django-newsletter Documentation

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Contents

Django app for managing multiple mass-mailing lists with both plaintext as well as HTML templates with rich text widget integration, images and a smart queueing system all right from the admin interface.

CHAPTER 1

Installation

1) Install the package from PyPI:

```
pip install django-newsletter
```

Or get the latest & greatest from Github and link it to your application tree:

```
pip install -e git://github.com/jazzband/django-newsletter.git#egg=django-
↪newsletter
```

(In either case it is recommended that you use VirtualEnv in order to keep your Python environment somewhat clean.)

2) Add `newsletter` and the Django `contrib` dependencies noted below to `INSTALLED_APPS` in your settings file.

You will need one of the supported thumbnail applications (sorl-thumbnail or easy-thumbnails).

You may also add an *optional* rich text widget (Django Imperavi or Django TinyMCE) and

```
INSTALLED_APPS = (
    # Required Contrib Apps
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.auth',
    'django.contrib.sites',
    ...
    # At least *one* of these thumbnail applications
    'sorl.thumbnail',
    'easy_thumbnails',
    ...
    # Optionally, one of Imperavi or TinyMCE WYSIWYG editors
    #'imperavi',
    #'tinymce',
    ...
    'newsletter',
    ...
)
```

3) Specify your thumbnail application in your settings file:

```
# Using sorl-thumbnail
NEWSLETTER_THUMBNAIL = 'sorl-thumbnail'

# Using easy-thumbnails
NEWSLETTER_THUMBNAIL = 'easy-thumbnails'
```

4) Configure any of the optional *Settings*.

5) Import subscription, unsubscription and archive URL's somewhere in your `urls.py`:

```
urlpatterns = [
    ...
    path('newsletter/', include('newsletter.urls')),
    ...
]
```

6) Enable Django's staticfiles app so the admin icons, CSS and JavaScript will be available where we expect it.

7) Create the required data structure:

```
./manage.py migrate
```

8) Change the default contact email listed in `templates/newsletter/subscription_subscribe.html` and `templates/newsletter/subscription_update.html`.

9) (Optionally) Create message template overrides for specific newsletters in `templates/newsletter/message/<newsletter_slug>/<message_type>[_subject].<html|txt>` where `<message_type>` can be one from *subscribe*, *unsubscribe*, *message* or *update*.

10) You may now navigate to the Django admin where the Newsletter module should be available for you to play with.

    In order to test if submissions work, make sure you create a newsletter, a subscription, a message and finally a submission.

    After creating the submission, you must schedule it by clicking the 'submit' button in the top right of the page where you edit it.

11) Now you may perform a test submission with the *submit_newsletter* management command (*-v 2* is for extra verbosity):

```
./manage.py submit_newsletter -v 2
```

12) Add the *submit_newsletter* management command to crontab.

    For example (for sending every 15 minutes):

```
*/15  *  *   *   *     <path_to_virtualenv>/bin/python <project_root>/manage.
↪py submit_newsletter 1>/dev/null 2>&1
```

To send mail, `django-newsletter` uses Django-provided email utilities, so ensure that email settings are properly configured for your project.

CHAPTER 2

Settings

2.1 Required Settings

The following settings are required.

2.1.1 Configure thumbnailing applications

To improve the user experience and performance of django-newsletter, a thumbnailing application is used to automatically thumbnail article images in newsletter messages.

Currently two applications are supported by default: easy-thumbnails and sorl-thumbnail.

First you will need to install the thumbnailing application (as per the applications instructions). Afterwards the thumbnailing application can be selected as follows:

```
# Using sorl-thumbnail
NEWSLETTER_THUMBNAIL = 'sorl-thumbnail'

# Using easy-thumbnails
NEWSLETTER_THUMBNAIL = 'easy-thumbnails'
```

This configures django-newletter to use these applications for relevant model fields, admin fields, and template thumbnails.

2.2 Optional Settings

The following optional features may be configured.

2.2.1 Disabling email confirmation

Disable email confirmation for subscribe, unsubscribe and update actions for subscriptions.

