

LIST WRANGLER - Email Mailing List Manager for GTK+

By Frank Cox

September 3, 2012

theatre@melvilletheatre.com

Abstract

Do you have a mailing list of people that you send periodic emails to? If so, LIST WRANGLER is the program that you need to manage your mailing list and send out the emails.

I maintain an email mailing list of people who want to be notified when a new movie is booked at my movie theatre. I wrote LIST WRANGLER for the purpose of managing that mailing list, and also as a way to learn GTK+ programming. This is my first “graphical” program. Though I have been writing programs for several decades on a lot of different computers, everything I’ve written prior to this point has been text mode (ncurses and the like) or utility programs that don’t have any user interface at all.

Part I

Installation

1 Requirements

LIST WRANGLER is a self-contained program that consists entirely of one single binary file. However, there are a few other things that must also be installed on your computer before it will actually work as intended.

Since this is a GTK+ program, you must, of course, have GTK+ installed on your computer. I created this program using GTK2-2.18.9 on a Centos 6 computer. I have no idea how well it will work (if at all) on a computer that uses GTK+ version 3 since I don’t currently have one of those.

The program uses the SQLite database engine to handle the record-keeping functions so you will also need to have SQLite installed on your computer.

Most Linux computers will already meet the above two requirements, since GTK+ is the toolkit behind the Gnome desktop environment, and a great many programs use SQLite to store their data, including the Firefox web browser.

Email is sent using the Cleancode Email program, which can be found here:
<http://www.cleancode.org/projects/email>

I also have a rpm version of Cleancode Email available for download from my website here:

<http://www.melvilletheatre.com/articles/el6>

The database portion of LIST WRANGLER will actually work if you don't have the email program installed, but it won't send out any email so it wouldn't be very useful. Read the documentation for the email program and get it set up to work with your mailservier first.

It is very likely that the only prerequisite program that you don't already have installed on your computer will be Cleancode Email.

2 Compile and Install

LIST WRANGLER is very easy to compile and install. Just un-tar the distribution archive (`listwrangler-1.0.tar.bz2`), cd into the `listwrangler-1.0` subdirectory and type `make`.

- `tar xvjf listwrangler-1.0.tar.bz2`
- `cd listwrangler-1.0`
- `make`

That's it. LIST WRANGLER is a self-contained program and after compiling it you will find one single binary file named *listwrangler*. That's the whole program. You can install it anywhere on your computer that you like. You can optionally type

- `make install`

and the program will be installed in `/usr/local/bin`, and a copy of this documentation will be installed in `/usr/share/doc`.

I also provide a rpm distribution file for LIST WRANGLER. If you have a rpm-based system like Centos, Red Hat or Fedora, you can download and install the rpm if you wish, instead of using the tar.bz2 file. After downloading `listwrangler-1.0-1.src.rpm`, just type this command to compile it and create a binary rpm for installation on your system:

- `rpmbuild -rebuild listwrangler-1.0-1.src.rpm`

After compiling the src.rpm file you should have a binary `i386.rpm` or `x86_64.rpm` file (depending on your computer's architecture) which you can install as follows:

- `rpm -i listwrangler-1.0-1.i386.rpm`

or

- `rpm -i listwrangler-1.0-1.x86_64.rpm`

Note that if you're using Centos 6 (RHEL 6, Scientific Linux 6, etc.) you can just download and install the pre-compiled binary listwrangler rpms from my website without having to worry about compiling them for your system.

Part II

Configuration

After installation, and assuming that you installed *listwrangler* somewhere on your path like `/usr/bin`, `/usr/local/bin` or `~/bin` (don't worry – typing “make install” or installing the rpms will do this for you automatically), just type *listwrangler* at the command prompt to run the program. Or you can set up a launcher on your desktop panel, or whatever you like.

The first time you run the program it will create a subdirectory in your home directory named *.listwrangler*. So if your home directory is `/home/username`, then you will have a new subdirectory named `/home/username/.listwrangler`. The entire program configuration, database and activity log file are stored in `/home/username/.listwrangler`. Temporary files that are created during the actual email run (sending to the mailing list) are also stored in the same directory, but they should be automatically deleted immediately after they have been used.

The program doesn't store any files anywhere else.

LIST WRANGLER automatically creates and saves a default configuration that I will guarantee is not the one that you actually want to use. So the first thing that you will want to do is click on the File - Configuration menu to set up the program to meet your needs.

