LISTSERV® 15.5
Introductory List Owner's Manual

www.lsoft.com

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URL: http://www.lsoft.com/manuals/index.html

L-Soft invites comment on its manual. Please feel free to send your comments
by email to manuals@lsoft.com

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Table of Contents

List of Figures

List of Tables

Preface - About This Manual

This Introductory Manual is intended for new list owners with little or no experience using LISTSERV software and who are administrating one email list. The goal of this document is to give a broad overview of the main functions of LISTSERV software and some basic instructions on how to set up and administer a list. This document will concentrate on demonstrating interaction with LISTSERV using the Web interface.

Every effort has been made to ensure that this document is an accurate representation of the functionality of LISTSERV®. As with every software application, development continues after the documentation has gone to press so small inconsistencies may occur. We would appreciate any feedback on this manual. Send comments via email to: MANUALS@LSOFT.COM

The following documentation conventions have been used in this manual:

- Menus, options, icons, fields, and text boxes on the screen will be bold (e.g. the **Help** icon).

- Clickable buttons will be bold and within brackets (e.g. the **[OK]** button).

- Clickable links will be bold and underlined (e.g. the **Edit** link).

- Directory names, commands, and examples of editing program files will appear in `Courier New` font.

- Some screen captures have been cropped and/or edited for emphasis or descriptive purposes.

- Many of the screen shots presented here will appear differently if you own multiple lists or are the LISTSERV maintainer.

- This symbol denotes an important note or warning.

- This symbol denotes optional advice that can help you save time.

- This symbol indicates instructions for interacting using email commands. Email commands are available for some commands. If you are not interested in using email commands, then simply ignore these instructions.

Editorial Notes

New Version Numbering

With this release, L-Soft is aligning LISTSERV's version numbering with the rest of the email industry. There have been 51 released versions of LISTSERV since 1986 – 15 major upgrades and 36 minor releases. Version 1.8e in the "traditional" numbering system corresponds to 14.0. The present update is version 15.5.

Because the old nomenclature is more familiar to our users, in this version of the documentation we will continue to refer to versions of LISTSERV inferior to version 14.4 by the old version system.

For New List Owners

If you are a new LISTSERV list owner, we recommend that you read through this entire document to get a good foundation on the main features of LISTSERV. However, if you are in a hurry to get started, you can get an even quicker launch by following the steps in Section 2 Getting Started. Remember to come back later and read through the rest of the document, so that you get a better understanding of what is available to you as a list owner.

For New List Moderators

If you are a new LISTSERV list moderator, you can get a quick start by reading Section 3 Communicating with LISTSERV and then jumping directly to Section 5.8.4 Moderating a List.

LISTSERV Command Syntax Conventions

Generally, parameters used in this document can consist of 1 to 8 characters from the following set:

```
A-Z 0-9 $#@+-_:
```

Deviations from this include:

- *fformat* – Netdata, Card, Disk, Punch, LPunch, UUencode, XXencode, VMSdump, MIME/text, MIME/Appl, Mail.

- *full_name* – *first_name [middle_initial]* surname (not your email address). Must consist of at least two space-separated words, e.g., "John Doe".

- *listname* – name of an existing list

- *node* – Either the fully-qualified domain name (FQDN) of an Internet host or the BITNET nodeid or Internet hostname of a BITNET machine which has taken care of supplying an ':internet' tag in its BITEARN NODES entry.

- *host* – Generally the same as node, but normally refers specifically to the fully-qualified domain name (FQDN) of an Internet host rather than to a BITNET nodeid.

- *pw* – a password containing characters from the set: `A-Z 0-9 $#@_-?!|%`

- *userid* – Any valid RFC822 network address not longer than 80 characters; if omitted, the 'hostname' part defaults to that of the command originator.

- *internet_address* – Similar to *userid*, but specifically refers to a complete RFC822 network address in `userid@fqdn` format. When we use this nomenclature a fully-qualified hostname is required.

Other deviations from the standard set will be noted along with the affected commands.

Also, the following conventions represent variable or optional parameters:

- *italic type* – Always indicates required parameter names that must be replaced by appropriate data when sending commands to LISTSERV.

- < > – Angle brackets may sometimes enclose required parameter names that must be replaced by appropriate data when sending commands to LISTSERV. Sometimes used for clarity when italic type is inappropriate.

- [ ] – Square brackets enclose optional parameters which, if used, must be replaced by appropriate data when sending commands to LISTSERV.

Contacting L-Soft

Support

L-Soft international recognizes that the information in this manual and the FAQ questions on our web site (http://www.lsoft.com/lsv-faq.html or http://www.lsoft.com/manuals/owner-faq.html) are not going to solve every problem you may face. We are always willing to help diagnose and correct problems you may be having with your licensed LISTSERV server.

L-Soft strongly recommends that, for support purposes, it is best to use the technical support "lifebuoy" link from the Server Administration Dashboard to initiate a support ticket. This will help you create an email message to the support group that contains all the necessary information about the site configuration, license and so forth without requiring you to find the individual files or issue information commands.

If LISTSERV is not running, of course, this will not be possible. In that case, please try to use the following procedure:

- Make the subject line of your report indicative of the problem. L-Soft receives a great deal of mail with the subject "Help!", which is not very helpful when we receive them.

- Include any appropriate log entries. LISTSERV keeps logs of everything it does, and without the log trace back, it is often impossible to determine what caused a given error.

- If you're running a Unix server and LISTSERV dumps core, please run the debugger on the core file, produce a trace back, and include the results.

- Always send a copy of your site configuration files (with the passwords x'ed out). See the Site Manager's Operations Manual for LISTSERV for the locations and names of the two site configuration files.

- Send along anything else that you think might be helpful in diagnosing the problem.

If the supporting documents (for instance, log files) are extremely large, please contact support first before sending everything through. The support group has alternative methods of handling large files that they will be happy to share with you.

If you are not currently an L-Soft customer and are running an evaluation version of our software, please send your trouble reports to the evaluation users' list, LSTSERV@PEACH.EASE.LSOFT.COM.

If you are running LISTSERV Lite, please send your trouble reports to the LISTSERV Lite support mailing list, LISTSERV-LITE@PEACH.EASE.LSOFT.COM. This includes users of the paid version of the software unless you have also purchased paid support.

If your LISTSERV Classic/Classic HPO server for VM, VMS, unix, or Windows has paid-up maintenance, you may send problems to SUPPORT@LSOFT.COM for a quick reply.

Sales

To reach our worldwide sales group, simply write to SALES@LSOFT.COM. You may also call 1-800-399-5449 (in the US and Canada) or +1 301-731-0440 (outside the US and Canada) to speak to our sales representatives.

Section 1 About Mailing Lists and LISTSERV

T he widespread use of electronic mail (email) has become an efficient, convenient, and economical way for people from all over the world to communicate. While traditional email is ideal for one-on-one interaction, email lists advance the concept a step further by disseminating a single message simultaneously to a group of people. Fast, global, and cost effective mass communication is easy with the use of email lists.

Figure 1-1 One-on-One Email Interaction

Figure 1-2 Email Lists Interaction
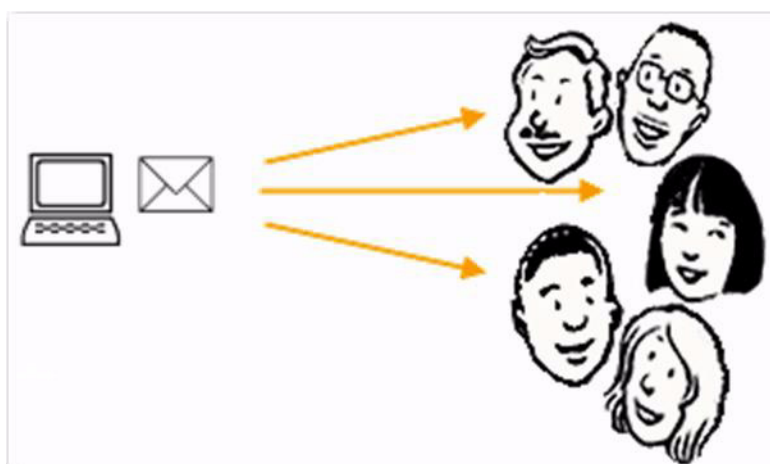
With email lists, companies and institutions can quickly and cost-effectively deliver thousands, even millions, of direct email messages simultaneously over the Internet. Furthermore, through database integration, messages can be personalized according to each recipient's demographic information and preferences. Newsletters and announcements can be conveniently distributed by email to patrons, customers, distributors, and resellers. Email discussion groups can be used for interaction among co-workers in special projects and workgroups, or to keep lines of communications open between individuals scattered throughout the world working towards a common goal. Individuals can form non-commercial discussion forums on just about any imaginable topic of interest, from hobbies to health support groups. The possibilities of how email lists can be used for communication among groups of people are virtually endless. See the Case Studies page on L-Soft's Web site for real-life examples:
http://www.lsoft.com/customers/casestudies.asp

What is LISTSERV?

LISTSERV is an email list management software program. Email list management software makes it easy to administer email lists, performing in seconds the functions that would otherwise have to be done manually, possibly taking many hours or days to complete. Introduced in 1986 on BITNET, LISTSERV was the first software program to automate the administration of email lists. It is the most time-tested and reliable email list management product on the market today.

In order to use LISTSERV, the software must be installed on a server with a dedicated connection to the Internet. LISTSERV is available for a variety of server operating systems.

Once LISTSERV is installed on a server and running, it can:

- Handle list subscriptions and signoffs (leaving the list).

- Allow subscribers to alter their subscription settings, or owners to alter them on the subscriber's behalf.

- Distribute email to all list subscribers.

- Accumulate messages to be sent as periodic "digests".

- Save list messages in a searchable archive (sometimes referred to as "notebooks").

- Automatically handle communication between members and owners of lists.

- Report on the activity of mailing lists.

- Allow list owners to control the character and behavior of their list(s).

- Automatically process bounces (message delivery errors).

- Be used with an external database to send targeted, personalized e mail messages.

When a list is set up, an email address is created for the list, which is then used to send or "post" messages to the list. Once a message is sent, it is delivered to the central server where L-Soft's LISTSERV (the mailing list management software) resides. The software then completes the operation by automatically distributing the message to all subscribers on the list, in the manner indicated by their subscription options.

Figure 1-3 Path of LISTSERV Message

Who are the people involved?

There are five main classifications of people who can interact with LISTSERV. Each classification has a differing level of responsibility for its role and interaction with the software. Figure 1-4 below illustrates the hierarchy of these classifications. It also represents the relative number of people who fit into each classification.

Figure 1-4 People Who Can Interact with LISTSERV

The **LISTSERV maintainer** is the technical person in charge of the LISTSERV application on a particular server. The LISTSERV maintainer may not be in charge of the entire server, but should have privileged access to the computer and know where to get help if there is a problem with the hardware, software, or network connection. The LISTSERV maintainer:

- Oversees the administration of dozens or even hundreds of different lists, but is usually not involved with the content of individual lists.

- Has the responsibility for creating new lists and assigning list ownership.

- Is implicitly an owner of all lists – has access to all list owner functions, all archives, and log files.

- Allocates disk space and sets the path and folders to store information related to the lists.

- Provides assistance to owners of the lists on the server.

- Ensures that list owners abide by the site's appropriate use policies.

- Ensures that LISTSERV is up and functioning correctly, with a working connection to the Internet.

The **list owner** is the person formally in charge of the operation of a specific list. The list owner is usually knowledgeable in the field covered by the list. There can be more than one list owner for a list. The responsibility of the list owner is limited to the list itself, and does not include the computer running the list, its mail system, network lines, and other hardware specifics. List owners:

- Set and change the configuration of the list.

- Add, delete, and modify subscriptions to the list.

- Assist subscribers and potential subscribers.

- Set policies, procedures related to the list, and send administrative messages to the list.

- Run reports on list activity.

A **list moderator** may or may not be the list owner as well. There can be more than one list moderator for a list, and some lists have none. Moderators receive incoming messages sent to a moderated list and determine whether they should be distributed to the list. List moderators:

- Approve messages to be posted to the list.

