Network Journal Submission and Delivery

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   The on-line documentation will be maintained as (userguides.
   journal-netsub,). Hard copies are available from Marcia Keeney.

   The first implementation of a Network Journal Submission and Delivery
   system is now experimentally up. This system allows use of the NIC's
   NLS Journal System without entering NLS. Network users may submit
   text files written on their host systems using their mail subsystems
   (e.g. SNDMSG, FTP, TELNET). The mail will then be converted at SRI-
   ARC into NLS files, journalized, and sent to the specified recipients
   according to their preset Journal delivery options. A newly added
   option permits the user to receive automatic Journal delivery (of
   citations to journalized documents) at his host via the Network mail
   protocol.

Overview

   Network mail sent to SRI-ARC (NIC) will be entered into the NIC
   Journal system if a slash appears in the user-name. To get the mail
   to the NIC, you may use either the FTP, TELNET, or mail subsystem
   provided by your local system.

   The author's NIC Ident(s) are assumed to appear before the slash; the
   recipients' NIC Ident(s) after it. Idents should be separated by
   spaces. (See scenarios in branch 3)
   (e.g. jew / mdk dhc)

When this format is detected by the NIC, the Network Journal system
will be invoked. At SRI-ARC the mail will be transformed into an NLS
file, assigned a unique catalog number, stored permanently under that
number, and a notice of it will be sent to all the listed recipients.
If the slash is not found, the mail will be handled in the normal
way.

Delivery of Journal citations may now be obtained via the Network (as
well as to an NLS file at SRI-ARC and in hard copy). If you wish to
receive your Journal mail at you host computer, contact the NIC (see
RFC510 -- 16400,).

A more detailed description follows.

NETWORK JOURNAL SUBMISSION

The remote user prepares the text of his Journal article in his host
using whatever tools he has available to him. He may wish to prepare
long articles beforehand using his text editor (e.g. TECO if he's a
TENEX user). For short messages, he may be content with the basic
editing features (such as backspace character and line delete)
provided by his submission subsystem.

Connecting to the NIC

To get the mail to the SRI-ARC FTP server, you must either:

    1) via FTP and TELNET mail subsystems, connect to SRI-ARC's FTP
       server process, then issue the FTP mail command, or

    2) use the mail subsystem provided by your local system.

       For TENEX SNDMSG mail: put "@nic" at the end of the "User:"
       field.
          (e.g. jew / mdk dhc@nic)

       If you wish to send the mail as a SNDMSG message to some
       people as well as submit it to the Journal, you may treat the
       Journal form as one name, follow it with a comma, and then list
       other names of which SNDMSG is aware, separated by commas.
          (e.g. jew/mdk dhc@nic, meyer, white)

Specifying Authors and Recipients

The user invokes Network Journal submission via his mail subsystem.
Network Journal Submission is invoked by a user-name field of the
following format:

```
        author $(SP author) [SP] / [SP] recipient $ (SP recipient) [SP]
        [ ; conversion algorithm]

            "$(..)" means "any number of occurrences, possibly
                 zero, of what's inside the parentheses"
            "SP" means "space"
            "[..]" mean "the contents of the brackets are optional"
```

   i.e., author(s), slash, recipient(s), optional semicolon and
   conversion-algorithm

        e.g., jew/mdk rww   cr   dcs rww jcn / sri-arc ;h

   'Author' is the NIC Ident of (one of) the user(s) submitting the
   article, and 'recipient' the Ident of (one of) its intended
   recipient(s). An Ident, as usual, may designate either a "group" or
   an "individual". SRI-ARC will verify the idents. If it finds them
   correct, it will accept the mail. An invalid Ident will cause the
   mail to be rejected; the user will get an error message and have to
   start over. The first author Ident will be taken to be the clerk.

   If the SRI-ARC mail subsystem finds the slash in the user-name field,
   the Network Journal Submission system will be invoked; otherwise, the
   mail will be treated as normal Network mail (delivered to the
   directory specified by the user-name).

