompts READY.  Once in NETED, H =commandname= will provide help on | 17 |
| request syntax. | 18 |
| Please let me know if you have any problems, suggestions, etc. | 19 |
|    Chris Thomas at CCN | 19a |

CCN NETED - AN INVITATION

(J30438) 8-APR-74 20:52; Title: Author(s): Christopher S.
Thomas/CST2; Distribution: /NETED; Sub-Collections: NIC NETED; Clerk:
CST2;

Extra Initial files in <USING>


Please delete your initial files from the using directory at
office-1.  We are very low on disk space, and have exceeded
allocation more than once.  Unless you can present me a very good
reason for their remaining around, I will wipe out any I find still
there by next Monday, April 15.   Nancy                              1

Extra Initial files in <USING>

(J30439)    9-APR-74 08:56;    Title:   Author(s): Nancy J. Neigus/NJN;
Distribution: /CAG JI LCR JAKE MEJ; Sub-Collections: NIC; Clerk: NJN;

INFORMAN Report draft

INFORMAN group--
We have got a draft ready for you to read and improve (hopefully).
the NLS version is (using, info-draft, 1: w) and the text version is
<USING>INFO-DRAFT.TXT;1.  PLEASE COMMENT.  This is your report too.

1

INFORMAN Report draft

(J30440)   9-APR-74 09:07;   Title:  Author(s): Nancy J. Neigus, David
H. Crocker/NJN DHC; Distribution: /INFORMAN; Sub-Collections: NIC
INFORMAN; Clerk: NJN;

Proplems and Progres with JOVIAL Manual

I printed (carrier,comtest,) via a normal output processor file. The
file is online at Office-1 as <vannouhuys>jovcom,print;1.                    1

There do seem to be some problems, One is page number" which seems to
restart at random numbers and occasions...althought it is really hard
for an outsider to tell what's right and what's wrong.  Something
seems to have gone wrong in the page 29 under section 2,1,10. On the
page 29 undr  section 2,4,1 a Pxp directive is printing. On the last
page 22 a Grab directive is printing.                                       2

I have sent a copy to Dean and will send a copy to Duane today.             3

Proplems and Progres with JOVIAL Manual

(J30441)  9-APR-74 11:15;   Title:  Author(s): Dirk H. Van Nouhuys/DVN;
Distribution: /DLS NDM; Sub-Collections: DPCS; Clerk: DVN;

Following precedent, the "CONUNION" initial report will          1

be a little late. Three drafts do exist, though, so it's          2

only a matter of my trying to see if I can keep the weak          3

promise I made to attempt some sort of "collation" on them          4

which is the blockage. Am guessing two days to two weeks,          5

with the likelihood being somewhere in the middle.          6

   apologies and cheers, map          6a

(J30442) 9-APR-74 11:53; Title: Author(s): James E. (Jim) White/JEW;
Distribution: /JEW; Sub-Collections: SRI-ARC; Clerk: JEW;

How to Create Distribution Lists for Sndmsg, Training Memo 3


For experiences NLS Users (Answer to Mike Bedford's request)

How to Create Distribution Lists for Sndmsg, Training Memo 3

In order to create distributions for sndmsg, you must first create a
file.  This file will contain nothing but the names of the people you
wish to be in a particular distribution.  2)  Then you insert one
statement in the file and in it put the names of the receivers just
as you would in sndmsg (lastname,lastname, etc.).   3)  Check to see
if the statement is longer than one line.  If it is find the lastname
before the end of the line and insert a literal carriage return after
the comma.  This way of noting each line with a CR is necessary when
a string of names is more than one line long.   4)  Update the file
and then position the pointer so it is at the beginning of statement
1.  5)  With your marker at the beginning of the statement and
statement numbers turned off (with viewspecs), do an Output
Sequential (no forced upper) to Filename.sav CR.  6)  To use the
distribution list file, merely type a control B in sndmsg when is
asks you for USERS: and enter the filename.sav <esc> CR.  This may
take more than one try, but should work in a way similar to using
control b to submit a TXT file as the Message.                        1

How to Create Distribution Lists for Sndmsg, Training Memo 3


(J30443)  9-APR-74 16:27;    Title:  Author(s): James H, Bair/JHB;
Distribution: /KWAC BELL-CANADA CKM(May be good for your ARPA people);
Sub-Collections: SRI-ARC KWAC BELL-CANADA; Clerk: FEED;

