Simple Website List Signup Form

(updated Sep 2011)

This document provides a brief overview and examples detailing the necessary steps to set up a List Signup form on your web site so that people can simply "click a button" to join or leave list(s) hosted on a LISTSERV server (whether Hosted at L-Soft or elsewhere).

There are two basic ways to set up a List Signup form on a Web site: call the existing LISTSERV CGI executable or write your own CGI script. The Web interface of LISTSERV (version 13.x and later) includes its own CGI (wa.exe) that provides subscribe/unsubscribe capabilities. Simply "call" this CGI script with the proper parameters and the subscriber will be able to join or leave lists. This method requires the user to "confirm" joining or leaving the list.

If you write your own CGI script it must be written so that it sends a regular e-mail message to the LISTSERV server with a properly formatted command string. The script can act as a user sending the "subscribe" command by e-mail or as an authorized list owner sending the "add" command. The difference between each approach will be described, followed by examples. A custom written CGI script should work with any version of LISTSERV.

About Subscription Confirmation

Many LISTSERV List Owners do not want to "inconvenience" users by making them confirm subscription signons and signoffs. Confirmations do have important advantages for both the list owner and the subscriber:

- Confirmations test the e-mail address that the user has entered for validity, ensuring the address reaches the intended subscriber. According to L-Soft Support statistics, approximately 30% of subscribers make an error entering their e-mail address in such a web form. In addition, some corporate e-mail systems have been configured to reject list e-mail. Confirmation can test for such rejection as well.

- Confirmations prevent malicious third parties from subscribing a user to a list without that user's consent. This is known as "spoofing".

- Confirmation is an overt positive act that acknowledges that the user does want to receive e-mail messages generated by your list(s). In these days of "spam" and unwanted commercial e-mail, mail which has been specifically requested (Confirmed Opt-In) can never be considered "spam".

- Confirmation, also known as 'Double Opt-In' or 'Confirmed Opt-In' is a STRONGLY RECOMMENDED email industry practice. Essentially it is now a practical requirement.

LISTSERV 's confirmation message can be responded to either by e-mail by replying to the message with the simple word "OK" (detailed instructions are in the message), or with a clickable URL also found in the message. The actual text of the confirmation message is configurable in the CONFIRM1 template of SITE.MAILTPL or listname.MAILTPL

Calling the L-Soft CGI Program (wa.exe) on a LISTSERV Host

This method uses the L-Soft supplied wa.exe ('wa' on Unix) that provides all LISTSERV WWW functions. The user will be required to confirm both their subscription and signoff. The user will also receive the appropriate Welcome or Signoff message. This confirmation is to protect users from accidental clicking and unintended consequences as well as for the reasons noted at the beginning of this document.

Below is the minimum code sequence for calling the WA.EXE CGI program that you would add to your Web page. You can embellish this with add-ons and collect additional information for your own use. However, this is the minimum needed by the L-Soft CGI.

You can test this interface by going to: `http://demo.lsoft.com/signupdemo.html`. The information in the examples displayed in this paper is based on lists hosted on the L-Soft server DEMO.LSOFT.COM. To use the examples, simply substitute your server's name wherever you see DEMO.LSOFT.COM in the command strings, and in other places. You may also need to change the name of the CGI program (wa.exe) depending on your operating system.

In order to be fully successful, you may also need to make certain modifications to the *.WWWTPL dynamic Web templates so that the default pages normally created by LISTSERV are not accessible and instead include the necessary references to re-direct users to your site for signup.

This is the signupdemo.HTML file:

```
<!-- Begin LISTSERV(R) wa.exe example calling demo-->
<!-- Below is the basic code you will need to add to your site-->
<form action="HTTP://DEMO.LSOFT.COM/SCRIPTS/WA.EXE">
<!-- Note above URL for calling CGI script must be customized to your host-->
<!-- below parameters SUBED2 and A must be declared first and in this order.
All variable names are case sensitive. Other parameters may be declared in
any order after SUBED2 and A.-->
<input type=hidden name=SUBED2 value="SIGNUPDEMO"><!default LISTNAME to join>
<input type=hidden name="A" value=1><!required low security parameter>
<!Other Variables needed: (all variables below are case sensitive.)>
<!s= email address>
<!L= listname>
<!p= username phrase: Fname Lname>
<!9= topics list (if topics are used) else omit entirely>

<table>
<tr>
<td nowrap>
<b> Your e-mail address:</b>
</td>
<td>
<input name=s size=30 value="">
</td></tr>
<!-- name is optional -->
<tr><td>
<b>Your name:</b>
</td>
<td>
```

```
<input name=p size=30 value="">
</td></tr>
<tr><td>
<b>Select a list:</b>
</td>
<td>
<select name=L>
<option value="SIGNUPDEMO" selected>SIGNUPDEMO
<! other listnames follow here>
<option value="SIGNUPDEMO2">SIGNUPDEMO2
</select>
</td></tr>
<!-- cut here to remove optional topics section below if not desired -->
<tr>
<td>
<b>Delivery Style:</b>
</td>
<td>
<! checked one is the default choice>
<input type=radio name=9 value="HTML">HTML
<input type=radio checked name=9 value="text">Text
<input type=radio name=9 value="AOL">AOL
</td></tr>
<!-- cut here to remove optional topics section above -->
<tr>
<td></td>
<td>
<input type=submit name="b" value="Join this list">
<input type=submit name="a" value="Leave this list">
<!-- uncomment next line to allow 'unsubscribe from all' -->
<! input type=submit name="e" value="Leave All lists">
<input type="reset" name="Reset" value="Reset">
</td></tr>
</table>
</form>
<!end of LISTSERV(R) example CGI calling code>
```