- Stop inappropriate messages from being sent to the list.

- May edit the content of messages before sending them to the list.

List subscribers are people who have requested and have been granted permission to join a particular mailing list. Subscribers:

- Can leave a list.

- Can set the way they receive list postings or change the name or email address associated with their subscription, within the configuration limits set by the list owner.

- May be permitted to search and view the archives.

- May be permitted to send messages to the list, depending on the type of list.

Non-subscribers include everyone not subscribed to a list. Non-subscribers:

- Can make a request to LISTSERV to be subscribed to a particular list.

- Depending on the list configuration, they may or may not be allowed to send messages to a list or read its archives.

Section 2 Getting Started

I f you are a new list owner, working with your first list, here are the recommended steps for getting started:

1. Read through Section 3 Communicating with LISTSERV to gain a general understanding of the concepts of LISTSERV commands, header keywords, and communicating with LISTSERV.

2. Decide on the type of mailing list you want: one-way, two-way discussion, or moderated discussion. See Section 4 Mailing List Types for more information if you are not sure.

3. Request your list from the site administrator. Depending on the procedures and arrangements provided at the individual site, the site administrator may configure your list to your specifications, or may simply create the list from the built-in list template that is closest to what you requested. This leaves the fine-tuning to you. You might only be provided with a "bare-bones" list with only the Owner and Notebook keywords defined, leaving the bulk of the configuration to you.

4. Obtain a LISTSERV password on the list's server. See Section 5.3 Setting a LIST-SERV Password.

5. Define or adjust the list configuration. Even if your site administrator configured the list to your exact specifications, understanding how it is set up will benefit you by saving time and effort as you become a more experienced list owner. Use the Web Interface wizards to guide you:

    a. Go to the "Categories of Keywords – Frequently used keywords", and check the keywords in each category and consider whether or how they apply to your list.

    b. Go through the Task Oriented Wizards, and consider whether any of them are of interest.

    c. Alternatively, read through the List Keyword Reference document, concentrating especially on the keywords listed for your type of list in Section 4 Mailing List Types, and edit the list header using email or the Web interface list header editor (see Section 5.6 List Configuration). A few keywords require special privileges to modify, so you may need to get assistance from the site administrator.

6. Consider which administrative email messages, if any, you want to customize. Modify their templates (see Section 6 Customizing Mail and Web Templates). The descriptions in Section 4 Mailing List Types list the templates that you are most likely to be interested in customizing for each list type.

7. Test your list. Subscribe to your list from one or more email addresses that do not have any special privileges on the list (not listed as Owner, Editor, or Moderator). Send test messages to the list. Try sending from editor, owner, subscriber, and non-

subscriber addresses. Signoff (leave the list) from at least one address. Practice performing common tasks. Does the list behave the way you expect it to? Do the messages look the way you want? If not, adjust the list's configuration and templates accordingly. When you are done testing, remember to remove the test addresses and the archives of the test messages, if necessary.

8. If you have an initial set of addresses to start the list with, create a text file and upload it into the list or add the addresses one at a time (see Section 5.6.3 Adding a New Subscriber to the List). Do not forget to add yourself if you want to receive list messages.

9. If desired, publicize your list in whatever forum is appropriate (for example, your own Web page, CataList, or in your print advertising). The List Owner's Manual contains an entire section on "Advertising Your Public Mailing Lists".

10. Start using your list. Enjoy!

Section 3 Communicating with LISTSERV

L ISTSERV was created before the World Wide Web was in general use. Then, the primary way for most people to communicate with the LISTSERV program was by email, and this method is still widely used today. The most recent versions of LISTSERV include a Web interface to make communication easier and more intuitive. The Web interface is richly populated with on-screen information, tutorials, and wizards to help you use the program quickly and effectively.

When you want to perform actions using LISTSERV, such as adding a subscriber to a list, the action is based on a command LISTSERV receives by email or using the Web interface. Some commands are only available to LISTSERV maintainers and list owners, while other commands are available to subscribers and non-subscribers as well.

3.1 Using Email to Communicate with LISTSERV

There are two main email addresses that are used to work with LISTSERV lists. One is to communicate with the LISTSERV program — a "command address", and one is used to post mail to the list — the "list address". Any time the list configuration is changed or a subscription setting is changed, communication takes place with the LISTSERV program using the command address. Whenever a message is posted to the list, it is sent to the list address.

The command address will usually start with "LISTSERV@" and will be followed by the server name where the LISTSERV program has been installed. Messages sent to the command address should contain only commands to LISTSERV, one command per line. Lines containing non-commands will result in an error message being returned.

Tip: If sending commands from an email client that uses a "signature file", make sure that the first line of the signature file is a line containing only "-- " (two consecutive hyphens and a space) starting at the very start of the line. Otherwise, LISTSERV will attempt to interpret the signature text as commands and return "Invalid command" errors.

Figure 3-1 Example of an Email Sent to LISTSERV

`Date: Tue, 31 Dec 2002 10:35:35`	*All email messages must have a date.*
`From: beth_23@xyz.com`	*This is the list owner's email address.*
`Subject:`	*The Subject is ignored by LISTSERV*
`To: listserv@listserv.example.com`	*The email address that communicates with the LISTSERV program always begins with "LISTSERV@" because you are contacting the LISTSERV program.*
`GET womensclub(header`	*A command (GET) is followed by specific parameters for that command. In this case, the name of the file to "get" followed by the options: a single parenthesis "(" and the word "header", indicating that LISTSERV should send only the header part of the list to the list owner's email address.*

The list address will always start with the name of the list followed by the address of the server where the list resides.

Figure 3-2 Example of an Email Sent to the List

```
Date: Tue, 31 Dec 2002 23:59:59              All email messages must have a date.

From: pres_woman@hotmail.com                 The sender must have permission to post.

Subject: Next Meeting                        A posting should have a subject line.

To: womensclub@listserv.example.com          The email address that sends mail to the list of
                                             subscribers always starts with the name of the list.
Dear Members,

The next meeting of the women's club will be   The body of the email message contains the
on January 27th at 8:00 PM. We will meet at    information that is sent to the subscribers.
the public library, 123 Oak Street.

The agenda is posted on our Web site at
www.example.org. Don't forget to fill out
your survey for the new year's activities.

Your President
```

For a list of LISTSERV commands, their descriptions, and how to issue them, see the List Keyword Reference document.

Email Command: You can also get a listing of commands by sending an email message to your LISTSERV server with the following command: `INFO REFCARD`

3.2 Using the Web Interface to Communicate with LISTSERV

Sending email messages to LISTSERV containing commands and posting messages to the list is sometimes confusing for people new to mailing lists. To simplify this process, the Web interface provides a centralized location for interaction with LISTSERV. As a list owner, you can use the Web interface to issue commands directly to LISTSERV. You can also use the Web interface to post simple messages to the list. An overview of the Web interface for list administration is provided in Section 5 Using the Web Interface.

3.3 Anatomy of a LISTSERV List

A LISTSERV list consists of the list's configuration (header) and any number of subscriptions. Each subscription includes an email address, a name, and the subscription "settings" or "options". The list's configuration regulates list behavior that applies to the entire list, whereas subscription settings regulate behavior that may be different for each subscriber.

A list's configuration is defined by a set of "keywords" arranged in a format called a "List Header." The keywords contained in the list header have values associated with them. The values of the keywords determine the behavior of the list. For example, a list header that contains the keyword "Attachments" with the value set to "No" will not allow any messages that include attachments to be sent to the list. Keywords can be added, removed, or have their values changed in a list header by sending a command to LISTSERV to replace the header.

Keywords and their associated values set the behavior of the list. This behavior in turn sets the "style" of the list. For example, the keyword "Send" and its associated value determine who is allowed to post messages to the list. A list that has the keyword "Send" set to "Owner" allows only the owner of the list to post messages to the subscribers. This creates a one-way communication style for the list – the owner can send messages to the subscribers, but the subscribers cannot send messages to the list for distribution.

A list of this type might be used for newsletters or product announcements. A list with the keyword "Send" set to "Private" would allow the list owner and the subscribers to that list to send messages to the list, setting up a two-way communication style list. This type of list could be used for collaboration or discussion among the subscribers. See Section 4 Mailing List Types for descriptions of the three most common types of mailing lists.

There are more than 50 keywords that can set the behavior of mailing lists. Keywords can be added, removed, or have their values changed by using the Web interface or by sending an email message to the LISTSERV program using the command address.

Figure 3-3 Example of a List Header

`PUT WC(HEADER PW=XXXXXX`	*The "PUT" command is used to replace the list header over*
`*`	*email.*
`* Women's Club`	*The first non-blank line in the header is the title of the list.*
`*`	*The "Hide Header" (.HH ON) directive is used so no one but the*
`* .HH ON`	*list owner will see the following header lines.*
`*`	
`*`	*Keywords in the list header and their respective settings or val-*
`* Subscription= By_Owner`	*ues determine the behavior of the list. The keyword is followed*
`* Ack= Yes`	*by an "=" (equal sign). Anything to the right of the "=" denotes the*
`* Confidential= Yes`	*setting or value for that keyword.*
`* Validate= Yes,Confirm`	*When a keyword has several values, they are*
`* Reply-to= List,Respect`	*separated by commas, or can be continued over several lines by*
`* Send= Private`	*repeating the same keyword.*
`* Errors-To= Owner`	
`* Owner= beth_23@xyz.com`	
`* Notebook= Yes`	
`* Notebook= E:\LISTS\WC`	*Any text that is not a keyword definition or a*
`* Notebook= Weekly,Private`	*directive (line starting with a ".") is considered a comment and*
`*`	*ignored by LISTSERV.*
`* This template creates the`	
`* "classic" public discussion`	*A description of the template used to create a*
`* list. Typically it will have`	*particular type of list may be present. This text is explanatory*
`* public archives, only`	*only. It is not used by LISTSERV, does not affect the behavior of*
`* subscribers can post to the`	*the list in any way, and may be removed by the list owner if*
`* list and replies`	*desired.*
`* will go back to the list.`	
`* Only list owners may review`	*When updating the list header using e mail, each line must start*
`* the list of subscribers.`	*with an asterisk ("*").*
`*`	
`* See Section 2 in the List`	
`* Owner's Manual for more`	
`* information.`	
`*`	
`*`	*".HH OFF" turns the Hide Header directive off so that any part of*
`* .HH OFF`	*the header that follows is viewable by the public*
`*`	
`* This mailing list is for the`	*A description of the list viewable by anyone has been added by*
`* members of the Women's Club.`	*the list owner.*

3.4 The "OK" Confirmation Method

For the sake of security, there are a number of actions for which LISTSERV requires confirmation before proceeding. In some cases, LISTSERV will accept a password-based validation. In other cases, email confirmation is required. When this happens, LISTSERV sends an email message with a subject line such as:

```
Subject:            Command confirmation request (787EF897)
```

The string of "hexadecimal" numbers in parentheses ("787EF897" in the example) is called a "cookie" (sometimes referred to as a "confirmation code") and is different every time. The text of the message will look something like this:

Figure 3-4 Example of an "OK" Confirmation Message

```
Your command:

                        quiet delete listname *@*

has been received. For security reasons, you are now required to reply to
this message, as explained below, to confirm the execution of your command.
Note that the security level of the list is under list owner control, and
that is the person you should contact if you have any complaint about secu-
rity procedures.

To confirm the execution of your command, simply point your browser to the
following URL:

 http://home.ease.lsoft.com/scripts/wa.exe?OK=787EF897&L=LISTNAME

Alternatively, if you have no WWW access, you can reply to the present mes-
sage and type "ok" (without the quotes) as the text of your message. Just
the word "ok" - do not retype the command. This procedure will work with any
mail program that fully conforms to the Internet standards for electronic
mail. If you receive an error message, try   sending a new message to LIST-
SERV@HOME.EASE.LSOFT.COM   (without using the "reply" function - this is
very important) and type "ok 787EF897" as the text of your message.

Finally, your command will be cancelled automatically if LISTSERV does not
receive your confirmation within 48h. After that time, you must start over
and resend the command to get a new confirmation code. If you change your
mind and decide that you do NOT want to confirm the command, simply discard
the present message and let the request expire on its own.

----------------------- Original mail header -------------------------
Return-Path: <yourname@EXAMPLE.COM>
Received: from mail.example.com by home.ease.lsoft.com (Windows v1.1b) with
SMTP id <9.FC988C9E@home.ease.lsoft.com>; Tue, 3 Dec 2002 17:16:06 -0500
Received: from yourbox by mail.example.com (Windows v1.1b) with SMTP id
<0.000007B9@mail.example.com>; Tue, 3 Dec 2002 17:16:06 -0500
From: "Your Name" <yourname@example.com>
To: listserv@home.ease.lsoft.com
Date: Tue, 3 Dec 2002 17:16:06 -0500
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Subject:
```

In the figure above, the owner sent an email command to delete all subscribers from a list that is configured such that it requires list-owner commands to be validated (`Validate=Yes,Confirm`). As the "delete" command did not include the owner's password, LISTSERV sent an email requesting confirmation of the command.