NETED SUGGESTION: BEFORE IT'S TOO LATE

- - - -                                                                              1

THE IDEA OF NETED SOUNDS GOOD, BUT I'M ENOUGH OF A PESSIMIST                          2

TO  PREDICT  THAT   AFTER A SHORT WHILE THERE WILL BE AS MANY                         3

DIFFERENT VERSIONS AS THERE ARE IMPLEMENTORS.   THEREFORE,  I                         4

WOULD   SUGGEST THAT SOME CHARACTER (EG., "X") BE RESERVED AS                         5

A PREFIX CHARACTER FOR ANY AND ALL SITE DEPENDENT  COMMANDS.                          6

THAT   ONE  RULE  WOULD  LET  ME, AS A NET USER, KNOW WHAT TO                         7

AVOID, AND AS A HACKER, KNOW  HOW  TO  ADD  GOODIES  WITHOUT                          8

INCURRING THE WRATH OF MAP ET AL.                                                    9

- - - - - - -                                                                        10

NETED SUGGESTION: BEFORE IT'S TOO LATE

Bobbie...Print branch .0 to see the directives used.  See me
any questions.  We might want to set up similar directives fo
other goodies going to the Commander.  Come see me and I'll
explain them to you.

BRIEFING SYNOPSIS

A Tool for Data Base Management System Implementation

BRIEFER

William E. Rzepka, GS-12, X7011, RADC/ISIM

LENGTH OF BRIEFING

Twenty minutes,

PURPOSE OF BRIEFING

To familiarize the Commander with the ideas contained in
technical paper generated by ISIM,

BACKGROUND

The technical paper has been accepted for presentation a
NATO Defense Research Group, Seminar on the Design and
Evaluation of Information Systems to be held in Athens,
Greece on 23-26 April 1974,

SUMMARY OF BRIEFING

A software Tool for the implementation of data base
management systems is described. The need for such a de
stems from current operating system technology which, in
general, provides data base implementers with only basic
operations whose appeal is quite universal and whose
refinement for a specific problem solution is usually qu
demanding. The objectives of the Tool are to reduce the
costs and time involved in the implementation of data ba
management systems and to demonstrate the feasibility of
incorporating this concept into the design specification
future operating systems.

RECOMMENDED ACTION

Not applicable.


As of: 11 APR 74                              Prepared by: RADC

(J30446)  10-APR-74 09:19;    Title:  Author(s): Duane L. Stone/DLS;
Distribution: /RJC WER; Sub-Collections: RADC; Clerk: DLS;
Origin: <STONE>BRIEF.NLS;3, 4-APR-74 06:09 DLS ;

Bobbie,.second use of directives for formating purposes,.see

BRIEFING SYNOPSIS

Generation of an Information System

BRIEFER

Joseph P. Cavano, GS-09, X3857, RADC/ISIM

LENGTH OF BRIEFING

Twenty minutes.

PURPOSE OF BRIEFING

To familiarize the Commander with the ideas contained in
technical paper generated by ISIM.

BACKGROUND

The technical paper has been accepted for presentation a
NATO Defense Research Group, Seminar on the Design and
Evaluation of Information Systems to be held in Athens,
Greece on 23-26 April 1974.

SUMMARY OF BRIEFING

As organizations and the problems that face them have gr
ever larger and more complex, there has been an increasi
need for new tools that would present a unified view of
organization and its problems. A computerized informatic
system does this to help management make desisions under
uncertainty by providing integrated information and
incorporating techniques of management science.

This paper examines the rationale behind the need for ar
on-line, integrated information system and the services
should provide. It formulates a comprehensive definition
the components and the functions of such a system in ter
meeting these needs and services.

RECOMMENDED ACTION

Not applicable.

As of: 11 APR 74                         Prepared by:   RADC

(J30447)  10-APR-74 09:22;   Title:  Author(s): Duane L, Stone/DLS;
Distribution: /RJC JPC; Sub-Collections: RADC; Clerk: DLS;
Origin: <STONE>CAVBRIEF.NLS;1, 4-APR-74 06:10 DLS ;

this is test message no, 2                                                                        1

(J30448)   10-APR-74 14:08;   Title: Author(s): Virginia L. Kallal/VLK;
Distribution: /VLK; Sub-Collections: NIC; Clerk: VLK;

This is a resend of a March 26 to MEH (JJOURNAL, 30299,1)


We would like your reaction to this proposal.                                1

This is a resend of a March 26 to MEH (JJOURNAL, 30299,1)


(J30449)   10-APR-74 14:43;   Title:   Author(s): Michael T,
Bedford/MIKE; Distribution: /MEH FEED JCN; Sub-Collections: NIC; Clerk:
MIKE;

Tickler for Week of 15 April 1974

oMain Concern for next week is ISI Confessions!