Please note that the calling order of the above parameters is significant. The SUBED2=listname and A=1 must be listed first, in this order. The other parameters may follow in any order, except of course the 'Submit' is at the end.

To customize the example script, replace instances of "SIGNUPDEMO" with your own Listname(s) where necessary, and replace "demo.lsoft.com" with your own server address. If you do not want people to enter a full name, then you can hard code the "p" parameter to "no name" like this:

```
<tr valign=top>
<td><!Your Name:></td>
<td><input type=hidden name=p value="No Name"></td>
</tr>
```

You can also set the List Configuration options to

```
Default-Options= Conceal
```

Then LISTSERV will not ask for or require a Full Name.

You may also want to change the SIGNUP WWW template. See below.

All the LISTSERV related *.HTML pages are re-generated as needed from template files. Since they are dynamic you should never make changes to the *.HTML pages themselves, but only to the templates used to generate the HTML pages. This is a complex process and you should tread carefully. Before modifying any templates, you should study the default .*TPL template files (mailtpl is mostly text messages with some HTML, wwwtpl is all HTML) to be sure you understand the existing functions before modifying them. See also the LISTSERV Customization Manual.

Below is the minimum code necessary to change the default templates on your own LISTSERV host site to work just like the example. Before using this code, you might want to read Sect 9 of the LISTSERV Owners Manual, or Sect 16 of the LISTSERV Site Manager Manual that discusses template files and how to modify the desired templates. It is best to use the LISTSERV WWW Interface to modify these templates.

Modifying the web template SUBEDIT-MAIN in the way (below) prevents the user from modifying their Subscription Options (such as MAIL/NOMAIL, DIGEST/INDEX, and others) with the WWW Interface. (They can always modify them by e-mail commands or you can choose to not modify this template.) Since this simplified signup procedure is normally used only for one-way lists where all subscriber options are preset in the List Configuration anyway and not intended to be changed, this is not a serious limitation.

Web Template Name: SUBEDIT-MAIN

```
<title>Join or Leave the &+LISTNAME; list</title>
<center><h1>Join or Leave the &+LISTNAME; list</h1></center>
<p>
+BB &+MSG;
<hr><p><b>&+MSG;</b><p>
+EB
<hr>
<p>Thank you!  Your Request has been Processed.
<p>To confirm your identity and prevent third parties from tampering
with the list, an e-mail message with a confirmation code will be sent
to the address you specified in the form. Simply wait for this message
to arrive, then follow the instructions to confirm the operation.
<hr>
```

If you prefer, you can also replace the above SUBEDIT-MAIN template with a simple redirect code to redirect another page on your website: `<meta http-equiv="refresh" content="0; URL=http://totally.other.page">`. This completely prevents the user from editing their own subscriber options, but this is not usually a problem for one-way lists.

Custom Written CGI Script Acts Like the User

Write your own CGI script so that the e-mail message impersonates the subscribing user and is formatted as though the user was issuing a normal SUBSCRIBE command by e-mail. The advantage of this method is that it requires no special privileges or security. The user will receive a welcome or signoff message as appropriate, which can be customized with specific information about your list. The user may be required to confirm their subscription depending on certain List Configuration settings (`Subscription= Open,Confirm`). User confirmation is not normally needed to signoff by e-mail command.

[Both the e-mail headers and the message text (command strings) must always be flush-left.]

```
Date:(Today date in RFC822 format)
From:user@address
To:LISTSERV@demo.lsoft.com

SUBSCRIBE listname Fname Lname
```

Note as always, the LISTSERV command(s) is (are) in the message body, never in the Subject: line.

If the user may subscribe to several lists at one time, the command form in the message body is similar:

```
SUBSCRIBE listname1 Fname Lname
SUBSCRIBE listname2 Fname Lname
SUBSCRIBE listname3 Fname Lname
```

Note: In this case separate confirmations will be sent for each list. If you want only 1 confirmation for multiple subscriptions then code this variation:

```
OK BEGIN
SUBSCRIBE listname1 Fname Lname
SUBSCRIBE listname2 Fname Lname
SUBSCRIBE listname3 Fname Lname
OK END
```

To leave one list the command is:

```
SIGNOFF listname
```

Note that no name is used for the signoff; it will produce an error if present.