When you receive a command confirmation request, you must confirm within 48 hours (this time may be configured differently using the Confirm-Delay= keyword) in order for the command to be executed. There are two ways of confirming the command, using the Web interface or using email.

- To confirm with the Web interface, simply visit the link included in the message. The link sends the "OK" command to LISTSERV, providing the list name to which it applies and the cookie that was assigned to this command.

- To confirm with email, simply reply to the email message, keeping intact the Subject line ("Re:" or other prefixes may be added with no impact), in particular the cookie in parentheses at the end of the subject line. In the text of your reply, simply say "OK" (without the quotes) and nothing more.

Tip: If this method is not successful, then you can send a new message to the LISTSERV command address using the "`OK  xxxxxxxx`" command, where "`xxxxxxxx`" is the cookie copied from the original confirmation request.

The cookie is the key to the "`OK`" confirmation method of validation. LISTSERV randomly generates a new cookie for each action that requires validation. Only someone with access to the email address to which LISTSERV sends the cookie knows what the cookie is. All of the privileges within LISTSERV are tied to an email address, so when LISTSERV needs to verify that a command was really initiated by the owner of a particular email address, it uses the "`OK`" confirmation method.

Caution: Never "`OK`" a cookie blindly. Make sure that it is for a command that you initiated or for a message that you want to have distributed to the list. Several cases of list "hijackings" or spam sent to well-secured lists have been traced back to a list owner or moderator absent-mindedly clicking an OK link that they should not have clicked.

Examples of actions that require an "OK confirmation":

- Postings from a non-editor to a list with `Send= Editor,Hold`.

- Postings from a subscriber with the "`REVIEW`" subscription setting.

- Postings to a list with `Send=…,Confirm` (sender must confirm that the message came from them – strongly recommended for one-way lists, such as newsletters).

- Subscription requests for a list with `Subscription=Open,Confirm` or `Subscription=By_Owner,Confirm`. Subscription confirmations are strongly recommended on public lists, to prevent unwanted third-party subscriptions.

- Subscription and signoff requests made over the web without a login.

- `DELETE` or `ADD` commands sent over email without a password, on a list with `Validate=Yes,Confirm`.

- All subscription modifying commands, including `SET` and `SIGNOFF` commands from subscribers, on a list with `Validate=All,Confirm`.

As these examples illustrate, the list configuration controls most of the conditions under which confirmations are required. The list owner must decide on the right balance between security and convenience for the list. For more information, see the List Keyword Reference document.

Section 4 Mailing List Types

T here are three main types or styles of mailing lists, each with its own advantages for specialized use. Setting specific keywords to certain values and then editing various templates creates different types of mailing lists. The style of list will best determine the particular keywords and their settings in your list header. Your LISTSERV maintainer will be able to create a list based on the style you want or need. When requesting a new list, make sure you tell your LISTSERV maintainer what style of list you want. The three major types of lists are:

- **One-Way Announcement** – The owner(s) and/or editor(s) of the list are the only people who are allowed to send messages to the subscribers. The communication flows one way – from the list administrators to the list subscribers. This type of list is primarily used for newsletters, product announcements, and dissemination of information that does not require feedback from the subscriber.

- **Two-Way Discussion** – The list administrators and the list subscribers are both permitted to post messages to the list. The communication flows two ways - between the administrators and the subscribers, and back and forth between different subscribers. This type of list is primarily used for discussion groups engaged in the exchange of ideas and information centered on a specific topic.

- **Moderated** – This type of discussion list has an editor or editors who review all incoming messages. The editor can then decide to allow the message to be sent to all the subscribers on the list, or not allow the message to be posted to the list. Moderated lists can be used to control the discussion by keeping off topic, inflammatory, or otherwise inappropriate messages from the reaching subscribers.

There are other types of lists, for example you can use a list as an "auto-responder". The three types listed here are the most common. See the List Owner Manual for LISTSERV for more information on other list types.

4.1 One-Way Announcement Lists

One-way announcement lists or newsletters are types of lists where subscribers only receive information and do not interact with the other list members. This type of list is most commonly used for delivering news and media publications, company newsletters and any other types of announcements. For example, the "LISTSERV at Work" newsletter (see http://www.lsoft.com/news/newsletter-us.asp) is sent quarterly to keep the L-Soft community informed and up-to-date with the company's latest developments. One-way lists are similar to print newspaper subscriptions. They often have large numbers of subscriptions and people sign on and off the list as they wish. Set up an announcement list by using one of the following sets of keywords.

Table 4-1 Keywords for an Announcement Style List

Keyword and Suggest Value	Description
`Send= Owner,Confirm`	Only addresses listed in the `Owner=` keyword can post to the list. Non-owner addresses attempting to post receive a non-customizable rejection message.
`Send= email-address,Confirm`	Only the specified e mail address is allowed to post to the list. The sender is required to confirm the post. All other addresses attempting to post receive a non-customizable rejection message.
`Send= Editor,Hold,Confirm` `Editor= editor-address(es)`	Only address listed in the `Editor=` keyword can post to the list without moderation. Editors are required to confirm their own postings. Any non-editor address attempting to post to the list will receive the message defined by the `POST_EDITOR` template, and the message will be forwarded to the first editor listed (or `Moderator=` addresses, if defined). The editor or moderator(s) must be careful not to `OK` these or they will be distributed.

`Send= Editor,Hold,Confirm`
`Editor= editor-address(es)`
`Default-Options= NOPOST`
	Same as above, except that subscribers that attempt to post will receive a non-customizable rejection message, and their post will not be forwarded to the editor or moderators. Non-subscriber posts will still be forwarded to the moderator, as above. If the editor addresses are subscribed, they must be set to "`POST`" before they will be allowed to post.

The following table contains some header keywords that you may want to consider setting in addition to those in the above table. Keywords appearing without a suggested value may have multiple settings and/or options to consider. For more information about assigning keyword values, see the List Keyword Reference document or the Keyword Wizard in the Web Interface.

Table 4-2 Other Keywords to Consider for an Announcement Style List

Keyword	Suggested Value
`Auto-Delete=`	`Yes,Full-Auto` (set `Max`, `Delay`, and `Probe` values as appropriate for you list)
`Change-Log=`	`Yes`
`Confidential=`	
`Default-Options=`	
`Digest=`	`No`
`Notebook=`	
`Reply-To=`	`Sender,Ignore`

Keyword	Suggested Value
Subscription=	Open,Confirm
Validate	Yes,Confirm (Yes,Confirm is the minimum recommended protection. For stronger protection, see the List Keyword Reference document or the Keyword Wizard.

You may also want to customize the following templates. For more information on customizing template, see Section 6 Customizing Mail and Web Templates.

Table 4-3 Templates to Customize for an Announcement Style List

Welcome Message	ADD1	BOTTOM_BANNER
Farewell Message	DELETE1	BOTTOM_BANNER_HTML
$SIGNUP	INFO	TOP_BANNER
SIGNUP1	POST_EDITOR	TOP_BANNER_HTML
SIGNOFF2		
You may also want to customize the following templates, unless you've disabled Auto-Delete or set Auto-Delete=Manual.		
AUTODEL	PROBE1	PROBE2

4.2 Two-Way Discussion Lists

Two-way discussion lists allow for interaction between group members. These open forums facilitate ongoing discussions among members. They are most commonly used for internal communication within an organization or group of people. For instance, many universities use secure "class lists" for interaction among students and teachers or to conduct remote teaching.

Unlike a one-way list, a discussion list not only allows, but also encourages interaction between members who are part of the group. Every member can write to the list, and in doing so, all members will receive a copy of the message. In this way, discussions can take place and views can be exchanged among a large number of people. Two-way discussion lists can be public or private depending on the way the list is configured. Public lists allow anyone to join and participate. Open public discussion lists tend to be large with many messages being posted (high volume). They can take up a lot of server space and they can be open to spamming, spoofing, and flaming if there are no security measures in place.

Closed or private two-way discussion groups can also be large and high volume, depending on the topic of the list, or they can be medium sized or very small. Subscriptions are monitored and are often subject to approval by a list administrator. Subscribers communicate amongst themselves on a specific topic. Incidents of spamming and flaming are generally low because only subscribers can post to the list,

and their subscription request has been reviewed. Set up a discussion list by using one of the following sets of keywords.

Table 4-4 Keywords for a Discussion Style List

Keyword and Suggest Value	Description
`Send= Public`	Anyone, even non-subscribers, can post to the list.
`Send= Private`	Only subscribed addresses may post to the list. Messages from an address that is not subscribed will be rejected, even if the person sending the message is subscribed under a different address.
`Send= Editor,Hold` `Editor= email-address,(listname)`	This is known as a "self-moderated list". All list subscribers are editors, and therefore their posts are not moderated. Messages from non-subscribers, instead of being rejected as in a `Send=Private` list, are forwarded to the primary editor (or `Modera-tor=` addresses if any are defined) for approval.

`Send= Public`
`Default-Options= REVIEW`
`Editor= email-address`
	For non-subscribers, this is similar to the previous setting, as the `REVIEW` default option applies to non-subscribers as well as new subscribers. Thus, messages from non-subscribers are forwarded to the primary editor (or `Moderator=` addresses if any are defined) for approval. All subscriptions are initially set to "`REVIEW`", so that there may be a "probation period" for new subscribers. When a message comes from a subscriber that is set to "`REVIEW`", it is forwarded to the primary editor (or `Moderator=` addresses if any are defined) for approval. When the probation period is over, the owner may set the individual subscription to "`NOREVIEW`" so that posts from that address are no longer "moderated". This prevents spammers from signing on to a private or self-moderated list with open subscriptions, for the sole purpose of sending spam and immediately signing off. It also bypasses one of the problems of a self-moderated list, which is that individual posting limits are not enforced for list editors and therefore setting the second value of the `Daily—Thresh-old=` keyword is useless on a self-moderated list.

The following table contains some header keywords that you may want to consider setting in addition to those in the above table. Keywords appearing without a suggested value may have multiple settings and/or options to consider. For more information about assigning keyword values, see the List Keyword Reference document or the Keyword Wizard in the Web Interface.

Table 4-5 Other Keywords to Consider for a Discussion Style List

Keyword	Suggested Value
`Attachments=`	
`Auto-Delete=`	`Yes,Full-Auto` (set `Max`, `Delay`, and `Probe` values as appropriate for you list)
`Change-Log=`	`Yes`
`Confidential=`	
`Daily-Threshold+`	
`Default-Options=`	
`Digest=`	
`Moderator`	
`Notebook=`	
`Reply-To=`	
`Sizelim=`	
`Subscription=`	`Open,Confirm`
`Validate`	`Yes,Confirm` (Yes,Confirm is the minimum recommended protection. For stronger protection see the List Keyword Reference document or the Keyword Wizard.

You may also want to customize the following templates. For more information on customizing template, see Section 6 Customizing Mail and Web Templates.