By default subscribe, unsubscribe and update requests made by a user who is not logged in need to be confirmed by clicking on an activation link in an email. If you want all requested actions to be performed without email confirmation, add following line to settings.py:

```
NEWSLETTER_CONFIRM_EMAIL = False
```

For more granular control the `NEWSLETTER_CONFIRM_EMAIL` setting can be overridden for each of subscribe, unsubscribe and update actions, by adding `NEWSLETTER_CONFIRM_EMAIL_SUBSCRIBE` and/or `NEWSLETTER_CONFIRM_EMAIL_UNSUBSCRIBE` and/or `NEWSLETTER_CONFIRM_EMAIL_UPDATE` set to `True` or `False`.

2.2.2 Configure rich text widget

Known to work are django-imperavi as well as for django-tinymce. Be sure to follow installation instructions for respective widgets. After installation, the widgets can be selected as follows:

```
# Using django-imperavi
NEWSLETTER_RICHTEXT_WIDGET = "imperavi.widget.ImperaviWidget"

# Using django-tinymce
NEWSLETTER_RICHTEXT_WIDGET = "tinymce.widgets.TinyMCE"
```

If not set, django-newsletter will fall back to Django's default TextField widget.

Note: django-tinymce 3 and higher do not support Python 3.5.

2.2.3 Configure thumbnailing applications

To improve the user experience and performance of django-newsletter, you may use various thumbnailing applications to automatically thumbnail article images in newsletter messages.

Currently two applications are supported by default: easy-thumbnails and sorl-thumbnail.

First you will need to install the thumbnailing application (as per the applications instructions). Afterwards the thumbnailing application can be selected as follows:

```
# Using sorl-thumbnail
NEWSLETTER_THUMBNAIL = 'sorl-thumbnail'

# Using easy-thumbnails
NEWSLETTER_THUMBNAIL = 'easy-thumbnails'
```

This configures django-newletter to use these applications for relevant model fields, admin fields, and template thumbnails.

If not set, django-newsletter will fall back to Django's default ImageField and implement rudimentary thumbnailing with Pillow.

2.2.4 Delay and batch size

The delay between each email, batches en batch size can be specified with e.g.:

```
# Amount of seconds to wait between each email. Here 100ms is used.
``NEWSLETTER_EMAIL_DELAY = 0.1``

# Amount of seconds to wait between each batch. Here one minute is used.
``NEWSLETTER_BATCH_DELAY = 60``

# Number of emails in one batch
``NEWSLETTER_BATCH_SIZE = 100``
```

For both delays, sub-second delays can also be used. If the delays are not set, it will default to not sleeping.

CHAPTER 3

Usage

1) Start the development server:

```
./manage.py runserver
```

2) Navigate to `/admin/` and: behold!
3) Setup a newsletter and create an initial message.
4) Preview the message and create submission.
5) Queue the submission for submission.
6) Process the submission queue:

```
./manage.py submit_newsletter
```

7) For a proper understanding, please take a look at the *Reference*.

3.1 Embed A Sign-up Form Within Any Page

If you want to include a sign-up form on any page of your site, similar to the code that MailChimp or other email services may provide, you simply paste the following code snippet where you want the form to appear:

```
<form enctype="multipart/form-data" method="post" action="/newsletter/[NAME-OF-
↪NEWSLETTER]/subscribe/">
{% csrf_token %}
<label for="id_email_field">E-mail:</label> <input type="email" name="email_field"␣
↪required="" id="id_email_field">
<button id="id_submit" name="submit" value="Subscribe" type="submit">Subscribe</
↪button>
</form>
```

Replace [NAME-OF-NEWSLETTER] with the name of your newsletter. You do not need to add anything to views, urls, or any other file. This snippet alone should simply work. Take note that the name field is removed from this, since most people only want the user to have to enter an email address to sign up for a newsletter. If you want to include the name field, you'd add this line before the <button> line:

```
<label for="id_name_field">Name:</label> <input type="text" name="name_field"␣
↪maxlength="30" id="id_name_field"><span class="helptext">optional</span>
```

CHAPTER 4

Templates

To get started, we recommend copying the existing 'stub'-templates from the module directory to your project's *templates* dir:

```
cp -rv `python -c 'import newsletter; from os import path; print(path.
↪dirname(newsletter.__file__))'`/templates/newsletter <project_dir>/templates/
```

