



INSTALLATION INSTRUCTIONS

Version 1.0, November 2022

Compatible with Joomla! 3.x-4.x

INTRODUCTION

Dada Mail filled a need for me when my web-hosting company imposed a limit on the number of outbound emails per hour my site could send. I was running a simple Mailman discussion list that had about 165 subscribers. The per-hour limit was 250 messages, which was exceeded if anyone replied to a message posted to the list within an hour of it being posted. Then, Mailman promptly suspended the subscriptions of anyone who could not be sent the message. This entirely defeated the purpose of Mailman mailing lists with that provider in my opinion.

Dada Mail solved my problem because it allows me to use any SMTP server I want, whether it's on the same server as my site or another server. But Dada Mail ran its course. Over time it could not handle the load a single large email put on our server with subscribership per list over 200 and started to have performance issues.

Similar to Dada Mail, Mailster can use the POP3 protocol to access the email account associated with each list. It can alternatively use the IMAP protocol. Each list's email account is periodically polled by a cronjob script, and messages pulled from it are sent by Mailster to all the subscribers of the respective list. The cronjob script is easy to setup per instructions on the Mailster website.

My first application of Mailster was to implement a closed email discussion list for a home owner association (HOA). The HOA site uses Joomla, and I wanted the email list subscriptions to be exclusively available to site members, not open to the public. Mailster is a native Joomla extension, so it was the perfect solution.

Fortunately, Mailster manages its lists using the same database the Joomla site uses. In fact, Mailster can use existing ACLs you define within your site to quickly add subscribers to a list. Mailster, with its Business and higher plans, comes with a Community Builder "bridge" Joomla plugin. However, it is only able to handle the account email. We needed it to handle additional email addresses provided by custom CB fields.

FEATURES

The Mailster Subscriptions CB plug-in integrates Mailster's subscription capability into a Joomla! website running Community Builder. It is really more of a bridge than an independent application. Everything the plug-in does is based on Mailster being installed to manage its settings and subscribers on a Joomla! site with Community Builder managing user profiles.

Your site members can subscribe to and unsubscribe from any Mailster list for which you publish a corresponding CB profile field. Each user can subscribe multiple email addresses, including the Joomla! account email. If a site member changes one of their email addresses using the CB profile editor, it is automatically updated in all Mailster groups and lists to which they are subscribed. In addition, you can specify list(s) to which the primary account email address for new users is automatically subscribed after they register or if you create accounts for them via the CB administrator interface. Configuration options include sending subscription notification emails and formatting those email messages.

Note that this plug-in does not implement any Mailster administrator functions. So you will still need to create and configure your email lists using Mailster's admin interface. It also should not be used if the Mailster CB plugin is enabled as the two plugins are not aware of each other.

HOW TO INSTALL

Compatibility and Testing

This plug-in has been tested with Joomla! 4.2.4 along with Community Builder version 2.7.4, and Mailster version 1.7.6. It may work in older versions of these applications, but has only been tested with these versions. The very first version of the original Dada Mail plug-in was initially tested using the EasyEclipse integrated development environment (IDE) with XAMPP version 1.5.1 for Microsoft Windows on a locally-installed Joomla! 1.5 site with legacy support enabled. It was subsequently installed and testing was completed on a live SSL site running Linux, Joomla! 1.0.12, and CB 1.0.2. So it's been around a while and just refactored for Mailster.

Preparation

Before you install the Mailster Subscriptions plug-in, your site must be running Joomla! 4.x and Community Builder 2.7 and you must acquire and install Mailster. The Business or higher Mailster option is highly recommended since those options can run list processing from a background cronjob. You can get Mailster at <https://www.brandt-oss.com>. This plug-in was developed using the Business version of Mailster but should work with any version.

After you install Mailster, you must create one mailing list and one group for each list you plan to operate. Mailster allows list addresses to source from either Joomla user accounts or be external addresses. This plugin supports both. For this plugin to work, for each of your lists name a Mailster group and a list the same using a name without any spaces.

Installing the Mailster Subscriptions Plug-in

After you've created your first Mailster list and group using the Mailster administrator web interface, you can install this plug-in, manage that list, and create additional lists. Just install the plug-in as you would any other CB plug-in, using the CB plug-in manager. Installing the plug-in will create a new CB tab called "Email Lists". Although you do not need to use this tab for your Mailster list subscriptions, it is created for your convenience. You may delete it if you prefer to put the subscription fields into another profile tab. Make sure you remember to publish the plug-in.