Table 4-6 Templates to Customize for a Discussion Style List

`Welcome Message`	`SIGNOFF2`	`BOTTOM_BANNER`
`Farewell Message`	`ADD1`	`BOTTOM_BANNER_HTML`
`$SIGNUP`	`DELETE1`	`TOP_BANNER`
`SIGNUP1`	`INFO`	`TOP_BANNER_HTML`
You may also want to customize the following templates, unless you've disabled `Auto-Delete` or set `Auto-Delete=Manual`.		
`AUTODEL1`	`PROBE1`	`PROBE2`
If the list is self-moderated or is set to `Default-Options=Review`, then you may also want to customize the following templates.		
`POST_EDITOR`		

If you are implementing restrictions on posting contents, then you may also want to customize one or more of the following templates.		
CONTENT_FILTER	BAD_CONTENT	BAD_ATTATCHMENT
SIZELIM_EXCEEDED		

4.3 Moderated Lists

Similar to the two-way discussion list, a moderated list allows for the exchange of postings between subscribers and administrators, but an editor or moderator receives all incoming messages. The editor or moderator then decides to accept the message and post it to the list, or reject the message and not post it to the list. Lists can be set up with more than one moderator and they can take turns reviewing messages in a "round robin" fashion or all moderators can receive all messages.

Moderated lists can be of any size and subscriptions can be open or closed, depending on the type of list you want. Spamming and flaming are much less likely to happen on this type of list because all the postings are subject to approval by a person before they can be posted to the list.

Moderators receive and review postings sent to the list, and either approve them to be sent through the list or reject them to prevent them from being sent to the list. If there are multiple moderators, the list postings can be sent to each moderator in turn in a "round-robin" fashion or to all moderators. In the "round-robin" scenario, each message is sent to only one moderator for approval, sending one message to each moderator in the order listed in the list header before cycling back to the first moderator. The "round-robin" scenario allows a heavy load to be shared among several moderators. In the scenario where messages are all sent to all moderators, the first moderator to get to each message can approve or reject it. You would use this latter scenario if you want approvals to be made as soon as a moderator is available to review it.

The editors are those addresses that are allowed to send messages to the list without requiring moderation. The first address listed in the "Editor" keyword definition is known as the "primary" editor. If there is no "Moderator" defined, the primary editor is used as the sole moderator. The primary editor must always be an individual email address, but subsequent editors can be a list name enclosed in parentheses, meaning that all the subscribers on that list are allowed to post without being moderated. As a result, you can set up a separate list whose members are the editors of this one (and where subscriptions are closed). If you use the current list name, you have what is known as a "self-moderated" discussion list: subscribers can post without their messages being moderated, but posts from non-subscribers must be approved (see Section 4.2 Two-Way Discussion Lists). Set up a moderated list by using one of the following sets of keywords.

Section 5 Using the Web Interface

S ending email messages to LISTSERV containing commands and sending email to the list to post messages is sometimes confusing for people new to mailing lists. Because LISTSERV is such a powerful and feature-rich program, there are many different keywords and keyword values that can be set for mailing lists. To simplify this process, L-Soft has created a Web interface for list owners and subscribers, providing a centralized location for interaction with LISTSERV. The Web interface allows list owners to manage their lists, post to their lists, review archives, and run reports on list activity. The Web interface allows subscribers to manage their subscriptions, post to lists, and review archives.

LISTSERV's Web Administration Interface makes LISTSERV administration significantly easier, letting you change many LISTSERV site configuration settings "on the fly", although some changes may still require a restart of the server before they are recognized.

The LISTSERV 15.5 Web Interface requires JavaScript to be enabled by default. However, those who prefer not to use JavaScript can set their Navigation Style user preference to "Non-Script Navigation" in the Preferences menu.

Virtually all list management operations can be accomplished via this interface, which is tied into LISTSERV's own password manager for security.

Note: This interface cannot be used to manage lists that are coded `Validate= Yes,Confirm,NoPW` or `Validate= All,Confirm,NoPW` because passwords are not accepted for validation in those cases.

5.1 The Default LISTSERV Home Page

To enter the Web Interface you need a browser. L-Soft recommends Microsoft® Internet Explorer version 5.0 or greater or Netscape® 6.0 or greater for the best results.

The default home page for LISTSERV typically is reached by using the URL:

- On unix: `http://yourhost.domain/cgi-bin/wa`

- On VMS: `http://yourhost.domain/htbin/wa`

- On Windows: `http://yourhost.domain/scripts/wa.exe` or `http://yourhost.domain/cgi-bin/wa.exe`

Of course this is not standardized; the location of the 'wa' script is determined by the value of `WWW_ARCHIVE_CGI` in LISTSERV's site configuration file. In any case, invoking 'wa' without any parameters returns the default home page.

5.2 Logging In

You can log into the list administration interface from any list's main web archive index page (assuming that this link has not been removed by the list owner; it exists in the WWW_INDEX mail template by default). The interface may also be reached by a link from the default LISTSERV home page mentioned in Section 5.1 The Default LISTSERV Home Page.

To access the list administration interface without a link, you point your web browser to the "wa" script. Typically the interface is accessed as follows:

- On unix: http://yourhost.domain/cgi-bin/wa

- On VMS: http://yourhost.domain/htbin/wa

- On Windows: http://yourhost.domain/scripts/wa.exe or http://yourhost.domain/cgi-bin/wa.exe

and by default, users are directed to the main archives page for the server.

Figure 5-1 LISTSERV Archives Screen

To get to the administrative pages, you will have to log in. If you already have a personal LISTSERV password, then you will simply log in with your existing userid and password.

If you login with the "save my password in a cookie" method, LISTSERV will issue you a cookie that allows you to bypass this login screen (and incidentally to stay logged into the interface for longer than 15 minutes without having to log in again when your session expires). This option is, however, only recommended for people who have physically secure machines (for instance, on your machine at home or in your office) or who are able to otherwise keep unauthorized users from logging in since LISTSERV cannot tell who is using the cookie. Specifically, if your browser does not support separate configurations or bookmark files for different users, you should not use the cookie method in a workplace environment.

Notes: There is a known bug in Netscape prior to version 4.0 that allows you to see the userid and password typed into the text boxes if you back up to the login page using the "Back" arrow. The userid you use here must be associated with the personal

password you have from LISTSERV. If you have registered a password as joe@unix.host.com and try to log in here as joe@host.com with that password, LISTSERV will reject your login.

Figure 5-2 Login Screen

5.3 Setting a LISTSERV Password

If you do not already have a personal LISTSERV password (set with the PW ADD command or via the Web Interface) or cannot remember your password, you need to define one now. If you choose to do this via the Web Interface, simply click the **Get a New LISTSERV Password** link. The Register LISTSERV Password screen opens.

Figure 5-3 Registering a LISTSERV Password

Enter your email and password. Confirm the password by entering it again, and then click the **[Register password]** button. When your password registration is accepted, a

confirmation email will be sent to you. You will have to activate your password by responding to the email (or clicking the link it contains).

5.4 Logging In and Setting Preferences

When you log in for the first time, you will be returned to the main list archives page, but with a difference: the top toolbar will have a lot more options.

Figure 5-4 Web Interface Toolbar

The interface tells you who you are logged in as, and what functions your logged-in address is entitled to perform. It also tells you what mode you're set to (the Basic Mode by default; there are two other modes, "Expert" and "Tutorial"). If you are entitled to edit the page, you can go straight to the page editing wizard by clicking **Edit Page**.

Clicking the **LISTSERV logo** icon at the left takes you to L-Soft's home page. Clicking "**LISTSERV 15.5**" takes you to your default start page.

Help pages are accessed by clicking the **Help** icon at the right hand side of the toolbar.

The first thing you may want to do is click **Preferences**.

Figure 5-5 Preference Screen

One of the things you can set is the default start page. Site administrators will probably want to start at the server administration dashboard, while list owners will probably want to start at the list owner dashboard. Or they may be perfectly happy to start at the list archives page. In any case, clicking on **Preferences** brings up the following page:

More information can be found by clicking the **Help** icons associated with each preference.

The **Server Administration** menu gives you access to the Server Dashboard, site configuration functions, mailing list creation and deletion, server reports, server customization (mail and web templates), and the ad-hoc LISTSERV command entry page.

The **List Management** menu gives list owners access to the List Dashboard, list configuration, customization, and subscriber management.

List Moderation centralizes the moderation function, and it will show all messages needing moderation from the userid@host under which you are logged in.

Email Lists takes you back to the main list archives page.

5.5 The List Management Dashboard

The List Management Dashboard is one of the screens that may appear when you log in. (This is determined by your preference settings.)

The List Management Dashboard is divided into two sections, providing information and reports about your technical support and lists. Each section uses icons to indicate its status and available actions:

- **Green Shield with a Checkmark** – This icon means that you are current. Note that in the Moderation section this icon mean that there are no messages pending moderation.

- **Orange Diamond with an Exclamation Mark** – This icon means that something requires attention. Note that for the Moderation section, this icon means that there are messages pending moderation.

- **Life Buoy** – This icon is used if the Server Administrator has enabled technical support, making it easy and convenient to send requests to the Server Administrator. Once you click on this icon, an email message opens. Enter any information describing your problem. Please be as detailed as possible.

The **Technical Support** section shows whether or not the Server Administrator has enabled technical support. If it is enabled, then the **Life Buoy** icon is shown, making it easy and convenient to send requests to the Server Administrator. Once you click on this icon, an email message opens. Enter any information describing your problem. Please be as detailed as possible.

The **Moderation** section lists any messages that are awaiting moderation. The messages displayed here are those that belong to a list for which you are listed as a moderator.

Note: This section is only displayed if you are a moderator on one or more lists. In addition, only two icons are used in this section. The green icon indicates that there are no messages pending moderation; the orange icon indicates that there are messages pending moderation.

The reports table at the bottom of the screen shows list configuration and list activity (changelog) data, which is a combination of the List Report and the List Activity reports. (Note that the list activity data is only visible if a list has changelogs enabled.) By default, the changelog data is not automatically calculated because of the time it takes to process the log files, especially if you have many lists or if they have large log files. To calculate the data, just click on one of the plus signs, **[+]**. If you would like the changelog numbers to be loaded automatically every time you access the page, you can change the **Owner Dashboard Changelogs** setting in the Preferences section.

Figure 5-6 List Management Dashboard

To add or remove columns from the table, click the **Edit Table** option. This option is a great way to customize the information shown in the table, making sure only the information you want to see is visible. If you customize the table, then your changes will be saved in your preferences and will be automatically loaded every time you log in.

The **Lists Per Page** parameter controls how many lists will be displayed on a single page. The default is 10. If you want to break the list into 20 lists (for example), then simply enter "20" in the box and click **[Update]**.

The **Changelog Period** parameter lets you select the date range for the changelog columns in the report. The default is 1 day. If you want to change this period, simply choose a different option from the drop-down menu, such as 14 days, and then click **[Update]**.

5.6 List Configuration

Lists can be configured using a wizard, which guides you step-by-step through the configuration process, or manually.

To open the List Configuration Wizard, click on the **List Management** menu, select **List Configuration**, and then select **List Configuration Wizard**.

To configure a list manually, click on the **List Management** menu, select **List Configuration**, and then select **Manual List Configuration**.

Figure 5-7 The List Management Menu
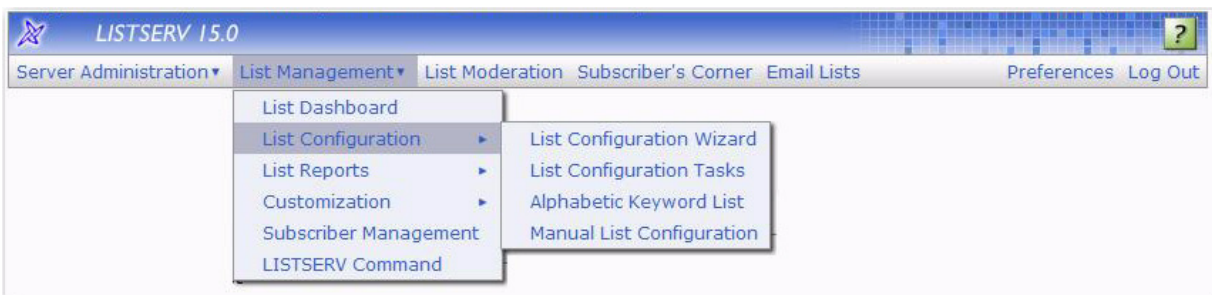
For those of you who want to configure the list manually, you can edit the list header in its "raw" state. This is only recommended for people who are very comfortable with the format of the LISTSERV list header and know the keywords and their parameters well.

