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**Revision**

This document applies to version of , and was last updated on by .

**Overview**

This document describes the syntax of the commands supplied with . It assumes you have installed the programs and configured them as described in INSTALL.PRN, and that you have access to the Nutshell Handbook *Using UUCP and Usenet*.

Additional documentation for the MAIL command is in the file MAIL.PRN, and additional information on the UUSTAT command is in the file UUSTAT.PRN.

**Command Syntax**

To obtain the syntax of the various command line options, enter the command name followed by '-?'; for example:

```
FMT-?
GENSIG -?
MAIL -?
UUCICO -?
UUPOLL-?
UUCP -?
UUSTAT -?
UUSUB -?
UUX -?
UUXQT -?
```

**Note:** For a listing of the commands available when reading mail, see the file MAIL.HLP in the configuration directory; for commands available when sending mail, see the file TILDE.HLP in the configuration directory.

**Command Descriptions**

**Note:** These are general instructions, and you may require additional assistance if you have never used a UNIX-like mail system before.

Descriptions of the commands supplied as part of follow in alphabetical order.

**FMT**

FMT is used as a simple paragraph formatter when entering mail in line mode. It effectively removes all carriage returns from within a paragraph and then writes the paragraph out in lines as close as possible to 72 characters to per line possible without going over. Paragraphs are separated by blank lines in the input file and output files.

**Note:** If the first word on the new line is longer than the maximum line length, it is written by itself on the line. It is not truncated.

The command syntax is:

```
FMT [-#] [input-file [output-file]]
```

The optional flag `-#`, where `"#"` is a number greater than or equal to 0, overrides the default maximum length of 72 characters per line. The default the input and output files are the console.

To format the all the text you have typed in from line mode, use it as a pipe at the question mark (?) prompt while sending mail:

```
~|FMT
```

**GENSIG**

GENSIG reads a standard signature file and appends random text selected from a second file, writing the combined data to a third file. The format of the command is:

GENSIG fixed.inp variable.inp merged.out

Where "fixed.inp" is the fixed portion of the signature file containing your name and address, "variable.inp" is a file which begins with a delimiter line followed by quotes or other text separated by additional delimiter lines. For example, the variable input file might look like this:

```
**
The above is a delimiter line.
**
Free the Intel 386!
**
"UUCP/extended" is "system crash" spelled sideways.
**
Don't quote me!
```

The file "merged.out" will contain the entire text of the "fixed.inp" file followed by one delimited text block from "variable.inp". If you use this to generate a signature file, then your PERSONAL.RC should reference the file "merged.out" as your signature file.

**Note:** To generate fresh quotes, this program should be run from your AUTOEXEC.BAT or other regularly run batch file.

## MAIL

To send mail, with the body of the message being typed in from the PC keyboard:

```
MAIL -s "the subject" address1 address2 ...
```

Where "the subject" is the topic of the message, enclosed in quotes; if the subject is omitted, then the '-s' flag should be omitted as well. Addresses are in the form user@node, node!user, localuser, or nick, where nick is a nickname in your aliases.txt file. The flags '-c' and '-b' may also be inserted between addresses; all addresses after '-c' are sent as Carbon copies, and addresses following '-b' are Blind Carbon copies (and not displayed in the header of the message). Thus, a valid mail command may be:

```
mail -s "Chocolate" snuffles@pandora.kew.com
```

The mail program will then prompt you for the message to be sent.

**Note:** ~? may be entered for available commands when entering the mail.

**Note:** This only queues the mail for sending if it is going to another system connected via a modem; UUCICO (below) must be invoked to actually transfer the mail to the other system.

To send mail which already exists in a text file, the procedure is as above, but the standard syntax for MS-DOS file redirection is added to the end of the command line:

```
MAIL -s "the subject" address1 address2 < filename
```

**Note:** Do not send binary files using the MAIL command. Use the UUCP command for transferring binary files to directly connected systems, and use a program such as UUENCODE (not supplied) to convert a binary file to printable characters mailing to distant systems.

