Elm Configuration Guide

How to install and customize the Elm mail system

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>>> Elm is now in the public trust. Bug reports, comments, etc. to: <<<

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(Version 2.3)

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This document is intended as a supplement to the *Elm Users Guide* and *Elm Reference Guide* and should be of interest mainly to people at a site either installing or maintaining the source code to the **Elm** mail system, or modifying the code.

It is *required* that installation be done by using the *Configure* script supplied with the system. Please see the file *Instruct* for further information on running *Configure*.

The remainder of this document will discuss the various questions asked by the *Configure* script and the options available via direct editing of various files and parameters. As indicated above, almost all of the sites that install **Elm** should find the *Configure* script more than sufficient.

Using Configure

Configure is a shell script that will automatically determine the type of system it is running on and tune the parameters of Elm to fit that system and its environment. Where the installer has a choice, it asks questions of the installer. *Configure* provides its own instructions when run, so they are not repeated here. However, when the

installer is presented with a choice, this next section explains some of the options available. Not all the questions or options to those questions are explained.

Enable calendar feature?

Elm has a feature to take specially marked lines within mail messages and add them to a file for use by the system calendar program. The command to do this extraction needs to be enabled to work. There is also a follow on question regarding the name of the calendar file:

Default calendar file?

which is usually calendar on most systems. This file will reside in the users home directory, not their .elm directory.

Does your /etc/passwd file keep full names in Berkeley/V7 format (name first thing after ':' in GCOS field)?

Elm uses the full name from the password file if it is available. There are two major ways this name is stored. Berkeley/V7 systems place the name as the entire GCOS field string, that is it starts directly after the ':' that delimits the fields. USG (UNIX® Systems Group, or AT&T) systems put the users name after a department number and separate it from that number by a '-'. The end of the users full name in these systems is a '('. Look at your /etc/password file and if either version applies, answer yes to that version. If neither applies, answer no. Elm can still get the users name from the ".fullname" file in their home directory.

Every now and then someone has a (gethostname, uname) that lies about the hostname but can't be fixed for political or economic reasons. Would you like to pretend (gethostname, uname) isn't there and maybe compile in the hostname?

Elm needs to know the correct name of the host on which it is executing to be able to create the proper headers for the outbound mail. Some systems use one name for uucp and another name for the system and others just don't reply to the subroutines with the proper name. In this case it will be necessary to compile in the name. In all other cases this should not be needed. It is provided just in case there is a problem with your system.

Does your mailer understand INTERNET addresses?

Elm will work with systems that can process the '@' character of INTERNET format addresses or with the '!' format of uucp addresses. If your mail delivery agent understands the '@' format addresses, they should be used and this question is answered yes. If when you send mail with the '@' format addresses (such as elm@dsi.com), they bounce, then answer this question no.

Am I going to be running as a setgid program?

On USG type systems and many other types, access to the mailboxes and the mailbox directory is via the group permissions. The mail user agents, such as Elm, need write access into this directory to be able to move the mailbox around due to internal editing and to create lock files. If the permissions on your mailbox directory are drwxrwxr-x, then Elm needs to be a setgid program.

What is the default editor on your system?

If no editor is specified in the users *.elm/elmrc file*, this is which editor to use. The editor is used to compose outbound mail messages.

What pager do you prefer to use with Elm?

This is the standard pager to use for reading messages. Besides the usual system pagers, two Elm specific internal options exist: builtin and builtin+. The built-in pager is faster to execute but much less flexible than the system

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provided pagers. The + version just clears the page before displaying the next page. Otherwise the two versions are identical.

Other Configurable Parameters

The following parameters rarely need to be changed, but are provided if you need them. *Configure* does not prompt for their values. To change them, edit the *hdrs/sysdefs.h* file directly after running Configure.

FIND_DELTA This is the delta that the binary search of the pathalias database will use to determine when it's slicing up a single line, rather than a multitude of lines. Ideally, this should be set to 1 byte less than the shortest line in the file...the default is 10 bytes.

MAX_IN_WEEDLIST
The maximum number of headers that can be specified in the weedout list of the *.elm/elmrc* file. A suggested alternative approach if this number is too small is to specify initial substrings in the file rather than increasing the number. For example, say you want to weedout the headers ''Latitude:'' and ''Latitudinal-Coords:'', you could simply specify ''Latitud''" and match them both! Furthermore you could also specify headers like ''X-'' and remove all the user defined headers!

MAX_HOPS When replying to a G)roup, this is the maximum number of hops that a message can have taken. This is used to try to optimize the return address (remove cyclic loops and so on) and regular use should show that the default of 35 is plenty more than you'll ever need!

system_text_file This is the source text file for the system level aliases. See either the *newalias(1L)* man page, or *The Elm Alias System Users Guide* for further details.

system_hash_file This is the file that contains the hashed version of the system aliases.

system_data_file This is the other file the *newalias* command installs in the system alias area and contains the actual addresses for each of the aliases contained in the hashed data file.

ALIAS_TEXT This is where the individual users alias text file lives.

ALIAS_HASH Where the hashed aliases are stored,

ALIAS_DATA and where the alias address data itself is kept.

DEBUGFILE The name of the file to put in the users home directory if they choose to use the '-d' debug option.

OLDEBUG The name of the file to save the previous debug output as. (this feature was added to ensure that users wanting to mail bug reports wouldn't automatically overwrite the debug log of the session in question)

temp_lock_dir Directory for lock files for XENIX.

temp_file Temporary file for sending outbound messages.

temp_form_file A place to store temporary forms (for Forms Mode) while answering them.

temp_mbox Place to keep copy of incoming mailbox to avoid collisions with newer mail.

temp_print File to use when creating a printout of a message.

temp_edit File to use when editing the mailbox file on XENIX.

temp_uuname Where to redirect output of the *uuname(1M)* command.

mailtime_file File to compare date to to determine if a given message is New since the last time the mail was read or not.

readmsg_file File to use when communicating with the *readmsg* program (see that program for more information)

smflags Defines the flags to hand to *sendmail* if and when the program chooses to use it.

smflagsv Defines the flags to hand to *sendmail* in verbose voyuer mode.

mailer If you don't have *sendmail*, this is the mailer that'll be used.

helpfile The help file name prefix.

ELMRC_INFO	The file containing textual messages associated with each **Elm** variable setting in the users *‘‘.elm/elmrc’’* file. This is used when the user chooses to auto-save the options from within the main program.
elmrcfile	The name of the automatic control file within the *.elm* directory. (currently *elmrc*)
old_elmrcfile	When a new elmrc file is saved, the old one is also saved, being renamed to whatever this identifier is set to.
mailheaders	The name of the optional file that users may have that will be included in the headers of each outbound message.
dead_letter	If the user decides not to send a message it will instead be saved to this filename in their home directory.
unedited_mail	In the strange case when the mailer suddenly finds all the directories it uses shut off (like */usr/mail* and */tmp*) then it’ll put the current mailbox into this file in the users home directory.
newalias	How to install new aliases..(note: you MUST have the ’-q’ flag!)
readmsg	What the *readmsg(1L)* program is installed as.