The list header appears in a multi-line text box that can be scrolled up and down. You simply type in the changes or added lines just as if you were using a regular text editor. When you are finished, click **[Submit]** to submit the changes. If you want to start over, you can click **[Reload]** to reload the header information from the server.

When you submit your changes with the **[Submit]** button, you will get the same kind of feedback from LISTSERV as you would if you sent a PUT operation by mail. The next screen will either say that the header of the list has been successfully updated, or it will indicate that it has found errors and that the header has not been stored. The feedback page also has a text box containing the header information you've just stored (or tried to store) so if you need to make further corrections to the header, you don't have to back up and start over.

The list header keywords and their parameters are documented in the List Keyword Reference document, in the online help, or (when using the configuration wizard) by clicking the **Help** icon for each keyword.

Email Command: To get descriptions of all the keywords sent to you in a plain text email, send the following command: INFO KEYWORDS

5.6.1 Hiding Parts of the Header

Parts of the header can be hidden from the public through the Web Interface or by updating the header over email. To hide parts of the header, enter the "hide header" directive:

```
.HH ON
```

on a line by itself before the first header line you want hidden, and turn it off with the directive:

```
.HH OFF
```

on a line by itself after the last line you want hidden. You may have as many hidden and non-hidden blocks in the header as you wish.

5.7 The Administrator Task Wizard

The Administrator Task Wizard allows you to review and modify which email addresses handle each aspect of administering your list. There can be any number of people involved in running a list. You might have the same person taking on all administrative roles alone, or you may assign several different people to each role.

To open the Administrator Task Wizard, click on the **List Management** menu, select **List Configuration**, and then select **List Configuration Tasks**.

Make desired changes to each of the keywords on any of the tabs, and then press the **[Submit]** button. Alternatively, you can click on each keyword to follow the links to the Wizard pages for each keyword – these include lengthy explanations about the keywords.

5.7.1 Understanding Administrator Roles

5.7.1.1 What is an Owner?

Owners are the primary administrators of the list. Email addresses with "owner" privileges may change the configuration and templates of the list, add and delete subscriptions, and change the settings on subscriptions.

Owners also receive email sent to the official list owner address. Unless otherwise specified, they receive notifications of subscriptions, signoffs, and error messages related to the operation of the list.

Some owner addresses may be designated as "quiet" owners. These addresses have all the owner privileges but do not receive any of the owner messages. Each list must have at least one non-quiet owner.

If you are replacing an owner, start by adding the new owner address. Next, make sure that the new address is able to function as an owner before removing the old address from the list of owners. If you make a mistake by first removing the old working address and then discovering the new address does not work, you may have to get the site administrator to fix your list for you.

5.7.1.2 What is an Editor?

On lists set to `Send=Editor`, editors are those addresses that are allowed to post directly to the list without moderation (that is, approval from a moderator).

On moderated lists where the `Moderator` keyword is not defined, the first editor listed in the `Editor` keyword acts as sole moderator.

On all lists, regardless of the value of the `Send` keyword, editors are not subject to limitations on the number of daily posts to the list, as set by the `Daily-Threshold` keyword.

The first editor listed in the `Editor` keyword must be an email address pointing to an individual. Other editors can point to lists on the same server including the current list; in

that case, all the subscribers on the list have "editor" privileges. To enter the name of a list, you must enclose just the list name (not the list address) in parentheses.

If you do not specify the `Editor` keyword, the primary editor is the first listed Owner address.

5.7.1.3 What is a Moderator?

When a list is fully or partially moderated, all messages from "moderated" addresses are sent to the moderator(s) for approval. You can set up your list so that incoming messages go to each moderator in turn in a "round-robin" fashion, or so that all incoming messages go to all moderators.

If you do not specify the `Moderator` keyword, moderated messages get sent to the primary Editor address.

Messages are moderated in the following circumstances:

- The message is sent from a non-editor address on a list with `Send=Editor`.

- The message is sent from a subscription that is set to "`REVIEW`".

- The message is sent from a non-subscribed address on a list where `Default-Options` includes "`REVIEW`"

5.7.1.4 What is an Error?

Occasionally, problems occur on a list, and LISTSERV needs to know where to send error notifications. If you do not specify the `Errors-to` keyword, error messages will be sent to all non-quiet owners.

Listed below are a some of the most common circumstances where error notifications might be sent to the address specified by `Errors-to` (or its default value):

- If the list is set to `Auto-Delete=Yes`, and there have been any delivery errors ("bounces") within the set time period, a "Daily Monitoring Report" is sent every morning.

- If the list is set to `Auto-Delete=No`, then all bounces are forwarded.

- If an email is received for the list from an address specified in the `Filter` keyword.

- If an email is received for the list containing mail headers pointing to the list (this may be an indication of a condition that would cause a mailing loop if the post were allowed to be delivered to the list).

5.7.1.5 What is a Notification?

Whenever someone subscribes or is added to the list, or someone signs off or is removed from the list, a notification is sent to the non-quiet owners (if `Notify=Yes`) or to the address(es) specified in the Notify keyword.

To turn off notification of subscription activities, set `Notify=No`.

5.8 List Maintenance via the Web Interface

Important: The LISTSERV 15 Web Interface cannot be used to manage lists that are coded `Validate= Yes,Confirm,NoPW` or `Validate= All,Confirm,NoPW` because passwords are not accepted for validation in those cases.

The Subscriber Management screen lets list owners examine, delete, and add subscribers to a specific list. To access this screen, select **Subscriber Management**

from the **List Management** menu. From this screen, select the list to work with, and then select either the Single Subscriber or Bulk Operations tab. The Single Subscriber tab lets the list owner examine or delete a subscription and add a new subscriber to the list. To add or delete many subscriptions at a time, use the Bulk Operations tab.

Note: To examine, modify, or delete multiple subscriptions at once, you can also use the Subscriber Reports screen.

5.8.1 Examining or Deleting a Subscription

This works very much like the "SCAN" command. Simply enter your criteria in the text box and click the **[Search in List]** button.

Figure 5-8 Examining or Deleting a Subscription

If there is no match for your entry, then you will get back the same page but with a Scan: No match message at the top. If, on the other hand, your search is successful, one of two things will happen.

If there are multiple matches for your criteria, a screen will be displayed with a scrollable list box containing all of the matches

Figure 5-9 Select Subscriber to Examine or Delete

Next, simply choose the user you want to examine or delete and click on the appropriate button. If you did not find what you were looking for, you can press the **[New Search]** button to get a new search screen.

If there was only a single match to your query, then the preceding screen will be bypassed and you will go directly to the next screen, which is the Subscriber Management screen for the subscription. It displays the values of all the settings for that subscription, including the subscription date and name. From the account management screen, you can delete the subscription or change the name, the email address, or the subscription options associated with the subscription. A sample of the screen is shown below.

Figure 5-10 Subscriber Management Screen

5.8.2 Adding a New Subscriber to the List

To add a new subscriber, select the list you want to add the subscriber to. Then, in the **Add New Subscriber** section, enter the email address and name of the new subscriber, select whether or not to send an email notification to this subscriber, and click the **[Add to List]** button.

Note: The full name of the subscriber is optional. If omitted, then the user will be added anonymously to the list.

Figure 5-11 Adding a New Subscriber

5.8.3 Bulk Operations

The Bulk Operations tab allows a list owner to upload an input file containing email addresses and (optionally) names, one address per line, and either add all the email addresses in the file to the list (optionally replacing the current subscribers) or remove them from the list.

The input file is created on your own machine with an ASCII text editor. After clicking the **[Import]** button you will see a command response similar to the following:

- If the **Add the imported address to "***List***"; do not remove any subscribers** option is selected:

  ADD: no error, 202 recipients added, no entry changed, no duplicate, none forwarded.

- If the **Remove all subscribers from "***List***", and add the imported address** option is selected:

  DELETE: 14 subscribers removed.

  ADD: no error, 38 recipients added, no entry changed, no duplicate, none forwarded.

  (If this option is selected, but no input file is specified, then you will only get the DELETE message.)

- If the **Remove the imported addresses from "***List***"; do not add any subscribers** option is selected:

  DELETE: 93 subscribers removed.

- If the **Remove the imported addresses from all lists** option is selected:

  DELETE: 243 subscribers removed.

  DELETE: 109 subscribers removed.

  Global deletion process complete, 352 entries removed.

- If you do not supply an upload file where required, or if your browser does not support the RFC1867 file upload extension, you get the following message:

  Your browser did not upload any file during the transfer. Assuming you did fill in the file input box, the most likely cause is that your browser does not support the file upload extension (RFC1867).

Figure 5-12 The Bulk Operations Tab

Notes: Bulk operations are not enabled by default. The site manager must enable this functionality explicitly. If you get an error 2 when you click on the **[Import]** button, this means that the "upload" directory has not been created. If you get an error 13 when you click on the **[Import]** button, this means that the "upload" directory has been created but the CGI program user does not have write permission in that directory. In addition, the input file must be a plain text file (not a word processor document or spreadsheet) and must contain one address per line, optionally followed with a space (or TAB) and the subscriber's name. In addition, the subscribers being added or deleted will not be notified.

5.8.4 Moderating a List

The List Moderation Interface allows list moderators to moderate a list through the Web Interface, rather than using email. To start moderating a list, click on **List Moderation** from the Toolbar. The List Moderation screen has a list selection area at the top. Click the drop-down menu to select the list you want to work with. Unlike the other list selection areas that show the lists for which the logged-in user is the owner, this one only shows the lists for which the user may act as moderator.

If you are moderator to more than one list, select the list you want to moderate. If there are no messages for you to moderate, the only action possible is to "refresh" using the **[Refresh]** button, which looks for messages to moderate in the selected list.

If there are messages to moderate, a table, like the one below, is displayed and contains all the messages that were sent to the logged-in email address for moderation.

Figure 5-13 Moderated List Table

The first column contains check boxes, one per message. The second column shows the **Subject** of the message. The third column shows the **From** email address that sent the message. The fourth column shows the **Date** in the message (not necessarily when the message was received). When **All Moderators** is checked, two extra columns are displayed showing whether your account received the moderation request or other accounts did; if the `Moderator=` keyword is set to "`All`" with multiple moderators, both columns will be checked for all messages.

5.8.4.1 Accepting or Rejecting the Message

If you can tell at a glance which messages to approve or reject, simply check all the boxes corresponding to the messages you want to act upon. Next, go to the **Action** drop-down menu, select the action you want to perform – **Approve** or **Reject**. (The default action is **Refresh**, which simply refreshes the display without accepting or rejecting any messages). Click the **[Submit]** button to record your actions.

5.8.4.2 Viewing the Message

Sometimes, you cannot immediately tell whether a message should be accepted or rejected without reading the contents of the message. To open the message contents, click on the subject of the message to display a new view that shows only one message.

