NAME

mail, rmail – read mail or send mail to users

SYNOPSIS

Sending mail

mail [**–tw**] [**–m** *message_type*] *recipient*. . .

rmail [**–tw**] [**–m** *message_type*] *recipient*. . .

Reading mail

mail [**–ehpPqr**] [**–f** *file*]

Debugging

mail [**–x** *debug_level*] [*other_mail_options*] *recipient*. . .

AVAILABILITY

SUNWcsu

DESCRIPTION

A *recipient* is usually a user name recognized by **login**(1). When *recipient*s are named, **mail** assumes a message is being sent. It reads from the standard input up to an end-of-file (CTRL-D) or, if reading from a terminal device, until it reads a line consisting of just a period. When either of those indicators is received, **mail** adds the *letter* to the *mailfile* for each *recipient*.

A *letter* is composed of some *header lines* followed by a blank line followed by the *message content.* The *header lines* section of the letter consists of one or more UNIX postmarks:

> **From** *sender date_and_time* [**remote from** *remote_system_name*]

followed by one or more standardized message header lines of the form:

> *keyword-name***:** [*printable text*]

where *keyword-name* is comprised of any printable, non-whitespace characters other than colon (`:´). A **Content-Length:** header line, indicating the number of bytes in the *message content* will always be present unless the letter consists of only header lines with no message content. A **Content-Type:** header line that describes the type of the *message content* (such as text, binary, multipart, etc.) will also be present unless the letter consists of only header lines with no message content. Header lines may be continued on the following line if that line starts with white space.

OPTIONS

Sending mail

The following command-line arguments affect sending mail:

–m *message_type*
: A **Message-Type:** line is added to the message header with the value of *message_type*.

–t
: A **To:** line is added to the message header for each of the intended *recipient*s.

–w
: A letter is sent to a remote recipient without waiting for the completion of the remote transfer program.

If a letter is found to be undeliverable, it is returned to the sender with diagnostics that indicate the location and nature of the failure. If **mail** is interrupted during input, the message is saved in the file **dead.letter** to allow editing and resending. **dead.letter** is always appended to, thus preserving any previous contents. The initial attempt to append to (or create) **dead.letter** will be in the current directory. If this fails, **dead.letter** will be appended to (or created in) the user's login directory. If the second attempt also fails, no **dead.letter** processing will be done.

rmail only permits the sending of mail; **uucp**(1C) uses **rmail** as a security precaution. Any application programs that generate mail messages should be sure to invoke **rmail** rather than **mail** for message transport and/or delivery.

If the local system has the Basic Networking Utilities installed, mail may be sent to a recipient on a remote system. There are numerous ways to address mail to recipients on remote systems depending on the transport mechanisms available to the local system. The two most prevalent addressing schemes are UUCP-style and Domain-style.

UUCP-style addressing
: Remote recipients are specified by prefixing the recipient name with the remote system name and an exclamation point, such as **sysa!user.** If **csh**(1) is the default shell, **sysa\!user** should be used. A series of system names separated by exclamation points can be used to direct a letter through an extended network (such as **sysa!sysb!sysc!user** or **sysa\!sysb\!sysc\!user**).

Domain-style addressing
: Remote recipients are specified by appending an `@´ and domain (and possibly sub-domain) information to the recipient name (such as **user@sf.att.com**). (The local system administrator should be consulted for details on which addressing conventions are available on the local system.)

Reading Mail

The following command-line arguments affect reading mail:

−e Mail is not printed. An exit status of **0** is returned if the user has mail; otherwise, an exit status of **1** is returned.

−h A window of headers are initially displayed rather than the latest message. The display is followed by the **?** prompt.

−p All messages are printed without prompting for disposition.

−P All messages are printed with *all* header lines displayed, rather than the default selective header line display.

−q **mail** terminates after interrupts. Normally an interrupt causes only the termination of the message being printed.

−r Messages are printed in first-in, first-out order.

−f *file* **mail** uses *file* (such as **mbox**) instead of the default *mailfile*.

mail, unless otherwise influenced by command-line arguments, prints a user's mail messages in last-in, first-out order. The default mode for printing messages is to display only those header lines of immediate interest. These include, but are not limited to, the UNIX **From** and **>From** postmarks, **From:**, **Date:**, **Subject:**, and **Content-Length:** header lines, and any recipient header lines such as **To:**, **Cc:**, **Bcc:**, and so forth. After the header lines have been displayed, **mail** will display the contents (body) of the message only if it contains no unprintable characters. Otherwise, **mail** will issue a warning statement about the message having binary content and **not** display the content. (This may be overridden via the **p** command. See below.)