4.1 Web view templates

newsletter_list.html Newsletter list view, showing all newsletters marked as public and allowing authenticated Django users to (un)subscribe directly.

newsletter_detail.html Newsletter detail view, linking to subscribe, update, unsubscribe and archive views for a particular newsletter.

submission_archive.html Archive; list of public submissions for a particular newsletter.

subscription_subscribe.html Subscribe form for unauthenticated users.

subscription_subscribe_email_sent.html Confirmation of subscription request.

subscription_activate.html Activation form for (un)subscriptions or updates of unauthenticated users.

subscription_subscribe_activated.html Confirmation of activation of subscription.

subscription_unsubscribe_activated.html Confirmation of activation of unsubscription.

subscription_update_activated.html Confirmation of activation of update.

subscription_subscribe_user.html Subcribe form for authenticated users.

subscription_unsubscribe.html Unsubscribe form for unauthenticated users.

subscription_unsubscribe_email_sent.html Confirmation of unsubscription request.

subscription_unsubscribe_user.html Unsubscribe form for authenticated users.

subscription_update.html Update form for unauthenticated users.

subscription_update_email_sent.html Confirmation of update request.

4.2 Email templates

Email templates can be specified per newsletter in *message/<newsletter_slug>*. If no newsletter-specific templates are found, the defaults in the *message* folder are used.

When a newsletter is configured to send HTML-messages, the HTML and txt are both used to create a multipart message. When the use of HTML is not configured only the text templates are used.

The following templates can be defined:

message.(html|txt)

Template for rendering a messages with the following context available:

- *subscription*: Subscription containing name and email of recipient.
- *site*: Current *site* object.
- *submission*: Current submission.
- *message*: Current message.
- *newsletter*: Current newsletter.
- *date*: Publication date of submission.
- *STATIC_URL*: Django's *STATIC_URL* setting.
- *MEDIA_URL*: Django's *MEDIA_URL* setting.

message_subject.txt Template for the subject of an email newsletter. Context is the same as with messages.

subscribe.(html|txt) Template with confirmation link for subscription.

subscribe_subject.txt Subject template with confirmation link for subscription.

unsubscribe.(html|txt) Template with confirmation link for unsubscription.

unsubscribe_subject.txt Subject template with confirmation link for unsubscription.

update.(html|txt) Template with confirmation link for updating subscriptions.unsubscription.

update_subject.txt Subject template with confirmation link for updating subscriptions.

4.3 Using a premailer

A premailer is a program that translates embedded CSS into inline CSS. Inline CSS is much more widely supported in emails, but can make templates very messy if you have more than a couple lines of styling.

django-premailer is an open-source package on PyPI that adds a template tag that applies a premailer. Unfortunately, the package was broken for Django 1.6 and upwards at the time of writing. An example of a working version is available at this gist (requires premailer to be installed).

You can then use the template tag in your templates as follows:

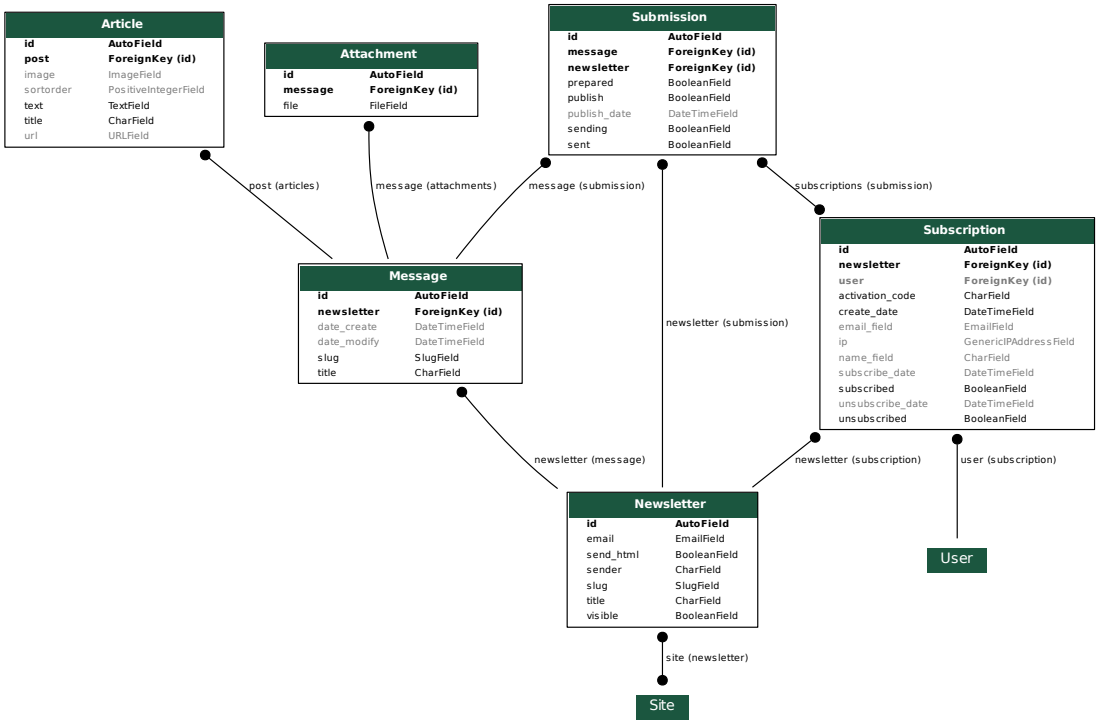
```
{% load premailer}{% premailer %}
<html>
<style type="text/css">
h1 { border:1px solid black }
p { color:red;}
</style>

<h1 style="font-weight:bolder">Hey</h1>
<p>Hej</p>
</html>
{% endpremailer %}
```

CHAPTER 5

Reference

For now, this documentation is automatically generated from the source code.

5.1 Models



class Newsletter(*id*, *title*, *slug*, *email*, *sender*, *visible*, *send_html*)

Bases: `django.db.models.base.Model`

get_templates(*action*)
Return a subject, text, HTML tuple with e-mail templates for a particular action. Returns a tuple with subject, text and e-mail template.

exception DoesNotExist
Bases: django.core.exceptions.ObjectDoesNotExist

exception MultipleObjectsReturned
Bases: django.core.exceptions.MultipleObjectsReturned

class Subscription(*id*, *user*, *name_field*, *email_field*, *ip*, *newsletter*, *create_date*, *activation_code*, *subscribed*, *subscribe_date*, *unsubscribed*, *unsubscribe_date*)
Bases: django.db.models.base.Model

update(*action*)
Update subscription according to requested action: subscribe/unsubscribe/update/, then save the changes.

save(**args*, ***kwargs*)
Perform some basic validation and state maintenance of Subscription. TODO: Move this code to a more suitable place (i.e. *clean()*) and cleanup the code. Refer to comment below and https://docs.djangoproject.com/en/dev/ref/models/instances/#django.db.models.Model.clean

exception DoesNotExist
Bases: django.core.exceptions.ObjectDoesNotExist

exception MultipleObjectsReturned
Bases: django.core.exceptions.MultipleObjectsReturned

class Article(**args*, ***kwargs*)
Bases: django.db.models.base.Model

An Article within a Message which will be send through a Submission.

save(***kwargs*)
Save the current instance. Override this in a subclass if you want to control the saving process.

The 'force_insert' and 'force_update' parameters can be used to insist that the "save" must be an SQL insert or update (or equivalent for non-SQL backends), respectively. Normally, they should not be set.

exception DoesNotExist
Bases: django.core.exceptions.ObjectDoesNotExist

exception MultipleObjectsReturned
Bases: django.core.exceptions.MultipleObjectsReturned

class Attachment(**args*, ***kwargs*)
Bases: django.db.models.base.Model

Attachment for a Message.

exception DoesNotExist
Bases: django.core.exceptions.ObjectDoesNotExist

exception MultipleObjectsReturned
Bases: django.core.exceptions.MultipleObjectsReturned

class Message(**args*, ***kwargs*)
Bases: django.db.models.base.Model

Message as sent through a Submission.

get_next_article_sortorder()
Get next available sortorder for Article.