To leave several lists:

```
SIGNOFF listname1
SIGNOFF listname2
SIGNOFF listname3
```

It is also possible to signoff all lists on the server:

```
SIGNOFF *
```

The user@address comes from the user's Web form input on your site. The Fname and Lname are the user's first name and last name if known. Substitute the phrase "No Name" if you do not want this option. It is also possible to set the List Configuration so that no name is required. (`Default-Options= CONCEAL`)

Lists hosted on an instance of LISTSERV may also use an alternate single-line special-action address format to subscribe to one-list-at-a-time only. Multiple lists are not supported by this method because the listname is part of the email address. But multiple emails can be sent.

```
Date: (current date in RFC822 format)
From: Fname Lname <user@address>
To: listname-SUBSCRIBE-REQUEST@demo.lsoft.com
```

(any message text is ignored so none is needed)

To leave the list the special action address is

```
Date: (current date in RFC822 format)
From: Fname Lname <user@address>
To: listname-SIGNOFF-REQUEST@demo.lsoft.com
```

Custom CGI Script Acts Like an Authorized List Owner

In this case the CGI script acts as an authorized list owner (a pre-authorized From: address), and sends the message as an ADD command. This requires use of a plain text password to verify the From: address. No user confirmation is possible using this method, so this method is generally not recommended. L-Soft Hosted Lists cannot use any method that does not permit positive confirmation. You must provide your own form of positive identification and confirmation (such as a login to a private Web site).

This method is more customizable than the above method where the script acts as a user. Welcome and/or signoff messages can be sent to the user or not, depending on the form of the command string. To have your Web site script submit an ADD command for getting people joined to your list(s), it must be able to issue a multi-line e-mail command string.

```
Date: (Today date in RFC822 format)
From: webserver123@hostname
To:   LISTSERV@demo.lsoft.com

//x JOB REPLY-TO=NONE
[QUIET] ADD listname user@address Fname Lname  PW=??????
```

Normally LISTSERV always acknowledges every command back to the user issuing the command. The `//x JOB REPLY-TO=NONE` in the command string was added to prevent LISTSERV from sending back an e-mail response back to your Web server that it will not be able to decipher. If the user has selected several lists, repeat the ADD line as many times as necessary:

```
//x JOB REPLY-TO=NONE
[QUIET] ADD listname1 user@address Fname Lname  PW=??????
[QUIET] ADD listname2 user@address Fname Lname  PW=??????
[QUIET] ADD listname3 user@address Fname Lname  PW=??????
```

To leave the list, the command string is:

```
//x JOB REPLY-TO=NONE
[QUIET] DELETE listname user@address PW=???????
```

For multiple lists repeat as necessary:

```
//x JOB REPLY-TO=NONE
[QUIET] DELETE listname1 user@address PW=???????
[QUIET] DELETE listname2 user@address PW=???????
[QUIET] DELETE listname3 user@address PW=???????
```

Note: You cannot use the "*" character to do this for ALL lists like the example below:

```
//x JOB REPLY-TO=NONE
[QUIET] DELETE * user@address PW=???????
```

In this instance your Web script will not be able to respond appropriately because LISTSERV will ask for and expect to receive a separate confirmation of this action.

Again, the user@address comes from the user's form input on your site. The Fname and Lname are the user's first name and last name if known. Substitute the single character "*" or the phrase "No Name" if you do not want this option (or set Default-Options= Conceal in the List Configuration.).

The PW=????? is a password assigned to the From: address of the e-mail that you determine, but will usually be something like "webserver123@host_name." The QUIET modifier is optional. If used, do not use the "[ ]" brackets. QUIET will prevent LISTSERV from sending any acknowledgement, welcome, or signoff message to the subscriber. As noted, the ADD or DELETE command does not require any confirmation from the subscriber.

For this method to be successful, your LISTSERV server must know the e-mail From: address that will be used by your CGI script so that this address can be installed as a valid list owner with power to issue commands. Your LISTSERV Site Administrator will also have to assign a password (of your choice) to this special address to enable its privileges to work.

CAUTION: For either method described above, it is advisable that you incorporate some processing in your CGI script to validate the user's e-mail address, at least as syntactically valid per RFC822. If your script acts as a user, the request may simply be sent off and never reach a valid e-mail address. If your script acts as an authorized list owner, it is extremely important that the "*" character, if entered as an address, is trapped. LISTSERV will recognize the "*" as a wildcard matching any address. Thus it is possible for a valid and authorized command to be issued that can delete all subscribers from the list, unless you perform validation on the submitted address before sending it to LISTSERV. The L-Soft CGI script (see above) does trap and prevent this occurrence.