Tickler for Week of 15 April 1974

(am3) 15 April - Monday                                                    1

   Col Thayer - Leave                                       1a

   0830 hrs, Branch Chief's Meeting                         1b

   PMP requested in Form 56 must be forwarded to DO for coordination
   with 3 cys of AF 725 and RADC Form 7 for repro & distribution    1c

   Due Date - ISIM/LaForge/Liuzzi - Review of System Development
   Notifications (SDNs - 427M)                              1d

(at3) 16 April - Tuesday                                                   2

   Col Thayer - Leave                                       2a

   Collect topic write-ups today by noon for confessions,    2b

(aw3) 17 April - Wednesday                                                 3

   Col Thayer - Leave                                       3a

   ISI Confessions 0830 hrs,                                3b

   R & T Selection of the Month is due in ISI, (KJOURNAL,19531,1:w)    3c

   Due Date - ISIM/McNamara & ISIS/S, DiNitto - IR&D (GE)    3d

(ath3) 18 April - Thursday                                                 4

   Col Thayer - Leave                                       4a

   0830 hrs, Branch Chief's Meeting                         4b

   Laboratory Activity Reports due today:  Bucciero must have them by
   1000, ISM must have them by 1100, and DOT must have them by 1600,    4c

(af3) 19 April - Friday                                                    5

   Col Thayer - Leave                                       5a

   Bobbie:  Travel figures due by noon,                     5b

Tickler for Week of 15 April 1974

(J30450)  11-APR-74 07:25;   Title:  Author(s): Roberta J, Carrier/RJC;
Distribution: /RADC; Sub-Collections: NIC RADC; Clerk: RJC;

Secondary distribution

- - - -                                                                     1

                                                                            2

Mike--                                                                      3

How do little (non-wheel) people do secondary distribution of journal       4

items they receive.  I looked all through my NLS manuals and tried          5

online querying, but I couldn't find any information.  Maybe you            6

could give me a pointer.  Are there any complications in this process       7

(like does it work at all) if the journal item originates at ARC and        8

I want to distribute it at OFFICE-1?                                        9

--Nancy                                                                    10

                                                                           11

-------                                                                    12

                                                                           13

Secondary distribution


(J30451)  11-APR-74 08:35;   Title:  Author(s): Nancy J. Neigus/NJN;
Distribution: /MDK; Sub-Collections: NIC; Clerk: NJN;

MAP 11-APR-74 10:00   30452

Comments on INFORMAN report

Rather than force some fairly lengthy comments on the INFORMAN draft          1

on all of you without warning, I'll just mention that some of you             2

might be interested in <MIT-MULTICS>MAPINFO.RUNOUT (on OFFICE-1,              3

suitable for TYPEing or FTPing). What's there is actually the draft           4

I submitted to the committee long about half-past February. Although          5

many of the ideas in it seem to have found their way into the report         6

(or to have been arrived at independently by the reporters), I feel          7

the major point it made has been underplayed almost to the point of          8

invisibility in the report as it now stands. As I am still quite             9

fond of that main point, though, I'd like to submit it to the               10

collective wisdom of USING. The reason for not simply abstracting it        11

out is that the draft as a whole was meant to be about it, and
contains                                                                     12

the reasoning which supports it. By the way, not to be mysterious           13

about "it": the point I'm concerned with is the "certification              14

board" mentioned in passing at the end of the report. (In case              15

anybody's curious, the "Section 2" refers to the original working           16

model Nancy suggested of having volunteers from the committee each do       17

a draft on one of several sections/topics she'd come up with; don't         18

be too frightened, though, I only came up with 3+ single-spaced             19

pages.) I'd like to see a consensus emerge from the Group around one        20

of three poles: 1) the Network Editorial Board is a good idea and           21

should be incorporated much more strongly into the report; 2) the           22

Board is such a good idea that it should be treated fully in an             23

appendix to the report (based on my draft, iff you like); or 3) it's        24

MAP 11-APR-74 10:00   30452

Comments on INFORMAN report

not a good idea, and I/we should forget it.  The third one             25

wouldn't hurt my feelings irreparably, but as I said, I do like the    26

idea enough myself that I'd like to see what the whole Group thinks,   27

   cheers, map                                          27a

p.s. the CONUNION committee report is in final proofreading, and       28

should be ready any day now,                                           29

MAP 11-APR-74 10:00   30452

Comments on INFORMAN report

(J30452)  11-APR-74 10:00;   Title:  Author(s): Michael A,
Padlipsky/MAP; Distribution: /USING; Sub-Collections: NIC USING; Clerk:
MAP;