exception DoesNotExist
Bases: django.core.exceptions.ObjectDoesNotExist

exception MultipleObjectsReturned
Bases: django.core.exceptions.MultipleObjectsReturned

class Submission(**args*, ***kwargs*)
Bases: django.db.models.base.Model

Submission represents a particular Message as it is being submitted to a list of Subscribers. This is where actual queueing and submission happen.

save(***kwargs*)
Set the newsletter from associated message upon saving.

exception DoesNotExist
Bases: django.core.exceptions.ObjectDoesNotExist

exception MultipleObjectsReturned
Bases: django.core.exceptions.MultipleObjectsReturned

5.2 Forms

class NewsletterForm(**args*, ***kwargs*)
Bases: django.forms.models.ModelForm

This is the base class for all forms managing subscriptions.

class SubscribeRequestForm(**args*, ***kwargs*)
Bases: *newsletter.forms.NewsletterForm*

Request subscription to the newsletter. Will result in an activation email being sent with a link where one can edit, confirm and activate one's subscription.

class UpdateRequestForm(**args*, ***kwargs*)
Bases: *newsletter.forms.NewsletterForm*

Request updating or activating subscription. Will result in an activation email being sent.

clean()
Hook for doing any extra form-wide cleaning after Field.clean() has been called on every field. Any ValidationError raised by this method will not be associated with a particular field; it will have a special-case association with the field named '__all__'.

class UnsubscribeRequestForm(**args*, ***kwargs*)
Bases: *newsletter.forms.UpdateRequestForm*

Similar to previous form but checks if we have not already been unsubscribed.

clean()
Hook for doing any extra form-wide cleaning after Field.clean() has been called on every field. Any ValidationError raised by this method will not be associated with a particular field; it will have a special-case association with the field named '__all__'.

class UpdateForm(**args*, ***kwargs*)
Bases: *newsletter.forms.NewsletterForm*

This form allows one to actually update to or unsubscribe from the newsletter. To do this, a correct activation code is required.

class UserUpdateForm(*data=None*, *files=None*, *auto_id='id_%s'*, *prefix=None*, *initial=None*, *error_class=<class 'django.forms.utils.ErrorList'>*, *label_suffix=None*, *empty_permitted=False*, *instance=None*, *use_required_attribute=None*, *renderer=None*)
Bases: django.forms.models.ModelForm

Form for updating subscription information/unsubscribing as a logged-in user.

5.3 Views

is_authenticated(*user*)

class NewsletterViewBase
Bases: object

Base class for newsletter views.

queryset = <QuerySet []>

allow_empty = False

slug_url_kwarg = 'newsletter_slug'

class NewsletterDetailView(***kwargs*)
Bases: *newsletter.views.NewsletterViewBase*, django.views.generic.detail.DetailView

class NewsletterListView(***kwargs*)
Bases: *newsletter.views.NewsletterViewBase*, django.views.generic.list.ListView

List available newsletters and generate a formset for (un)subscription for authenticated users.

post(*request*, ***kwargs*)
Allow post requests.

get_context_data(***kwargs*)
Get the context for this view.

get_formset()
Return a formset with newsletters for logged in users, or None.

class ProcessUrlDataMixin
Bases: object

Mixin providing the ability to process args and kwargs from url before dispatching request.

process_url_data(**args*, ***kwargs*)
Subclasses should put url data processing in this method.

dispatch(**args*, ***kwargs*)

class NewsletterMixin
Bases: *newsletter.views.ProcessUrlDataMixin*

Mixin retrieving newsletter based on newsletter_slug from url and adding it to context and form kwargs.

process_url_data(**args*, ***kwargs*)
Get newsletter based on *newsletter_slug* from url and add it to instance attributes.

get_form_kwargs()
Add newsletter to form kwargs.

get_context_data(***kwargs*)
Add newsletter to context.

class ActionMixin
Bases: *newsletter.views.ProcessUrlDataMixin*

Mixin retrieving action from url and adding it to context.

action = None

process_url_data(**args*, ***kwargs*)
Add action from url to instance attributes if not already set.

get_context_data(***kwargs*)
Add action to context.

get_template_names()
Return list of template names for proper action.

class ActionTemplateView(***kwargs*)
Bases: *newsletter.views.NewsletterMixin*, *newsletter.views.ActionMixin*, *django.views.generic.base.TemplateView*