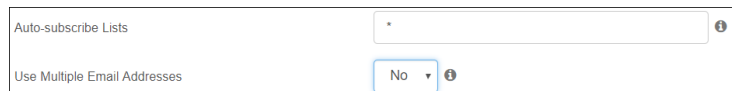
Plug-in Administration Options

Allowing your Mailster list to be subscribed within the CB profile is very easy. There are two different ways to do it depending on whether or not you want to support multiple email addresses on your site. This is a decision you should consider carefully since converting your site later from supporting only one address per account to supporting multiple addresses requires technical knowledge of managing the MySQL database directly.

The plug-in is setup by default to support either a single or up to 4 email addresses per site account profile. Since it does not dynamically add/delete configuration fields to allow this to be varied, if you want to support more or fewer lists, you'll need to edit the plug-in's XML file. The options for the "Use Multiple Email Addresses" selection are "No" and by default the values 1 to 4. The "No" option makes the plug-in ignore all but the first profile field name you specify, which needs to be the field name for the account's main email address. The other options set the number of email addresses to the value selected. If you want more than 4 addresses, you need to change the XML file to add more options, following the naming convention used for the first 4. The option field names need to end in a number (e.g., email1, email2, ...). Make sure you make the number of email addresses to select no more than the maximum for which you have defined configuration fields. For more on this subject, see "*Adding More Email Addresses*" below.

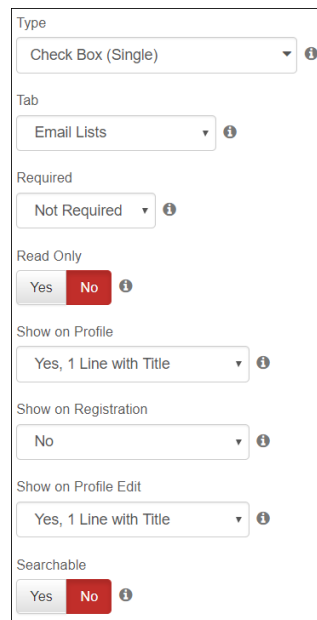
Single-Address Support

To configure your site to support subscribing only one email address per Joomla! user account, select “No” in the plug-in admin interface in the site back end “Use Multiple Email Addresses” option. Note that choosing this option will force ALL of your Mailster lists to be limited to subscribing only the primary email address of each Joomla! user account. To allow your site users to subscribe multiple addresses, select the number (up to 4) as shown below. If you want your users to be automatically subscribed to any of your Mailster lists, enter the list short names in the Auto-subscribe box, separated by commas, or enter an asterisk (*) if you want new users to be subscribed to all of your lists. Each list’s short name is its Mailster name in all lowercase with “cb_” prefixed to it. For instance, a list named “Neighbors” would have the short (database column) name “cb_neighbors”. If your list name does include spaces, they will be removed to create the expected short names. For instance, the short name for “Authorized Users” would be “cb_authorizedusers”.



The screenshot shows a configuration box with two fields. The first field, labeled 'Auto-subscribe Lists', contains an asterisk (*). The second field, labeled 'Use Multiple Email Addresses', is a dropdown menu currently set to 'No'. Both fields have an information icon (i) to their right.

If you select “No” for the above option, to allow users to subscribe/unsubscribe to/from your Mailster list simply define a **Check Box (Single)** or **Drop Down (Single-select)** field for each list using the list's short name. When you do this, Community Builder will prefix the field name with "cb_". For instance, if you have a list named "Neighbors", create a CB field by this name and CB will rename it "cb_neighbors" automatically. Publish the field and your members will then be able to subscribe to the corresponding Mailster list.



The screenshot shows the Joomla! Field configuration interface. The 'Type' dropdown is set to 'Check Box (Single)'. The 'Tab' dropdown is set to 'Email Lists'. The 'Required' dropdown is set to 'Not Required'. The 'Read Only' section has 'Yes' and 'No' buttons, with 'No' being the active selection. The 'Show on Profile' dropdown is set to 'Yes, 1 Line with Title'. The 'Show on Registration' dropdown is set to 'No'. The 'Show on Profile Edit' dropdown is set to 'Yes, 1 Line with Title'. The 'Searchable' section has 'Yes' and 'No' buttons, with 'No' being the active selection. Each dropdown and button group has an information icon (i) to its right.

Multiple-Address Support

If you select a value for the above option, to allow users to subscribe/unsubscribe to/from your Mailster list you’ll need to define one field for each email address you wish to allow your site users to subscribe to each of your lists. In the plug-in admin interface, enter one of these CB field names into each of the boxes beneath the multiple addresses option (see below). Note that when this configuration is used, the account email address is NOT automatically included. Enter

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“email” in one of the boxes to allow users to subscribe their account email address. Note that the order you enter these field names is significant, which will be explained later.