Figure 5-14 Message View
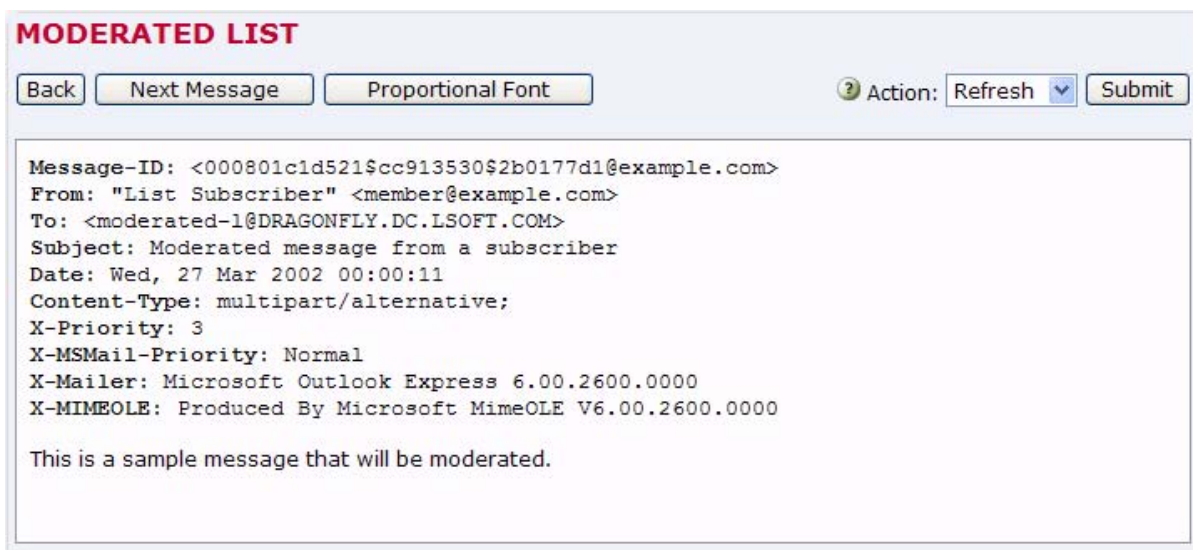
If the message is multi-part (the example includes an HTML part), the part displayed is determined by your preferences. The main mail headers of the message are also displayed. If you wish to approve or reject the message, select the appropriate action and then press the **[Submit]** button.

5.8.4.3 Subscriber Settings

If the logged-in email address is an owner of the list, and if the "From" address of the message is a subscriber to the list, then the email address in the main moderation view is a link and the **Change Subscriber Settings** link is shown on the message view. Both of these links lead to the interface for viewing and changing the subscriptions settings.

These links are convenient for lists that have `Default-Options=REVIEW`, with a policy of changing the subscription to "`NOREVIEW`" after the first on-topic posting to the list. The

moderator/owner may look at the message, decide that the subscriber may be removed from moderation, change the subscription settings to "NOREVIEW", and then approve the message. Be sure to change the settings first because the message will no longer be displayed after it has been approved or rejected.

Similarly, if a subscriber has sent inappropriate material to the list, the moderator/owner may want to delete the subscription.

Note: After using the subscriber settings, always use the **<u>Back</u>** link at the bottom to return to the List Moderation Interface and not the "Back" feature of the browser. The "Back" feature of the browser may cause past approve/reject commands to be repeated, and errors will be displayed, complaining that the "cookies" do not correspond to any existing messages awaiting moderation (true, since these were already approved or rejected). This does not do any harm at all to your list, but may still be disconcerting.

5.9 Digesting and Indexing

The List Configuration Task Wizard guides you through providing digest and index versions of the list, in addition to the usual individual postings. To access this wizard, click on the **List Management** menu, select **List Configuration**, and then select **List Configuration Tasks**. Click on the Digest tab to setup digest or index versions of the list.

Normally, LISTSERV sends messages out to subscribers as soon as it receives them, so that the subscribers receive the mailing list messages throughout the day. Some may prefer to get all of the messages at the same time, combined into a single piece of email. Such a collection of messages is called a digest.

Another option, similar to the digest, is for LISTSERV to send the subscriber a list of what messages have been distributed to the mailing list recently, along with information about when the message was posted, how big it is, and who sent it. This is referred to as an index.

5.9.1 What is a Digest?

Normally, LISTSERV sends mailing list messages out to subscribers as soon as it receives them, so that the subscribers get messages throughout the day.

Some may prefer to get all of the messages at the same time, combined into a single piece of email. Such a collection of messages is called a digest.

Depending on the volume of messages that go out over a mailing list, it may make sense to have the digest go out once a day, once a week, or once a month.

LISTSERV allows subscribers to get digests in three formats: HTML, MIME, and NOMIME NOHTML. Subscribers can individually choose the format that works best in their email clients. Each email client is different, so subscribers should experiment with the different digest styles to find the one they prefer.

5.9.2 What is an Index?

An index, similar to the digest, is another option for receiving one message that summarizes a collection of messages from LISTSERV. LISTSERV sends the subscriber a list of what messages have been distributed to the mailing list recently, along with information about when the message was posted, how big it is, and who sent it.

Indexes are only available for archived mailing lists that have digests enabled. Indexes are sent out at the same time as the digests.

Indexes are available in HTML and NOHTML formats. If HTML is used, the index includes a link to each message in the Web archive interface. If NOHTML is used, the index includes instructions on how to retrieve the messages the subscriber wants.

5.9.3 What is a Plain Text Digest?

Plain text is the simplest form of digest. All email programs should be able to read plain text digests without any difficulty. The basic form of this type of digest is given in RFC 1153.

At the beginning of a plain text digest there is a list of the subjects of the messages in the digest:

```
Subject: MYLIST Digest - 10 Jun 1996 to 11 Jun 1996

There are 5 messages totalling 50 lines in this issue.

Topics in this issue:

   1. Request for comments
   2. Another subject, another ruler (3)
   3. Project deadline on Thursday
```

Note: If the mailing list is used for discussions, typically there will be multiple messages for each subject.

After the topics list, the contents of the DIGEST-H template (if any) will be displayed:

```
This mailing list is sponsored by XYZ Industries. If you
would prefer to receive this mailing list as individual
messages instead of as a digest, send a "SET MYLIST MAIL
NODIGEST" to listserv@lists.example.com.
```

After the contents of the DIGEST-H template (if any), the messages will appear in the order LISTSERV received them, separated by lines consisting of 30 hyphens.

Since the digest is plain text, any HTML messages will appear uninterpreted (the raw HTML code will appear) and any attachments will appear in their encoded form. Additionally, any special characters (smart quotes or accented letters, for example) may not display correctly in plain text digests.

5.9.4 What is an HTML Digest?

Recipients of an HTML digest who have email programs that are programmed to handle such digests will see an index of the day's messages followed by the contents of the DIGEST-H template (if any).

For example:

Clicking on a subject in the table of contents takes you down to the relevant message or messages in the index. Clicking on any of the messages will then take you to the message in question.

HTML digests include information about the content of each message (through MIME); therefore, each message should display normally.

A special note: Since the digest includes all of the messages as MIME attachments, all of the links in the HTML digest index are of the form: "cid: content-id" (see RFC 2111 for more information about this type of URL). Unfortunately, some email clients, even some that otherwise support HTML, do not handle such references correctly. For this reason, some subscribers may not be able to use HTML digests.

5.9.5 What is a MIME Digest?

A MIME digest is midway in complexity between a plain text digest and an HTML digest. It contains a table of contents of the topics discussed in the digest:

```
There are 4 messages totalling 86 lines in this issue.
Topics of the day:
  1. Request for comments (3)
  2. Another subject, another ruler
```

Each message in the digest is then included as a MIME attachment. The subscribers access the messages as they would any other type of attachment. And, since MIME standards require that the type of content of each attachment is identified, all messages should appear normally, without the sort of display problems that plain text digests can have.

5.10 Reports

The Web Administration Interface makes it possible for server administrators or for those list owners with multiple lists to obtain reports on their lists and search these lists for specific characteristics.

To access, click on the **List Management** menu, select **List Reports**, and then select either **List Reports**, **Subscriber Reports**, or **List Activity Reports**.

5.10.1 List Reports

To create a report, select the list or lists to generate the report for. By default, you will see all of the lists you own. Next, select the columns you want to include in the report. Finally, click **[Submit]**.

Note: Each column heading is a clickable link that will sort the column in ascending or descending order. A small arrow pointing up or down will appear indicating the order. Each list name in the report is a clickable link to the list configuration page for that particular list.

The List Report contains a "search" option. Use this to search for a specific list or group of lists.

5.10.2 Subscriber Reports

To create a report, select the list or lists to generate the report for. By default, you will see all of the lists you own. Next, select the columns you want to include in the report. Finally, click **[Submit]**.

The report generated is not just a simple report. It also provides the means of manipulating the reported data. Once the list owner has generated a report, it is possible to change subscription settings or delete one or more subscribers. It is also possible to add subscribers to the list.

The Subscriber Report contains a "search" option. Use this to search for a specific subscriber.

The Subscriber Report also lets you add a subscriber to a list. To add a new subscriber to the list, type the user's email address followed by the full name. Then, choose whether or not to notify the user that he has been added and click on the **[Add Subscriber]** button.

The Subscriber Report also lets you change subscriber setters. Once the report has been generated, it becomes possible to change any subscriber's settings (except for the subscription date):

- Select the subscriber by checking the box to the left of the subscriber name. Check the **Invert** box to select every subscriber EXCEPT those that you have checked off.

- Make the change at the bottom of the column using the drop down boxes. All of the the selections for changing the current options will be listed. Highlight the new option by clicking it.

- Click the **[Submit]** button to save your changes. If you would like your subscribers to receive an email notification that their options have been changed, check the **Send email notification of changes** box. Otherwise, no notification will be sent.

To view and make changes to the subscription options of individual subscribers, click on the subscriber name. If a name is not available, click on the **No Name Available** link. The Subscriber Management screen will open for the selected individual. Make any changes and then click **[Update]**.

To delete subscribers, check the boxes to the left of the subscriber names you want to remove, and then click the **[Delete Selected Subscribers]** button.

Each column heading is a clickable link that will sort the column in ascending or descending order. A small arrow pointing up or down will appear indicating the order.

5.10.3 List Activity Reports

Two types of activity reports can be generated using this interface. The first report is a history report. This report simply displays the changelog records that match the selection criteria, one record per line, similar to reading the changelog yourself. The second report is a statistics report. This table allows you to reduce the changelog records to numbers, based on several different criteria. This is where you can determine (for instance) how many postings were made to a given list on a range of specified dates, how many times a particular LISTSERV command was issued, and so forth.

You should generally choose only one report column on which to report statistics (Event or Email Address or Details) as each value of the text field is counted independently and sorted in alphabetical order, and rows could then include unrelated values and cause some confusion.

Changelog reports are only available for lists where the `Change-Log` list header keyword is set to `Yes`, and only for the time span it was enabled. Enabling Changelogs in the list header will not suddenly make it possible to view past list activity. If Changelogs are enabled, but set to rotate over time (for example, monthly changelogs), the reports are only available for the current report.

To generate a changelog report:

* Select a list.

* Define **Report Type** to create a historical or statistical report or both. If you check both report fields, you will get two reports. The historical report shows the actual changelog entries. The statistical report shows counts and averages.

* Define **Report Entries** to determine which events to include in the report.

* Define **Report Interval** to set the date range for the report.

* Optionally, you can also select the reporting interval for statistics reports. The default is to show totals for the entire reporting period.

* Optionally select a report format. The default is a web-based table. You can also get the results in a "Comma-separated values" (CSV) format which can then be saved from your web browser to a file on your computer, allowing you to import the data into any reporting software that supports CSV files.

* Click the **[Submit]** button.

5.11 Sending Interactive Commands via the Web

The LISTSERV Command Interface is used for submitting LISTSERV commands that are not otherwise facilitated by the Web interface. See the List Owner's Manual for LISTSERV for a listing of all commands.

For some commands, the response is automatically displayed by the Web interface. For others, a special command parameter must be used in order to display the response in the browser, otherwise the response is sent by email. In addition, other commands are only able to respond by email.

To access the LISTSERV Command Interface, click on the **List Management** menu, and then select **LISTSERV Command**.

The Command Interface can only be used for single line commands. In particular, the PUT command will not work through the Web interface. Multi-line commands must be sent by email.

A selection of frequently used commands is available at the bottom of the screen.