To read your new mail, enter the command:

```
MAIL
```

If you do not have a mailbox or the mailbox is empty, MAIL will report this fact and exit. If you have mail, the program will scan the mailbox, display the subjects of all the messages, and then prompt you with the message number you are on and a question mark (?). For a list of commands within MAIL, enter a question mark at the prompt (?); to exit MAIL, enter 'q' at the prompt.

To read mail saved in a file in other than your mailbox, enter:

```
MAIL -f filename
```

Where filename is the file to be processed for mail. This may be the file you specified to store outgoing mail in, or mail you saved into another file when reading your new mail.

**Note:** When reading or saving mail, use of the tilde slash combination (~/) in front of a file name directs MAIL to look for the specified file in your home directory, the path of which was specified in your PERSONAL.RC file.

**Note:** For additional information on MAIL, including the command line flags and available subcommands, see the MAIL.PRN file.

This is a sample only. Snuffles, proofreading this, announced quite firmly that she does not want a message about Chocolate, she wants the real thing. She also pointed out that she reads her mail on kendra, not on pandora.

**NOVRSTRK**

NOVRSTRK is used to strip overstrikes from files to allow viewing on a terminal. If used to display the documentation, it will drop the overstrikes created by back spaces which are used to create bold and underscored text on a printer. The syntax of NOVRSTRK is:

```
NOVRSTRK    [input-file [output-file]]
```

The default input and output files are the console.

**RMAIL**

RMAIL is the Mail Delivery Agent (MDA) for ; that is, other programs such as MAIL and UUXQT pass it mail for delivery on standard input (STDIN), and RMAIL the handles actual writing to local mailboxes and/or queuing for remote systems. RMAIL is designed to only be invoked from other programs, and as such, end-users should never have to invoke RMAIL. The following information is included primarily for those who need to invoke RMAIL from a another program, such as an external news reader.

RMAIL operates in one of three modes:

- As an RFC-822 parsing back-end to the MAIL user agent program
- As a stand alone mailer for utility programs such as UUXQT
- As substitute for the UNIX RMAIL program invoked by UUXQT for remote mail delivery

These three operating modes are described below.

The general syntax of RMAIL is as follows:

```
RMAIL [[-f|-F] filename] [-x debug] address(es)
RMAIL [[-f|-F] filename] [-x debug] [-s subject] -w address(es) [-c address(es)] [[-b address(es)]
RMAIL [[-f|-F] filename] [-x debug] -t
```

Where:

- b address(es) Specifies optional blind carbon copy address(es). Must follow all other flags and addresses; used only with -w flag.
- c address(es) Specifies optional carbon copy address(es). Must follow all other flags and addresses except for the -b flags and its associated addresses.
- f filename Specifies the following file name is to be used in place of standard input
- F filename Specifies the following file name is to be used in place of standard input; the file is to be deleted after use.
- s subject Optional subject; used with and implies the -w flag.
- t Enables RFC-822 header parsing mode.
- w Enable stand-alone mailer mode.
- x debug Display debug messages at or below level "debug". The default value is 1; the option may set to 0 for unattended production use, or as high 20 for detailed debugging.
- address(es) One or more addresses the mail is to delivered to. Not used with -t flag; required for other modes.

**RFC-822 Mode**

In RFC-822 mode, RMAIL is invoked with the **(-t)** flag, which directs RMAIL to determine the addresses by parsing the mail's RFC-822 header. This mode is designed to act the back-end to a program such as MAIL which generates a the RFC-822 header and passes the mail to RMAIL for both local and remote delivery. RMAIL reads the header, validates the **From:** address, generates a UUCP **From** line, RFC-822 **Message-ID:** and **Received:** lines, and delivers mail to each address included in the **To:**, **Cc:**, and **Bcc:** headers. The **Bcc:** header, if any, is read for its addresses but not copied; other all header lines are copied as-is.