EMAIL OPTIONS

Auto-subscribe Lists: *

Use Multiple Email Addresses: 4

Email #1: email

Email #2: cb_email2

Email #3: cb_email3

Email #4: cb_email4

Email Options Field: cb_listnames

The email address fields should be created as type **Email Address** in the CB Field Manager as shown below. The **Size** you specify depends on your site’s template and is purely for user aesthetics. Whether you enable **Show on Registration** is entirely up to you. However consider the fact that whether or not a user subscribes at registration will override a Mailster list specified in the Auto-subscribe list (the auto-subscribe function executes first).

Type: Email Address

Tab: Email Lists

Required: Not Required

Read Only: Yes No

Show on Profile: No

Show on Registration: No

Show on Profile Edit: Yes, 1 Line with Title

In addition to creating fields for the email addresses, you must also define a **Check Box (Multiple)** or **Drop Down (Multi-select)** field for each Mailster list using the list's short name. These two field types allow multiple selections to be made for a single CB field, in this case allowing multiple addresses to be subscribed to a single Mailster list. The number of rows and columns you specify depends mostly on the aesthetics you want. For checkboxes, the recommendation is to set all the field dimensions to 0. For a drop list, the recommendation is to set the number of rows to the number of email addresses your site will support plus one and the other dimensions to 0.

You can also use Code field types, which are a bit trickier. First, you have to know a little bit of PHP. You at least need to understand array key-value pairs. But the tricky part of this is that without a static field option list defined for your actual email list fields (the code generates the options list on the fly), you need to define an unpublished option list field so this plugin knows

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what the options are. Using Code Check Box (Multi-select) or Code Drop List (Multi-select) field types can create visually pleasing response and order enforcement when combined with CB's Core Ajax plugin.

For each email address your site will support (or for a common field if you use Code fields for your actual list fields), you will need to "Add a Value". Each value you enter corresponds to one supported email list address. And the order you define them here must match the order you entered the email address field names in the plug-in admin interface. It is important to understand that the correlation between the checkboxes (values entered here) and the email address fields is made by the software based on the ORDER they are specified, not on the names or labels you assign to them. This allows you the freedom to use HTML formatting on the email address field labels.

Type	Tab	Required	Read Only	Show on Profile	Show on Registration	Show on Profile Edit	Searchable
Check Box (Multiple)	Email Lists	Not Required	Yes/No	Yes, 1 Line with Title	No	Yes, 1 Line with Title	Yes/No

Value	Label
Account Email	
Email #2	
Email #3	
Email #4	

Unless you use a common, unpublished field, you will need to define the same exact list of values in the exact same order for each email list field. The end result should look to the user something like the following example in the CB profile editor.

Field	Account Email	Email #2	Email #3	Email #4
Notice List	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Neighbors List	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Email Notifications

Plug-in options allow you to choose whether the user, admin, both or neither receives a notification email whenever a list subscription change is made. Note that these messages can be configured to be sent whether the change is made in the back end by the administrator or in the front end by the user. A good number of the plug-in options are devoted to formatting these messages. HTML is the better format since it supports lists and tables.

The body of each notification message consists of three parts: the prefix, the changes, and the suffix. Changes are either subscriptions or unsubscriptions. Because the information in the different parts of the messages are user-dependent and can be list-dependent, several tags are

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defined to provide a personal touch to the messages. Not all tags work in all message parts, and some of them work differently in different message parts. A table displayed in the plug-in configuration description summarizes the tags.

Special tags you can insert into email notice message fragments are as follows:

Tag	What is Inserted	In Message Parts
[USER]	Name of the subscriber.	A,E,F
[SITE]	Name of the website.	A,E,F
[EMAIL]	Primary account email address of the subscriber.	A,E,F
[EMAIL]	Email address applicable to the subscription or email address change.	B,C,D
[OLD]	Old email address applicable to email address change.	D
[LIST]	Name of the email list being un/subscribed.	B,C,D

A Subscribe or Unsubscribe message will be inserted for each modification the user makes. When HTML format is used, you can make this appear as a bulleted list. When Text format is used, there is no formatting capability at all (not even using newlines).

This example illustrates how the HTML format can be used to create nicely-formatted notification messages.

Send Notification to	<input type="radio"/> No <input type="radio"/> User Only <input type="radio"/> Admin Only <input checked="" type="radio"/> Admin and User ⓘ
Send Account Deletion Notification	<input checked="" type="radio"/> No <input type="radio"/> Yes ⓘ
Admin Address	<input type="text" value="hmehoa@scherzinger.org"/> ⓘ
Email Format	<input type="radio"/> Text <input checked="" type="radio"/> HTML ⓘ
Part A) Message Prefix	<input type="text" value="Welcome to [SITE].