5.12 Mail-Merge

Advanced mail-merge features are available and can be accessed either by sending specially-formatted DISTRIBUTE jobs to LISTSERV or by using the web administration interface. The web interface is not a "wizard" but simply an interface that allows you to "cut and paste" a mail merge message and select different standardized groups of list subscribers to whom the message is to be sent.

Notes: LISTSERV's mail-merge functionality REQUIRES the use of LISTSERV's Embedded Mail Merge feature. For more information, see the EMM keyword in the Site Configuration Keyword Reference document. Mail-merge functions are documented fully in the Advanced Topics Guide for LISTSERV.

Section 6 Customizing Mail and Web Templates

The majority of Web interface Web pages and administrative messages sent to subscribers can be customized. Customizing your list's Web pages and administrative messages creates an individual look and tone for your list. Subscribers will see Web pages and read administrative messages that are specific to your list, containing pertinent information and instructions rather than just generic pages and messages.

The template editor allows the site administrator and list owner to customize the majority of the Web Interface Pages and Administrative Messages sent out by LISTSERV. There are two types of templates you can customize – Web and Mail.

Web Templates (also referred to as Dynamic Web Templates) control the pages produced by the Web interface. These pages are produced dynamically when they are accessed. What gets displayed by the browser depends on the circumstances and may change depending on who is accessing the interface, which list they are accessing, the settings of that list, and so on.

Commands in Web Templates begin with a plus sign "+" and variables begin with an ampersand followed by a plus sign "&+".

Mail Templates control text produced by LISTSERV itself. Although generally categorized as mail templates, they actually fall into three different types:

- Mail Templates control the contents of email messages sent by LISTSERV. A mail template is a complete email message. Formatting commands are available, substitutions that make sense in the context of the specific message are available, and while other templates may be imbedded with the .IM command, the message is in and of itself ready for LISTSERV to send.

- Message Templates supply text that will ultimately be shown to the user. These messages may be included in a mail template; or they may be included in an email sent by LISTSERV in response to LISTSERV commands sent by email to the LISTSERV command address; or they may be returned to the Web interface in response to commands sent through the Web interface. Limited formatting is available.

- Message Fragments templates are the lowest level of mail templates. Fragments are pieces of text produced by LISTSERV as parts of other messages or emails. For example, list digests must follow a certain format dictated by the Internet RFCs. Therefore, it is not possible to provide a complete mail template for digests. However, some of the text within the digest is not mandated by the RFCs, and so LISTSERV provides some fragment templates to control these parts, for example MSG_DIGEST_FRAGMENT_DATERANGE1 to control the date range and MSG_DIGEST_FRAGMENT_PREAMBLE1 to control the text preceding the table of contents. Formatting commands are generally not available in fragments.

Commands in Mail Templates begin with a period "." and variables begin with an ampersand "&".

To access the template editor, click on the **List Management** menu, select **Customization**, and then select either **Web Templates** or **Mail Templates**.

Once the template editor has opened, simply select the list and template you want to work with. The template editor also lets you create new template.

For more information about customization templates, see the Customization Manual for LISTSERV 15.5 or click on the link(s) located in the **Tips** section at the bottom of the editor.

Many list owners prefer to customize some of the administrative messages sent to subscribers and the main Web page for the list archives. However, it is not necessary to customize any of the templates. Customizing templates can be complex for new users, so it is not covered in depth in this manual. The table below lists some of the templates you will most likely to want to customize.

Table 6-1 Templates to Customize

Template	Description
`Welcome Message`	A template for a message sent to new subscribers, in addition to the standard "signup" message. By default, no welcome message is sent.
`Farewell Message`	A template for a message sent to subscribers leaving the list. By default, no farewell message is sent.
`$SIGNUP`	A standard message sent to all new subscribers, usually with list instructions. By default, this template is included in both the `SIGNUP1` and `ADD1` templates.
`SIGNUP1`	A message sent to new subscribers who have signed on by themselves. By default, includes the `$SIGNUP` template.
`ADD1`	A message sent to new subscribers who have been added to the list by the owner. By default, includes the `$SIGNUP` template.
`SIGHNOFF2`	A message sent to users who are trying to sign off a list they are not signed on to or from an address that was not the one used to subscribe with.
`DELETE1`	This message is sent to a subscriber who has been removed from the list by a list administrator.
`POST_EDITOR`	A message sent to a user when their post has been forwarded to a moderator (`Send= Editor` or subscription is set to `REVIEW`).
`INFO`	A message containing information about the list. Sent to anyone sending the "`REVIEW listname`" command to LISTSERV. By default includes the non-hidden parts of the list header.
`BOTTOM_BANNER`	Adds a text message to the bottom of each message posted to the list. Usually used for disclaimers, tips, and/or signoff or other instructions. If you plan to send HTML messages through the list, you should also define a `BOTTOM_BANNER_HTML` template containing the HTML version of the `BOTTOM_BANNER`.

Template	Description
TOP_BANNER	Adds a text message to the top of each message posted to the list. Usually used for a copyright or short legal warning which absolutely has to be seen by each and every reader. If you plan to send HTML messages through the list, you should also define a TOP_BANNER_HTML template.
AUTODEL1	This message is sent to users who are automatically deleted from the list when delivery errors (bounces) to that address exceed the threshold set by the Auto-Delete= keyword (or its default setting).
WWW_INDEX	The main web page for the list archives. This template creates the *listname*.html file. This is a "static" web template. Requires knowledge of HTML to customize (see below).

Things to consider when editing templates:

- Deleting a template in the Web Interface template editor or removing it from the *listname*.mailtpl file (when customizing by email) will not prevent a message from being sent. It merely deletes the customizations and results in the default message being sent. The way to prevent a message from being sent is to customize the template by inserting the directive ".QQ" on a line by itself. Be careful, if you add ".QQ" to a template that is included in other templates, you will be canceling those templates as well.

- Changing the wording of most mail templates is fairly straightforward. Simply be aware of the following:

  - Variables begin with an ampersand ("&") and may end with a semicolon. You may remove variables from the text if you do not wish to customize that part of the text. For example, the ADD1 template contains the text "You have been added to the &LISTNAME mailing list (&TITLE) by &MBX(&INVOKER)". The "&LISTNAME", "&TITLE", and "&MBX(&INVOKER)" will be replaced by the list name, title, and the name and email address of the owner that added the subscription. This is easily changed to "You have been added to the &LISTNAME mailing list (&TITLE) by the list owner" if you do not wish to reveal the name and address of the owner.

  - If an ampersand ("&") appears in the template text (this includes any URLs with ampersands) it must be doubled ("&&") in order to keep LISTSERV from treating it like a variable.

  - Lines starting with a dot (".") are template "directives". Do not make changes to these lines without understanding what they do. See the List Owner manual for LISTSERV for details.

- Changing the Web templates requires knowledge of HTML. You cannot edit the Web templates using an HTML editor – the templates contain variables and template directives of which HTML editors are ignorant. If you are proficient at coding HTML, be aware of the following:

- The Web templates are not pure HTML. Think of the templates as HTML code generators: a mix of HTML code, template variables (which may include additional HTML code or simple text strings), and template directives that determine which pieces of HTML code will be included in the final HTML page.

- Variables in the dynamic Web templates begin with ampersand-plus sign and end with a semicolon (for example: "`&+LISTNAME;`").

- Variables in the static Web templates begin with just an ampersand. You must double any ampersands that you wish to be passed on to the HTML instead of being interpreted as a template variable. For example:

```
<a href="/scripts/wa.exe?SUBED1=&LISTNAME&&A=1">
```

in the WWW_INDEX for the list called MYLIST will result in the following HTML code:

```
<a href="/scripts/wa.exe?SUBED1=MYLIST&A=1">
```

- Template directives are lines starting with a dot (".") in the static Web templates and lines starting with a plus ("+") in the dynamic Web templates. Do not make changes to these lines without understanding what they do.

- You may create your own dynamic Web templates. The beginning of the template should look like:

```
+SE SHOWTPL_ALLOWED 1

+SE WA_BROWSER_TITLE enter page title here

+IM STYLE-SHEET
```

The first line is required (or else the page will not display), the following two are optional but recommended.

To display the template, call the Web interface script with the parameters `SHOWTPL=templatename&L=listname`. For example:

```
http://listserv.example.com/scripts/
wa.exe?SHOWTPL=MYTPL&L=MYLIST
```

Section 7 List Archives

The list archive consists of all of the notebook logs for your list. (If your list is coded "`Notebook= No`", then it does not have a list archive, of course.) Users can find out what notebook logs are available for a specific list by sending the command `INDex listname` to the appropriate LISTSERV host.

7.1 Setting Up Archive Notebooks

If your list is coded "`Notebook= No`", you should consult your LISTSERV maintainer before changing the keyword to create list archive notebooks. The LISTSERV maintainer will have to tell you where the notebook should be kept (the second parameter in the "`Notebook=`" keyword). Also, depending on local policies, you may or may not be allowed to archive your list, or keep more than a few months' or weeks' worth of archives available at a given time.

7.2 Indexing Available Archive Notebooks

To find out what archive notebooks are available for your list, simply send the `INDex listname` command to LISTSERV.

7.3 Deleting Existing Archive Notebooks

If your list is set to `Notebook=Yes`, you may occasionally need to delete archive notebook files to conserve disk space or to prevent general access to out-of-date information. In order to prevent accidental deletions of archive files, archive files may only be deleted by email.

First, you may need to find out what archive notebook files are available for your list. Send the following command:

```
INDEX listname
```

LISTSERV will then send a list of all the files associated with your list. For example:

Figure 7-1 Deleting an Archive Notebook File

```
*
* Archive files for the MYLIST list at LISTSERV.EXAMPLE.COM
* (monthly logs)
*
* filename filetype     GET PUT size (bytes) date       time
* -------- --------     --- --- ------------ ---------- ------
  MYLIST LOG0209        LOG OWN        3,198 2002-09-28 18:45:25
  MYLIST LOG0210        LOG OWN       50,837 2002-10-11 16:29:09
  MYLIST LOG0211        LOG OWN       34,639 2002-11-30 19:49:34
  MYLIST LOG0212        LOG OWN       95,669 2002-12-26 09:30:16
```

If you wish to retain a copy of the archive file, you may request a copy of it with the GET command before you delete it. For instance:

`GET MYLIST LOG0209`

To delete an archive notebook file, simply execute a PUT operation for the notebook in question without sending any other text along with the PUT command line (turn off automatic signatures, and do not use a mail service that automatically adds text to every message sent). For instance, send an email message with the following text as the only content in the body of the message:

`PUT MYLIST LOG0209 PW=yourpassword`

This command without any other additional text would delete MYLIST LOG0209 (the file containing the September 2002 archives of the MYLIST list) from the server.

If you provide a digest for your list, you should not delete the current archive file.

Two important issues:

- This command MUST be issued by e-mail. It cannot be issued via the "Execute a LISTSERV command" facility of the Web Interface.

- You MUST turn off your signature file (if one is enabled in your mail client) in order to successfully delete files. If you do not, LISTSERV will store your signature file in place of the file you are trying to delete instead of deleting the file.

Section 8 Where to Go From Here

N ow that you have reviewed your list and manipulated it, you probably have questions, concerns, and ideas on how to use the many different features of LISTSERV. List owners can be very involved with their lists, or can take a "back seat" and let their subscribers and/or editors and moderators do most of the posting. List owners are responsible for setting the rules and enforcing the policies of the list, so although you may not actively participate in posting messages, you do have a very important role.

8.1 List Owners' Responsibilities

A list owner is entrusted with its members' personal information (email address and name), and this carries certain responsibilities with regards to ensuring privacy and security.

You must determine what level of security is most appropriate for your list. For example, a closed family list, where all members know each other personally may be set to `Review=Private` (any list member may get the list of all subscribed addresses), but any list with subscriptions open to the public should be set to `Review=Owners`. A hobby discussion list may operate with relaxed security and deal with transgressions as they occur, but a commercial newsletter must have very tight security, as any breach will reflect poorly on the company's reputation. On an open discussion list, subscribers are aware that the discussion may sometimes stray off-topic, whereas on a moderated list they expect that you will exercise more control over what gets posted. On a one-way list, subscribers will hold you responsible for every posting.