**Note:** When an RFC-822 header prefixed by **Resent-** is found, only the **Resent-** headers are used; the original headers are copied but otherwise ignored. In this case, the preceding description applies to the **Resent-** headers; the original headers are copied without being examined.

The RFC-822 header read by RMAIL is subject to the following restrictions:

All **Resent-** headers, if any, must precede the original headers.

The **From:** header must precede the **To:** header.

**Note:** If the address in the **From:** header does not match the address of the user defined in the UUPC.RC and/or PERSONAL.RC files, a **Sender:** line is generated with correct address. The **To:**, **Cc:**, and **Bcc:** headers must be together in the listed order. Each address in these headers must begin on a new line and be less than 512 bytes long.

### Stand alone Mode

In stand alone mode, RMAIL is invoked with the (-w) flag to process mail without an existing RFC-822 header; this allows bypassing the Mail User Agent (MAIL) for specialized applications such as mail generated by another program. This mail is subject to the following restrictions:

- Mail is not logged in the user's outgoing mailbox
- The user's signature file is not appended to the mail
- Aliases are not expanded
- All addresses plus the subject (if any) must fit on the MS-DOS or OS/2 command line

The following services are performed by RMAIL in stand alone mode:

- A UUCP **From** line is generated.
- A valid RFC-822 header is generated with **Received:**, **Date:**, **Message-ID:**, **From:**, and **To:** lines. In addition, **Subject:** and **Cc:** lines as required if the Subject (-s) and/or Carbon Copy (-c) are specified.
- The generated RFC-822 header also includes a **From:** user id derived by the MS-DOS or OS/2 environment variable **LOGNAME**, if defined; otherwise the default current user is used. When **LOGNAME** is defined the real name of the user will be taken from the **PASSWD** file if available, or a dummy name.
- Mail is queued for the addresses on the command line, including primary addresses, carbon copied addresses, and blind carbon copied addresses. As with RFC-822 mode, the output of RMAIL in stand alone mode does not include any reference to blind carbon copy users in the actual mail header.

### UNIX RMAIL Emulation Mode

In UNIX RMAIL emulation mode, the following processing takes place:

- Mail is read in to a temporary file; the UUCP **From** line, which is the first line in the file, is parsed and stripped from the mail. No other mail headers are examined.
- Mail is delivered to each local user on the command line with a UUCP **From** line generated from the system name(s) parsed from the incoming **From** line.
- Mail is delivered to all other users on the command line with a UUCP **From** line generated from the system name(s) parsed from the incoming **From** line with the system name UUXQT received the mail from prefixed to the list unless it is already the first system in the list.
- Note:** UUXQT normally passes the incoming system name in the **UU\_MACHINE** environment variable; if this is not set, the incoming system name is taken from the "remote from system" portion of the **From** line. If this data is also missing or invalid, the incoming system name is generated as being from the local system and user id /dev/null.

### RNEWS

The RNEWS command is a dummy command supplied with to write news articles or batches to the news directory defined in the UUPC.RC configuration file. It does not uncompress or unbatch news, nor does it organize the news by subject matter. It is intended only to keep news to the local system from being lost.

**Note:** A full suite of news programs is under development, but are not available at this time. Queries about news should be directed to uupc-news@kew.com.

### UUCICO

UUCICO performs actual exchange of files with other systems. Normally, UUCICO is invoked from either UUPOLL or UIIO.BAT; however, the program can also be invoked directly. To make call UUCICO all connected systems to deliver and pickup remote mail and files:

```
UUCICO -s all
```

Note that this is **not** a UUPC.RC or PERSONAL.RC variable. This directs UUCICO poll all the systems listed in the **SYSTEMS** file. "Postmaster" is used the user id defined as Postmaster in UUPC.RC and for the address **POSTMASTER**, "UNIX-to-UNIX Copy" for the user id UUCP. For all other undefined addresses, the rel name is set to the same value as the user id itself.