1. Your Email Address - the program requires your email address so it can send you the test emails, as well as include you in the subscriber's mail run if you select that option.
2. Email Preamble - The initial text of the subscribers' email, which should probably state a reason why you are sending the email.
3. Final Body Line - The last line after the main email body (which is created with the Edit Email button, described later in this document). I use it to say “Program subject to change without notice.”
4. Email Postscript - The final text in the subscribers' email. I use it to provide a description of how a subscriber can remove his name from my email mailing list if he decides that he doesn't want to receive any more notifications.
5. 80-column wordwrap for email - This setting determines whether the emails that are sent by this program are word-wrapped at 80 characters,

or if they are sent as a single line per paragraph. Some email clients seem to have trouble word-wrapping long lines, and when you send a non-word-wrapped email the person trying to read it ends up with a very long single line and has to scroll back and forth to read the text. This is obviously very inconvenient. Having said that, I have made this an optional setting since a lot of people read their email on mobile devices these days and I'm not sure if word-wrapped email looks better or worse on small screens like someone's phone. To date, I personally leave the word-wrap turned on when sending emails.

6. Include yourself in mail run - Do you want to be emailed a copy of each message that you send to the subscribers? If so, activate this setting. This simply includes your email address (set in step 1 above) in the mailing list when you send an email to all subscribers.
7. Welcome Email Subject Line - When you add a new subscriber to the database, you can optionally send him an email welcoming him to the mailing list. This is where you set the subject line of that email.
8. Welcome Email Text - When you add a new subscriber to the database, you can optionally send him an email welcoming him to the mailing list. This is the body of that email.
9. Verification Email Subject Line - When you receive a request for a new subscription (through a form on your webpage or a paper form someone filled out or however you wish to do this) you can send a Verification Request by email to that person before actually adding him to the database. This serves two purposes: It verifies that the person really does want to be on your mailing list, and it provides a method to verify that the email address you received is correct and that you can in fact send email to that person. This is where you set the subject line of that email.
10. Verification Email Text - When you receive a request for a new subscription (through a form on your webpage or a paper form someone filled out or however you wish to do this) you can send a Verification Request by email to that person before actually adding him to the database. This serves two purposes: It verifies that the person really does want to be on your mailing list, and it provides a method to verify that the email address you received is correct and that you can in fact send email to that person. This is the body of that email.
11. Email Signature Line - This is the final line of all emails that the program sends out.
12. Outbound Email Delay (seconds) - My mailserver is small and sending it several hundred emails all within the space of a few seconds would overload it. Therefore, I need to pace the emails as they are sent out. This is where you can set the number of seconds that the program waits before sending each email. The minimum delay is 1 second, so if you have 100

13. Save - If you don't save your new configuration, nothing changes. After saving, your configuration is stored in the */home/username/.listwrangler* subdirectory as described at the start of this section.

Part III

Usage

3 Edit Email

This is where you go to create the subjectline and body of the email that you want to send to all of your subscribers. The View Email button will create a dummy email using your data and show it to you in a window on your screen. The Test Email button will actually email the message to you.

Once again, don't forget to save your data. The email the program actually sends out is based on the data that is currently saved in the database, not on what you see on your screen. If you don't save your data, then nothing has changed.

4 Send Email

After editing your email as described in the previous section, this is where you go to actually send it to all of the subscribers and, optionally, to yourself, depending on your configuration setting described in the Configuration Section.

After starting your mail run, there is nothing further to do until it's over.

A log of all emails that have been sent is stored as a text file in your database and configuration directory */home/username/.listwrangler*. Note that this text file will continue to grow over the course of time as you use the program so you may wish to delete or truncate it occasionally.

5 Verify

When you receive a request for a new subscription (through a form on your webpage or a paper form someone filled out or however you wish to do this) you can send a Verification Request by email to that person before actually adding him to the database. This serves two purposes: It verifies that the person really does want to be on your mailing list, and it provides a method to verify that the email address you received is correct and that you can in fact send email to that person. Enter the name and email address of your prospective new subscriber and hit the OK button.

6 New Subscriber

This is where you go to add a new subscriber to the database. After entering their email address and hitting OK, you will be asked if you want to send the new subscriber the Welcome message using the subject line and body that you defined in the Configuration section. You can also send the new subscriber the last email that was sent to all of your subscribers, and can change the subject line of that email if you wish. NOTE: Changing the subject line of the last email message here will automatically save it.

7 Delete Subscriber

On the (hopefully rare) occasions that someone decides that he doesn't want to be on your mailing list any more, this is where you go to remove him. Just enter the email address of the subscriber to be deleted.

8 List Subscribers

This will open a new window holding a list of all of the subscribers that are currently in your database.

Part IV

License

LIST WRANGLER is FREE SOFTWARE.

Copyright © 2012 Frank Cox

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the Melville Theatre nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT,

INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.