As the owner of the list, it is your responsibility to:

• Understand your list's configuration.

• Let subscribers know what they expect from the list when they sign up.

• Help subscribers subscribe and sign off.

• Assist subscribers when they have difficulties with the list.

• Ensure that the list abides by the site's appropriate use policy and applicable laws (for example, disallow the propagation of copyrighted materials not belonging to the sender), and any additional restrictions imposed by the site administrators.

• Prevent abuse of the list by third parties, to the extent possible. For example, always require subscription confirmations on open lists, prevent outside access to the subscriber email addresses (`Review=Owner`), and require confirmation of all postings to one-way lists (`Send=…,Confirm`).

• Receive and review all mail sent to the listname-request address. This address is publicized as the way to get in touch with the list owner when a subscriber or potential subscriber requires assistance. When LISTSERV receives mail at this address, it forwards it to all "non-quiet" list owners. List owners must accept this

mail, as it might represent signoff requests from subscribers who are unable to remove themselves on their own. Ignoring such requests would make you a spammer. Unfortunately, it also means that some spam can be sent to list owners through LISTSERV. It is irresponsible to send complaints to your LISTSERV provider and your LISTSERV site's upstream provider about spam sent through the listname-request, as it will only damage your own access to the list as well as your subscribers' and those of other lists on the same server, without affecting the original spammer in any way.

8.2 Learning More About LISTSERV

"Everything should be as simple as it is, but not simpler."
— Albert Einstein

LISTSERV is a very feature-rich application. In this Introductory guide, we have striven to keep the explanations as simple as possible while keeping them accurate. We did not want to sacrifice some of the more complex information that, in our experience, have found to be useful to new list owners.

As you become more familiar with using LISTSERV, you will naturally want to take advantage of the many other features contained within the program. LISTSERV can be linked to a database and use database fields to create messages customized to each individual subscriber. Subscriber demographics or other information stored in the database can be systematically selected for the creation of highly personalized and targeted messages.

Another useful but complex feature is LISTSERV's system for handling errors with problematic email deliveries called "bounces". LISTSERV automatically processes and decodes the majority of the common error bounces (undeliverable messages returned to the sender). The list owner and LISTSERV maintainer have the flexibility to define the parameters of the bounce handling. For instance, LISTSERV can be set to remove a subscriber from a list after a specified number of messages are bounced.

There are many resources for learning about and applying LISTSERV features.

L-Soft's Web site, http://www.lsoft.com has links to a glossary, FAQs, technical white papers, and downloadable user's manuals. Click on the INFO link on L-Soft's home page to access these resources.

Most LISTSERV sites provide an email address for assistance. If you do not know the email address to use for your LISTSERV site, you can always reach the LISTSERV Site Maintainer at listserv-request@listserv-server where listserv-server is the domain name of the LISTSERV server (for example: listserv-request@listserv.example.com).

Another source of information and help are the many public LISTSERV mailing lists where list owners and site maintainers exchange ideas and assist each other:

LSTOWN-L

http://peach.ease.lsoft.com/archives/lstown-l.html

LSTOWN-L is a discussion forum for list owners whose mailing lists run on L-Soft's LISTSERV product.

LSTSRV-L

http://peach.ease.lsoft.com/archives/lstsrv-l.html

LSTSRV-L is a discussion forum for site maintainers who administer LISTSERV.

LISTSERV Lite

http://peach.ease.lsoft.com/archives/LISTSERV-Lite.html

The LISTSERV-LITE public list is the support channel for L Soft's LISTSERV Lite product. LISTSERV Lite offers an extremely stable but competitively priced (and in some cases, free) alternative for sites with small workloads.

LISTSERV Developers

http://peach.ease.lsoft.com/archives/LISTSERV-Developers.html

LISTSERV application developers' forum.

For technical material on the protocols for email, see the many "Request for Comments" documents (RFCs) available on the Web. These documents explain the rules that email and other software products must follow in order to work cooperatively with each other on the Internet. Understanding the rules is often helpful for troubleshooting problems.

Table 8-1 RFC's and RFC Web Sites

RFC	Web Site
All RFCs	http://www.ietf.org/iesg/1rfc_index.txt
3000 Internet Official Protocol Standards	http://ietf.org/rfc/rfc3000.txt
Internet Drafts	http://ietf.org/ID.html
821 Simple Mail Transfer Protocol	http://ietf.org/rfc/rfc0821.txt
2821 Simple Mail Transfer Protocol	http://ietf.org/rfc/rfc2821.txt
822 Standard for the Format of ARPA Internet Text Messages	http://ietf.org/rfc/rfc0822.txt
2822 Internet Message Format	http://ietf.org/rfc/rfc2822.txt
1123 Requirements for Internet Hosts – Application and Support	http://ietf.org/rfc/rfc1123.txt
2045 MIME Part 1: Format of the Internet Message Bodies	http://ietf.org/rfc/rfc2045.txt
2046 MIME Part 2: Media Types	http://ietf.org/rfc/rfc2046.txt
2047 MIME Part 3: Message Header Extensions for Non-ASCII Text	http://ietf.org/rfc/rfc2047.txt
2049 MIME Part 5: Conformance Criteria and Examples	http://ietf.org/rfc/rfc2049.txt
1894 An Extensible Message Format for Delivery Status Notifications (DSNs)	http://ietf.org/rfc/rfc1894.txt
1893 Enhanced Mail System Status Codes	http://ietf.org/rfc/rfc1893.txt

RFC	Web Site
1855 Netiquette Guidelines	http://ietf.org/rfc/rfc1855.txt
2505 Anti-Spam Recommendations for SMTP MTAs	http://ietf.org/rfc/rfc2505.txt
2635 DON'T SPEW: A Set of Guidelines for Mass Unsolicited Mailings and Postings (spam*)	http://ietf.org/rfc/rfc2635.txt
3098 How to Advertise Responsibly Using Email and Newsgroups	http://ietf.org/rfc/rfc3098.txt
1818 Best Current Practices	http://ietf.org/rfc/rfc1818.txt
1796 Not All RFCs are Standards	http://ietf.org/rfc/rfc1796.txt

Glossary of Terms

A

Auto Responder – A computer program that automatically responds with a pre-written message to anyone who sends an email message to a particular email address or uses an online feedback form.

B

Bounce – An Email message that is returned as undeliverable.

Bounce Server – An optional dedicated LISTSERV server used exclusively to process bounced email.

C

Cookie – A block of data that a Web server stores on a client system. When a user returns to the same Web site, the browser sends a copy of the cookie back to the server. Cookies are used to identify users, to instruct the server to send a customized version of the requested Web page, to submit account information for the user, and for other administrative purposes.

D

E

Editor – A person or email address that is allowed to send messages directly to the list without moderation. If the editor keyword is not defined, the primary editor is the first list owner address.

F

Flame – An abusive or personally insulting email message or newsgroup posting, or to send an abusive or personally insulting email message or newsgroup posting.

G

H

Header – The arrangement of keywords and their associated values that make up the configuration of a LISTSERV list. The values of the keywords defined in the header determine the behavior of the list.

I

J

K

L

LISTSERV – The email list management software application distributed by L-Soft that allows users to create and maintain email lists on their corporate network or on the Internet. Newsletters, moderated, and un-moderated discussion groups and direct

marketing campaigns are all supported. List sizes can range from a few participants in a discussion group to several million in a newsletter.

M

Maintainer – The technical person in charge of the LISTSERV application on a particular server. The LISTSERV Maintainer has the right to create new lists on the server. Sometimes referred to as Postmaster or Site Administrator.

Moderator – A person who can accept or reject messages received by the list subscribers to post to the email list. It is also possible for the moderator to perform several tasks such as editing and deleting messages. There can be one or more moderators on a list. Moderators can share the task of moderation in a "round-robin" manner, with each moderator taking a turn, or all moderators can moderate all messages.

N

Notebook – A searchable archive containing all past posts to the list. A list owner may edit and delete notebook logs, only the list and/or the LISTSERV Maintainer may create a notebook log for a list.

O

Owner – The person formally in charge of the operation of a specific list. The list owner is usually knowledgeable in the field covered by the list. There can be more than one list owner for a list. The responsibility of the list owner is limited to the list itself, and does not include the computer running the list, its mail system, network lines, and other hardware specifics.

P

Peered List – A list that is split (or "peered") in order to share the mail load among two or more LISTSERV servers. Peering also makes it possible to have list archives located in more than one place. For example, a list might be peered between a European host and a North American host, making it possible for subscribers on each continent to retrieve archives from the nearer host.

Poster – A person or address that sends a message to a list.

Postmaster – The LISTSERV Maintainer; the technical person in charge of the LISTSERV application on a particular server. The postmaster has the right to create new lists on the server.

Q

R

RFC – These documents, called Request For Comments, explain the rules that email and other software products must follow in order to work cooperatively with each other on the Internet.

S

Spam – The unwanted, unsolicited junk email sent to a large number of recipients. Also known as unsolicited commercial email.

Spoofing – Pretending to be someone else by deliberately giving false information. Spoofing is the deliberate inducement of a user or resource to take an incorrect action. For example, signing a person up to a list without their knowledge and permission.

Subscriber – A person who has requested and has been granted permission to join a particular mailing list.

T

Topics – Subdivision of the list's messages into more precise categories. Subscribers can then pick which topics they want to receive messages from as a way to cut down the overall number of messages they receive. For example, a discussion list about restoring antique cars may have topics on the different makes or car, different year models, and/or shows for antique car owners to attend. A subscriber to this list may only be interested in Ford Model-T cars and therefore would elect to subscribe to only those topics, so as not to receive mail from any other topics.

U

V

W

X

Y

Z

LISTSERV®, version 15.5   *Introductory List Owner's Manual*

- 52 -

Index

··

A
Administrator Roles 26
  editor 26
  moderator 27
  owner 26
Administrator Task Wizard 26
Announcement Lists 13
Archive Notebooks
  deleting existing 43
  indexing 43
  managing 43
  setting up 43

B
Bulk Operations
  via the Web Interface 30

C
Commands
  OK 10
  sending via the Web Interface 38
  syntax conventions viii

D
Digesting 33
  with HTML 34
  with MIME 35
  with plain text 34
Discussion Lists 15

E
Email
  using to communicate with LISTSERV 7

F

G

H

I
Indexing 33

J

K

L
List
  digesting 33
  indexing 33
List Archives 43
List Configuration
  via the Web Interface 25
List Header
  hiding parts of 25
List Management Dashboard 23
List Moderator
  definition 4
List Owner
  definition 4
List Subscribers
  definition 4
Lists
  about 1
  adding a new subscriber via the Web Inter-
      face 29
  anatomy of 8
  configuring a list via the Web Interface 25
  deleting a subscription via the Web Inter-
      face 28
  examining a subscription via the Web In-
      terface 28
  maintenance via the Web Interface 27
  moderating 31
  types 13
    moderated 18
    one-way announcement 13
    two-way discussion 15
LISTSERV
  about 2
  communicating with 7
LISTSERV Maintainer
  definition 3
Logging In 19

M
Mail-Merge
  using the Web Interface 38
Moderated Lists 18

N

O
OK Confirmation Method
    using 10
One-Way Announcement Lists 13

P
Passwords
    setting for the Web Interface 21
Preferences
    setting in the Web Interface 22

Q

R
Reports 36
    List 36
    List Activity 37
    Subscriber 36

S

T
Two-Way Discussion Lists 15

U

V

W
Web Administration Interface
    list maintenance 27
Web Interface
    adding a new subscriber 29
    Administrator Task Wizard 26
    bulk operations 30
    configuring a list 25
    deleting a subscription 28
    examining a subscription 28
    List Management Dashboard 23
    logging in 19, 22
    mail-merge 38
    moderating a list 31
    reports 36
    sending interactive commands 38
    setting a password 21
    setting preferences 22
    the default home page 19
    using 19
    using to communicate with LISTSERV 8

X

Y

Z