**BREAK ON**  
UUCICO -f 0  
This behavior is based on the similar behavior of the BSD sendmail program. Why it does it is beyond the scope of this document (or most human understanding). UUCICO will wait for a successful telephone call, and exit upon completion; UUCICO may be terminated by the **BREAK ON** command. The **BREAK ON** command is required to insure that MS-DOS polls the keyboard for the Cntrl-Break sequence; otherwise, you may have to reboot your system to terminate UUCICO. **BREAK ON** is always enabled under OS/2.

The full list of options supported by UUCICO is as follows:

- r 0           Slave Role: initializes the modem and wait for the telephone to ring with an incoming call; the caller will be presented with a UNIX style login prompt. This option is modified by the -u, -w, -x, and -z options.
- r 1           Master Role: actively poll (call out) to the system defined by the -s option. This option is the default, and is modified by the -n and -s options.
- n            Call now flag: when specified, UUCICO ignores the time fields defined in the SYSTEM file when determining if a system should be called, and treats all systems as if they were defined with a time of "any".
- s sysname    System name to call. Default is to call "any", which is any system the local system has work queued for. Sysname may also be specified as "all", which requests all systems listed in the systems file be called, or the name of any system listed the systems file. This option is ignored when -r 0 is specified.
- u when       Passively poll (wait for the telephone to ring) until time "when", where "when" is a valid time in the format used by the SYSTEMS file to define a system call be called out to. The default is to wait for the telephone ring forever. This operand is primarily for use by the UUPOLL program. This option is ignored when -r 1 is specified or defaulted.
- w who        Begin processing in slave mode as if user "who" had just logged in. This option is for use when another program has answered the modem and validated the user id. This option implies the -r 0 option and is modified by the -z option.
- x debug      Display debug messages at or below level "debug". The default value is 1; the option may set to 0 for unattended production use, or as high 20 for detailed debugging.  
**Note:** Use of debug level 5 or higher for extended periods of time may fill rapidly fill your hard disk with debugging output, and should be used sparingly.
- z bps        Set modem speed to "bps" bits per second when used with -w option. The default speed is the speed listed in the modem definition file defined in the UUPC.RC variable InModem. This option is ignored if -w is not specified.

## UUIO

UUIO is a batch file which executes UUCICO followed by UUXQT; it also renames the UUCICO logs, aging them through five cycles and deleting the oldest log. All UUIO command line arguments are passed to UUCICO; no arguments are passed to UUXQT.

**Note:** If the default spool directory name (C:\lib\uupc\spool) is not used in the UUPC.RC file, you must edit UUIO to refer to the actual spool directory name.

See the description of UUCICO above for a description of the command line arguments.

## UUCP

UUCP queues binary or text files for transfer between two directly connected systems. The basic UUCP command syntax is:

```
UUCP file1 system!file2            or
UUCP system!file3 file4
```

The first example copies a local file (file1) to a remote host (system) as file2, the second example copies a file (file3) on a remote host (system) to the local file 4. Filenames may be specified as an absolute path name, relative to a user's home directory (~user/file), or relative path to the UUCP public directory (~name).

**Note:** On most systems, access will be severely restricted. Check with a user or system administrator on the remote system before transferring files to possibly restricted locations.

For additional information on the UUCP command, see chapter 2 of *Using UUCP and Usenet*.

## UUPOLL

UUPOLL allows unattended operation of the PC, automatically running UUCICO on a timed basis. Each time UUPOLL invokes UUCICO, it also automatically runs UUXQT to process any files received by UUCICO.

To use UUPOLL to have UUCICO call out on a regular basis:

```
UUPOLL -f 0240 -i 0600
```

This will cause UUCICO to call out at 2:40 A.M. and every six hours thereafter until the user presses Cntrl-Break. Both flags are specified as hhmm (hours and minutes).