Specifying an NLS Conversion Algorithm

   Optionally, the sender may specify the algorithm by which his
   sequential message file is to be converted to NLS format. This
   choice is made by inserting:

        ; conversion algorithm

   anywhere in the 'user-name' field (e.g. jew/mdk rww;s). (This should
   be before the "@nic" for SNDMSG.) Legal values for conversion-
   algorithm are:

        s -- Insert Sequential, each line an NLS statement (default
        conversion-algorithm)

        a -- Insert Assembler with structure

        m -- Insert Assembler without structure

        h -- Heuristic Insert Sequential, double <CR>s indicating end of
        statements, assuming no right justification in the source file.

j -- Heuristic Insert Sequential, double <CR>s indicating end of statements, assuming right justification in the source file (for those who put multiple spaces between words to line up the right margin, multiple spaces will be removed)

By "Heuristic Insert Sequential", we mean that the Insert Sequential algorithm attempts to be smarter about handling statements and levels. Statements are delimited by two successive carriage returns. Statement level will be determined by the amount the statement is indented. If it is indented more than the previous statement, it will be taken to be a substatement and put down a level; if it is the same as the previous statement, it will be on the same level. If the statement is indented less than the previous statement, the program will look for a past statement with the same indentation and put it at that level, The indentation of a statement is taken to be that of either the first or second line of the statement, whichever is less (to ignore paragraph indentation, for example). This is good from 1 to 12 levels. Carriage returns at the end of full (within 10 characters of the right margin, i.e. 62nd column) lines are replaced by spaces.

This algorithm is an attempt to answer a very difficult need. It won't always do just the right thing, but it should often provide the intended result. The user is encouraged to experiment with it; suggestions will be welcomed.

Titling the Message

Once the conversion has been performed, an optional title, signaled by the label 're:'. 'title:', or 'subject:' is searched for in the first statement of the message text. (The label may either be all upper or all lower case, or the first character upper and the rest lower case.) If a label is found anywhere in the statement, the line of that statement beginning with the first non-blank character following the label and going up to the first carriage return (and line feed) or else to the end of the statement is taken as the Journal title, and the statement containing the title is deleted from the file, Any substructure will be moved up a level.

The submission is equivalent to the NLS 'Submit Message' command if th NLS file (after the title statement (if any) has been deleted) has only one statement in it besides the origin statement; in such a case, the message in its entirety will be delivered as part of the Journal citation. Otherwise the Network submission is equivalent to 'Submit File'; only a reference to the Journal document will be

   delivered to each of the recipients.

TENEX SCENARIOS

   If you're a TENEX user, you can do Network Journal Submission with
   any of the following subsystems (system responses are in square
   brackets):

      (1)   SNDMSG (The header and trailer supplied by SNDMSG aren't
                      stripped off, and one can only title the document
                      by using the h or j conversion algorithms and
                      beginning the message with a carriage return (and
                      line feed).)

             [@] SNDMSG <CR>
             [Type ? for help]
             [Users:] JEW/DHC@NIC <CR>
             [Subject:] Title of message <CR>
             [Message: (? for help):] Text of message ... <^Z>
               (Note: ^B allows the insertion of a sequential
               file at any point in the text of the message.)
             [jew/dhc at NIC -- ok]

      (2) FTP

         For short messages:

             [@] FTP <CR>
             [HOST FTP User process x.xx.x]
             [*] CONN <SP> NIC <CR>
             [Connection opened]
             [Assuming 36-bit connections.]
             [*< SRI-ARC FTP Server x.xx.x - at DAY DATE TIME]
             [*] QUO <ALT> MAIL JEW/MDK RWW <CR>
             (pause)
             [*< Type mail, ended by a line with only a "."]
             [*] QUO <ALT> Re: Title of Message <CR>
             [*] QUO <ALT> line one of the message <CR>
             [*] QUO <ALT> line two of the message <CR>
             [*] ...etc...
             [*] QUO <ALT>.<CR>
             (pause)
             [*< Mail completed successfully]
             [*] DISC <CR>
             [*] QUIT <CR>