[USER] successfully:"/> ⓘ
Part B) Subscribe Message	<input type="text" value="subscribed [EMAIL] to [LIST]."/> ⓘ
Part B) Auto-Subscribe Message	<input type="text" value="auto-subscribed [EMAIL] to [LIST]."/> ⓘ
Part C) Unsubscribe Message	<input type="text" value="unsubscribed [EMAIL] from [LIST]."/> ⓘ
Part D) Address Change Message	<input type="text" value=" changed [LABEL] from [OLD] to [EMAIL]."/> ⓘ
Part E) Message Suffix	<input type="text" value="Thanks for keeping your subscriptions current.

The Webmaster"/> ⓘ

Welcome to Hunter Mill Estates HOA.

Bruce Scherzinger successfully:

- subscribed bruce.scherzinger@huntermill.org to the Notice list.

The Webmaster

Parameter Summary

Auto-subscribe Lists – If you want the account email address of new site members to be subscribed to any email lists automatically after they register, just enter the simple names of those lists in this field separated by commas. You can enter a single asterisk to subscribe new users to all of your lists. The new member will receive a subscription notice email (if enabled) after the registration is approved. If your site does not require confirmation or admin approval, the new member will be sent the subscription notice email immediately after registering. If it requires confirmation but not admin approval, the notice email will be sent immediately after confirming. Note that although the auto-subscribe function will work for any/all email address fields you include in the registration form, giving the user an option to subscribe at registration and then forcing subscription may be frowned upon by some people. If you do auto-subscribe your new users, make sure you include your email list policies and privacy notices in the registration form. And if you want to give a new user the option to subscribe an address at registration, don't include the field name for that address in the auto-subscribe list. Use good judgment.

Use Multiple Email Addresses – This option allows you to choose whether you wish for your site to support multiple email addresses per user for subscriptions to Mailster email lists.

Email #1...#4 – If you choose to support multiple email addresses per user, enter the CB field names associated with each email address entry field you present in your user profiles. Note that you **MUST SPECIFY** CB fields for as many email addresses as you select. If you only wish to support two addresses, for example, change the option value for the "User Multiple Email Addresses" to "2". All supported email address entry fields must be specified. Make sure the profile fields are created **BEFORE** you enter them here!

Email Options Field – If you are using Code fields, which really have no statically predefined option list (because the code computes it on the fly), then enter the name of the single options list field you used to define the options in this box. This field should not be published. Its only purpose is to specify a single field that represents the options each of your list fields should use. Please note that if you enter something in this box, the options it statically defines are what the plugin is going to assume your individual list Code fields are going to return. Make sure you define this field before changing this parameter.

Send Notification to – This option allows you to select who should receive email notifications when a member subscribes or unsubscribes to one of your Mailster lists. This applies to **ALL** notifications sent by the plug-in. Note that a notification is sent when a user's account is deleted informing the user that each of their subscribed emails was unsubscribed from all lists.

Send Account Deletion Notification – This option specifies whether the plugin should send an unsubscribe notification to a user when their account is deleted using the CB User Manager.

Admin Address – Some mail servers will not send an email message **To** the address specified in the **From** part of the email envelope. This field allows you to specify the address you wish to receive subscription notice emails when you include "Admin" in the Email Notification option.

Email Format – Although you can elect to send subscription notice emails in plain text format, HTML is recommended because there are no formatting options with plain text at all. All newline characters are removed by Joomla Mailer when "Text" is selected. The screen shot above illustrates the flexibility in formatting you have using HTML.

Message Prefix – The text entered into this box will appear at the beginning of all notification email messages. You can have the plug-in fill-in the site name, user's name, and/or user's account email address in this part of the message by specifying [SITE], [USER], and/or [EMAIL],

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respectively. The plug-in will not insert any list names into this part of the message, and the [EMAIL] tag will insert only the user account email.

Subscribe Message – The text appearing in this box will be repeated for each list the user subscribes to. Insert the subscribed address using the [EMAIL] tag and the list name using the [LIST] tag.

Auto-Subscribe Message – The text appearing in this box will be repeated for each list the user is auto-subscribed to following registration. Insert the subscribed address using the [EMAIL] tag and the list name using the [LIST] tag.

Unsubscribe Message – The text appearing in this box will be repeated for each list the user unsubscribes from. Insert the unsubscribed address using the [EMAIL] tag and the list name using the [LIST] tag. Note: If a user account is deleted, an unsubscribe notification will be sent if/as specified containing one of these lines for each of the user's email addresses with "all email lists" filled-in for the [LIST] tag.