To use UUPOLL to have UUCICO call out on a regular basis, and automatically answer the telephone between outgoing calls:

```
UUPOLL -f 0240 -i 0600 -r 0
```

This will cause UUCICO to call out at 2:40 A.M. and every six hours thereafter until the user presses Cntrl-Break, and in addition UUCICO will be invoked in passive mode to answer the telephone between outgoing calls.

The full list of operands allowed by UUPOLL are as follows:

- a hhmm Automatically actively poll system "any" after each successful incoming poll if hhmm seconds have passed since last active poll. This allows mail delivered by incoming systems to be automatically forwarded to systems the local system is allowed to call out to. The delay time may be specified as 0, in which case UUCICO will actively poll system "any" after every successful incoming telephone call. This option has no effect if -r 0 is not specified.
- d hhmm Duration of polling in hours and minutes, after which UUPOLL exits. Default is poll until the user presses Cntrl-Break.
- f hhmm First time to poll in hours and minutes. Default is to not actively poll unless the user specifies an interval via -i, in which case the default is the current time plus the interval.

**Note:** UUPOLL automatically determines when it is later than the specified first poll time and selects the available next time to poll. If it desired for UUPOLL to poll 24 hours a day, then the first poll time should be specified as to midnight as possible.

If, for example, the system is to poll at 6:13 AM, 2:13 PM, and 10:13 PM, UUPOLL must be invoked with:

```
UUPOLL -i 0800 -f 0613
```

Even if it is after 6:13 AM.

- i hhmm Interval to poll in hours and minutes. Default is 0400 (4 hours) if -f is specified.
- r 0 Directs UUCICO to answer telephone between active polls. Default is to not answer the telephone.
- r 1 Directs UUCICO not to answer the telephone, but to actively poll after the interval specified with -i.
- s system System name to poll. Default is "all" followed by "any", which cannot be explicit specified.
- x n Debug level passed to UUCICO and UUXQT. Default is 1.

**Note:** Either -r, -i, or -f must be specified.

**Note:** For additional information on the -s, -x, and -r options, see the description of UUCICO, above.

**Note:** If you specify both the -r 0 and either the -f or -i options, the effect is to have UUCICO invoked to answer the telephone between the active polls defined by the -f or -i options.

## UUSTAT

UUSTAT reports information on the jobs queued for another system; it can output detailed or summary information for one or all systems directly connected to the local host. UUSTAT is fully documented in the file UUSTAT.PRN; a summary of its operands is follows.

To display all jobs queued for the current user:

```
UUSTAT
```

To display all jobs queued by all users:

```
UUSTAT -a
```

To display the number of jobs queued for all remote systems, their last connection time, and the age of the oldest job queued:

```
UUSTAT -q
```

To display the status of all remote systems and their last connection time:

```
UUSTAT -m
```

## UUSUB

UUSUB reports statistics on the data transmitted between the local and remote systems since the last time the file HOSTATUS in the spooling directory was created. UUSUB is invoked with no operands to report these statistics:

UUSUB

**Note:** The summaries can be reset by erasing the HOSTATUS file from the spool directory.

## UUX

The UUX command queues commands for execution on remote systems. It used by other facilities, such as news functions and the UUCP command, to handle processing more complex than simple file transfers.

The UUX command is still under development. It's use is discouraged at this time.

## UUXQT

UUXQT must be executed to process remote files after UUCICO has received these files from a remote host. It normally is invoked with no operands:

UUXQT

This will automatically process all eXecute files in the local spool queues with the default debugging level in effect.

UUXQT supports the following command line options:

- s sysname      Process work only for work "sysname". The default is system "all", which processes work for all known systems.
- x debug        Display debug messages at or below level "debug". The default value is 1; the option may set to 0 for unattended production use, or as high 20 for detailed debugging.

To automatically execute UUXQT every time UUCICO is run, use UUPOLL or UIIO.