        For longer ones:

            [@] FTP <CR>
            [HOST FTP User process x.xx.x]
            [*] CONN <SP> NIC <CR>
            [Connection opened]
            [Assuming 36-bit connections.]
            [*< SRI-ARC FTP Server x.xx.x - at DAY DATE TIME]
            [*] MAIL <ALT> sequentialfilename <CR> [Confirm] <CR>
            [to remote-user] JEW/MDK RWW <CR>
            (pause)
            [<Begin mail file transfer.]
            [xx. bytes transfered, run time = xxx. MS,]
            [Elapsed time = xxxxx. MS, Rate = xxxx Baud]
            [*< Mail completed successfully]
            [*] DISC <CR>
            [*] QUIT <CR>

        TELNET (for short messages only)

            [@] TELNET <CR>
            [User Telnet x.x DATE Type HELP<cr> for help.]
            [*] NIC <SP> FTP Server [is complete.#]
            [300 SRI-ARC FTP Server x.xx.x.x - at DAY DATE TIME]
            MAIL JEW/MDK RWW <CR>
            (pause)
            [350 Type mail, ended by a line with only a "."]
            re: Title of Message
            line one of message <CR>
            line two of message <CR>
             ...etc...
             .<CR>
            (pause)
            [256 Mail completed successfully]
            <^Z>
            [*] DISC <CR>
            [*] QUIT <CR>

NETWORK JOURNAL DELIVERY

    Three modes of Journal delivery are currently available to NLS users;
    each user can select any one or a combination of ways of receiving
    journal mail:

        (1)   ONLINE -- an entry containing the text of the mail or, for
               longer items, a citation to it, made in the user's initial
               file, which resides in his directory at SRI-ARC.

    (2)   HARDCOPY -- the text of the mail is sent to the user (i.e.,
           to an address of his choosing) via the U.S. Postal Service.

    (3)   NETWORK -- Journal mail will be delivered to a user via the
           Net, to a host and mailbox of his choosing. If you wish
           this option, let the NIC know and give them the name of your
           host and mailbox.

        Short messages ('Submit Message') will be delivered in
        their entirety to the remote user, preceded by the usual
        sort of header giving author, date and time, citation
        number, and title:

           JEW 4-APR-73 11:21 15490
           SMFS Runs on TENEX 1.31 at the NIC
           Message: Dave-- The NIC came up on TENEX 1.31 on
           1-APR...

        A citation to larger Journal articles ('Submit File')
        will sent:

           JEW 4-APR-73 17:51 15491
           Farming Batch Work out to UCSB -- A Scenario
           Location: SRI-ARC <MJOURNAL> 15491.NLSXNLS

        In place of the usual link (which appears in ONLINE
        delivery) is a host name (SRI-ARC) and a pathname to
        the file at the host. Using it, the remote user or a
        process running on his behalf can fetch a copy of the
        file from SRI-ARC FTP. The parameter ';XNLS' signals
        SRI-ARC's FTP server process to convert the NLS file
        to sequential form (using a default conversion
        algorithm) before transmission to the user through the
        Net.

By Network Journal delivery, mail will be delivered via FTP mail
command to a host (i.e., to it's FTP server process) and mailbox
address of the user's choosing.

        These two parameters will be maintained in the NIC Ident file
        for each user who selects NETWORK delivery, and can, like his
        delivery mode, be viewed or changed from the Ident System in
        NLS. Initial values for host and mailbox address have been
        solicited from the Network community (see RFC 510 -- 16400,).

The implementation of Network Journal submission and delivery
described here is a first-cut. A more flexible and slightly cleaner
user interface will be fashioned when the File Transfer Protocol
(FTP), upon which both implementations will rely, is revised to deal
more comprehensibly with the issue of mail delivery, forwarding, and
recording (see RFC 524 -- 15146,1).

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