Email Address Change Message – The text appearing in this box will be repeated for each email address the user changes. Insert the old address using the [OLD] tag and the new address using the [EMAIL] tag. Note that the code does not check to see which email lists these changes affect, but know that it affects all lists to which that address is subscribed.

Message Suffix – The text entered into this box will appear at the end of all notification email messages. Formatting options for this part of the message are the same as for the Message Prefix.

Email Subject – This will be the subject of all subscribe, unsubscribe, and address change notice emails sent. You can include the [SITE], [EMAIL], and [USER] tags in this field. Note that [EMAIL] will insert the user account email.

From Address – Use this field to override the email address specified in the Joomla! Global Configuration panel Email tab if you want different sender information for email list subscription notices than for other website email notices. If you leave this blank, the Global Configuration setting will be used.

From Name – Use this field to override the email address specified in the Joomla! Global Configuration panel Email tab if you want different sender information for email list subscription notices than for other website email notices. If you leave this blank, the Global Configuration setting will be used.

Language Adaptation

To adapt this plug-in for other languages, change all applicable text in the XML file as well as in all "define" statements at the top of the PHP file. There is no separate language file.

Adding More Email Addresses

The plug-in comes preconfigured to support up to 4 email addresses per Joomla! user account. If you need more than this number, you can easily edit the plug-in XML file to add more. To do this, open the XML file in a text editor and look for the comments containing the words "MULTIPLE EMAIL ADDRESSES".

The XML file below is setup to only allow 1 or 4 addresses. Let's say you want to support 1 or 6 email addresses per user. To do this, simply add two more email# parameters to allow CB fields to be specified for your additional email addresses and add two more options for the "emails" field. Note that these parameter names must follow the naming convention "email#" where # starts at 1 and ends at the number of options you entered for the "emails" parameter option value

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list. If you want to support a variable number, just add more option records below the “emails” parameter, each with a different number (e.g., 1,2,3,4).

```
<!-- MULTIPLE EMAIL ADDRESSES -->
....<param name="emails"
.....type="list"
.....size="1"
.....default="0"
.....label="Use Multiple Email Addresses"
.....description="Select a number to allow one or multiple email addresses (up to 4) per user for subscribing to.
        for each subscription you want to support. Selecting No indicates only the primary account email can be subs
.....<option value="0">No</option>
.....<option value="1">1</option>
.....<option value="2">2</option>
.....<option value="3">3</option>
.....<option value="4">4</option>
....</param>
<!--
....To change the number of supported email addresses, change the "On" option value above and
....add or remove email# parameter definitions below. The number of email# parameter
....definitions should equal or be greater than the On option value above. The parameter names
....MUST FOLLOW the email# naming convention.
-->
....<param name="email1" type="text" size="40" default="email" label="Email #1" description="Enter the field name f
email lists." />
....<param name="email2" type="text" size="40" default="cb_email2" label="Email #2" description="Enter the field name f
email lists." />
....<param name="email3" type="text" size="40" default="cb_email3" label="Email #3" description="Enter the field name f
email lists." />
....<param name="email4" type="text" size="40" default="cb_email4" label="Email #4" description="Enter the field name f
email lists." />
....<param name="email_opts" type="text" size="40" default="" label="Email Options Field:" description="Enter the field
defined. This is necessary if you use a CB Code Field and your email list name options are not statically defined.
blank." />
<!-- END MULTIPLE EMAIL ADDRESSES -->
```

You can make these edits directly on the installed XML file at any time. You can even do it using the text editor built into your favorite file explorer component if you have one installed. The plug-in will automatically recognize your new email address fields, but don't forget that you'll need to create the new fields so your users can enter their email addresses. If the fields themselves do not exist, the database query of the fields that the plug-in code executes will fail and the user profile will not be fully displayed. Therefore, it is a good idea to always create the new email address fields FIRST, and then extend the number of them the plug-in can use by specifying the new field names afterwards.

Acknowledgements

Mailster is the creation of Holger Brandt. My sincere thanks go to Holger for creating Mailster and for his very personal and gracious support and also for his encouragement toward my goal to integrate Mailster with Community Builder.

Mailster is Free and Paid Software. To acquire Mailster, visit <https://www.brandt-oss.com>.

Community Builder is the quintessential Joomla! extension for sites that are based on member registration and need members to have configurable options. This plug-in would have been a lot more difficult to develop without CB. Hats off to the entire CB Team!

Community Builder is open source software released under the Gnu Public License.

To acquire Community Builder, visit <http://joomlapolis.com>.