Letter to Mellen

To KSH, From PF..........The following is a draft letter on incasting
from KSH to GHM, Depending on the extent of changes desired, you may
find it more convenient either for me to work on a marked up version
of the hard copy or for Mary to directly edit the draft on the
computer.(April 8, 1974)                                              1

                                                                      2

G. H. Mellen, General Manager                                         3

(Government and Computer Communications)                              4

BNR in SER 131 has described a domestic polling network that uses
existing subscriber loops. The telephones can be in an on or off hook
position and the network is not adversely affected by the
introduction of pulses emitted to a central counter. The audio visual
describing this incasting process has been seen by Don Chisholm, Bill
Anderson, Charlie Harris and your Steve Naisby and Moe Love.          5

Though many of the ultimate uses will only become apparent in field
trial stages, we can identify two basic types of applications at the
present. First, incasting can be used to infer reactions, feelings,
and general responses from a viewing audience. Second, incasting can
be used to stimulate the sense of particiation of a viewing audience.
Two examples of audience participative programs are: Quiz (home
versus studio panel); and, Entertainment (results interpreted as
applause). Two specific examples which could conceivably be popular
are selection of the best player in a hockey or football game and
selection of winners of awards that are typified by the annual Oscar
presentations.                                                        6

From what we have determined, there is an interesting potential for
possible new types of service offerings but because of the commitment
that would have to be made, much more groundwork remains to be done.
We are currently funding more research at BNR to look into
behavioural and technical considerations with a view to having
sufficient information on which to base a field trial prospectus
within a year. In addition, however, we agree with your people that
it would be valuable to sound out people in the broadcast industry to
see whether they think organizations would be willing to pay for one
minute incast para-commercials and indeed, whole programs that are
based on audience feedback. These people could also provide other
important feedback as to potential required service features for
incasting-type offerings.                                             7

Of course, it should be pointed out that the possibility of an
offering is still tentative. In addition, it would take about one
year to arrive at an initial trial, and several years  at the least
for widespread availability. We do think, however, that such

discussions would help us since there are a few basic questions which
still must be answered. As presently conceived, inferencing
capability is possible with a small random distribution of reply
keys, however it is conceivable that there might be public and
governmental pressure to expand to blanket coverage once the product
was on the market. Though preliminary cash flows on both
configurations have been worked out, we are presently funding a more
detailed estimation. In addition, more technical development work is
underway at the BNR labs to determine the technical feasibility of
switching from one configuration to the other.                          8

Since this is one of the first cases of "wired city" services that
could be offered by Bell, we would ideally like to examine the
interrelationships of automatic meter reading, smoke and fire
detection, USP, incasting, and other associated services to see
whether common technology and hence some costs could be spread out
over two or more potential offerings; however, if CATV interests
might pre-empt our position, we may want to get in rather quickly. It
seems to me that joint discussions with people in the broadcast
industry with a specific offer to go to field trial within one year
would elicit some valuable information. I would appreciate any inputs
from your staff and, if you are able to see the audio visual, I would
be interested in your preliminary reactions to the service concept.      9

Letter to Mellen

(J30453)  11-APR-74 11:42;   Title:  Author(s): Phil Feldman/PF;
Distribution: /KSH PF; Sub-Collections: NIC; Clerk: PF;

Your message  30319

- - - -                                                                              1

Alex,                                                                                2

That message was dated 28-Mar-74 07:10                                               3

about Net Work to be done  2-APR-74 07:00-EDT                                         4

It was postmarked  8-APR-74                                                           5

and arrived today,                                                                   6

                                                                                     7

Perhaps it would be better if you sent these messages                                8

a week or two earlier, assuming you want to keep sending them,                        9

                                                                                     10

Carl                                                                                 11

-------                                                                              12

                                                                                     13

Your message  30319

(J30454)  11-APR-74 12:35;   Title:  Author(s): Carl M. Ellison/CME;
Distribution: /AAM; Sub-Collections: NIC; Clerk: CME;