For each message, the user is prompted with a **?** and a line is read from the standard input. The following commands are available to determine the disposition of the message:

#	Print the number of the current message.
–	Print previous message.
<new-line**>**,**+**, or **n**	Print the next message.
!*command*	Escape to the shell to do *command*.
a	Print message that arrived during the **mail** session.
d, or **dp**	Delete the current message and print the next message.
d *n*	Delete message number *n*. Do not go on to next message.
dq	Delete message and quit **mail**.
h	Display a window of headers around current message.
h *n*	Display a window of headers around message number *n*.
h a	Display headers of all messages in the user's *mailfile*.
h d	Display headers of messages scheduled for deletion.
m [*persons*]	Mail (and delete) the current message to the named *persons*.
n	Print message number *n*.
p	Print current message again, overriding any indications of binary (that is, unprintable) content.
P	Override default brief mode and print current message again, displaying all header lines.
q, or CTRL-D	Put undeleted mail back in the *mailfile* and quit **mail**.
r [*users*]	Reply to the sender, and other *user*s, then delete the message.
s [*files*]	Save message in the named *file*s (**mbox** is default) and delete the message.
u [*n*]	Undelete message number *n* (default is last read).
w [*files*]	Save message contents, without any header lines, in the named *files* (**mbox** is default) and delete the message.
x	Put all mail back in the *mailfile* unchanged and exit **mail**.
y [*files*]	Same as –w option.
?	Print a command summary.

When a user logs in, the presence of mail, if any, is usually indicated. Also, notification is made if new mail arrives while using **mail**.

The permissions of *mailfile* may be manipulated using **chmod**(1) in two ways to alter the function of **mail**. The other permissions of the file may be read-write (**0666**), read-only (**0664**), or neither read nor write (**0660**) to allow different levels of privacy. If changed to other than the default (mode **0660**), the file will be preserved even when empty to perpetuate the desired permissions. (The administrator may override this file preservation using the **DEL_EMPTY_MAILFILE** option of **mailcnfg**.)

The group ID of the mailfile must be **mail** to allow new messages to be delivered, and the mailfile must be writable by group **mail**.

Debugging

The following command-line arguments cause **mail** to provide debugging information:

–x *debug_level* **mail** creates a trace file containing debugging information.

The **–x** option causes **mail** to create a file named **/tmp/MLDBG***process_id* that contains debugging information relating to how **mail** processed the current message. The absolute value of *debug_level* controls the verboseness of the debug information. **0** implies no debugging. If *debug_level* is greater than **0**, the debug file will be retained **only** if **mail** encountered some problem while processing the message. If *debug_level* is less than **0** the debug file will always be retained. The *debug_level* specified via **–x** overrides any specification of **DEBUG** in **/etc/mail/mailcnfg**. The information provided by the **–x** option is esoteric and is probably only useful to system administrators.

Delivery Notification

Several forms of notification are available for mail by including one of the following lines in the message header.

Transport-Options: [**/***options*]

Default-Options: [**/***options*]

>To: *recipient* [**/***options*]

Where the "/*options*" may be one or more of the following:

/delivery Inform the sender that the message was successfully delivered to the *recipient*'s mailbox.

/nodelivery Do not inform the sender of successful deliveries.

/ignore Do not inform the sender of failed deliveries.

/return Inform the sender if mail delivery fails. Return the failed message to the sender.

/report Same as **/return** except that the original message is not returned.

The default is **/nodelivery/return**. If contradictory options are used, the first will be recognized and later, conflicting, terms will be ignored.

OPERANDS

The following operand is supported for sending mail:

recipient A user login name.

ENVIRONMENT

See **environ**(5) for descriptions of the following environment variables that affect the execution of **mail**: **LC_CTYPE**, **LC_MESSAGES**, and **NLSPATH**.

TZ Determine the timezone used with date and time strings.

EXIT STATUS

The following exit values are returned:

0 Successful completion when the user had mail.

1 The user had no mail or an initialization error occurred.

>1 An error occurred after initialization.

FILES

dead.letter	unmailable text
/etc/passwd	to identify sender and locate *recipient*s
$HOME/mbox	saved mail
$MAIL	variable containing path name of *mailfile*
/tmp/ma∗	temporary file
/tmp/MLDBG∗	debug trace file
/var/mail/∗**.lock**	lock for mail directory
/var/mail/:saved	directory for holding temp files to prevent loss of data in the event of a system crash
/var/mail/*user*	incoming mail for *user*; that is, the *mailfile*

SEE ALSO

chmod(1), **csh**(1), **login**(1), **mailx**(1), **uucp**(1C), **uuencode**(1C), **vacation**(1), **write**(1), **environ**(5)

Solaris Advanced User's Guide

NOTES

The interpretation and resulting action taken because of the header lines described in the Delivery Notifications section above will only occur if this version of **mail** is installed on the system where the delivery (or failure) happens. Earlier versions of **mail** may not support any types of delivery notification.

Conditions sometimes result in a failure to remove a lock file.

After an interrupt, the next message may not be printed; printing may be forced by typing a **p**.