View that renders a template for proper action, with newsletter and action in context.

class ActionFormView(***kwargs*)
Bases: *newsletter.views.NewsletterMixin*, *newsletter.views.ActionMixin*, *django.views.generic.edit.FormView*

FormView with newsletter and action support.

get_url_from_viewname(*viewname*)
Return url for given *vienname* and associated with this view newsletter and action.

class ActionUserView(***kwargs*)
Bases: *newsletter.views.ActionTemplateView*

Base class for subscribe and unsubscribe user views.

template_name = 'newsletter/subscription_%(action)s_user.html'

process_url_data(**args*, ***kwargs*)
Add confirm to instance attributes.

post(*request*, **args*, ***kwargs*)

dispatch(**args*, ***kwargs*)

class SubscribeUserView(***kwargs*)
Bases: *newsletter.views.ActionUserView*

action = 'subscribe'

get(*request*, **args*, ***kwargs*)

class UnsubscribeUserView(***kwargs*)
Bases: *newsletter.views.ActionUserView*

action = 'unsubscribe'

get(*request*, **args*, ***kwargs*)

class ActionRequestView(***kwargs*)
Bases: *newsletter.views.ActionFormView*

Base class for subscribe, unsubscribe and update request views.

template_name = 'newsletter/subscription_%(action)s.html'

process_url_data(**args*, ***kwargs*)
Add error to instance attributes.

get_context_data(***kwargs*)
Add error to context.

get_subscription(*form*)
Return subscription for the current request.

no_email_confirm(*form*)
Subscribe/unsubscribe user and redirect to action activated page.

get_success_url()
Return the URL to redirect to after processing a valid form.

form_valid(*form*)
If the form is valid, redirect to the supplied URL.

class SubscribeRequestView(***kwargs*)
Bases: *newsletter.views.ActionRequestView*

action = 'subscribe'

form_class
alias of *newsletter.forms.SubscribeRequestForm*

confirm = False

get_form_kwargs()
Add ip to form kwargs for submitted forms.

get_subscription(*form*)
Return subscription for the current request.

dispatch(*request*, **args*, ***kwargs*)

class UnsubscribeRequestView(***kwargs*)
Bases: *newsletter.views.ActionRequestView*

action = 'unsubscribe'

form_class
alias of *newsletter.forms.UnsubscribeRequestForm*

confirm = False

dispatch(*request*, **args*, ***kwargs*)

class UpdateRequestView(***kwargs*)
Bases: *newsletter.views.ActionRequestView*

action = 'update'

form_class
alias of *newsletter.forms.UpdateRequestForm*

no_email_confirm(*form*)
Redirect to update subscription view.

class UpdateSubscriptionView(***kwargs*)
Bases: *newsletter.views.ActionFormView*

form_class
alias of *newsletter.forms.UpdateForm*

template_name = 'newsletter/subscription_activate.html'

process_url_data(**args*, ***kwargs*)
Add email, subscription and activation_code to instance attributes.

get_initial()
Returns the initial data to use for forms on this view.

get_form_kwargs()
Add instance to form kwargs.

get_success_url()
Return the URL to redirect to after processing a valid form.

form_valid(*form*)
Get our instance, but do not save yet.

class SubmissionViewBase
Bases: *newsletter.views.NewsletterMixin*

Base class for submission archive views.

date_field = 'publish_date'

allow_empty = True

queryset = <QuerySet []>

slug_field = 'message__slug'

year_format = '%Y'

month_format = '%m'

day_format = '%d'

process_url_data(**args*, ***kwargs*)
Use only visible newsletters.

get_queryset()
Filter out submissions for current newsletter.

class SubmissionArchiveIndexView(***kwargs*)
Bases: *newsletter.views.SubmissionViewBase*, django.views.generic.dates.ArchiveIndexView

class SubmissionArchiveDetailView(***kwargs*)
Bases: *newsletter.views.SubmissionViewBase*, django.views.generic.dates.DateDetailView

get_context_data(***kwargs*)
Make sure the actual message is available.

get_template()
Get the message template for the current newsletter.

render_to_response(*context*, ***response_kwargs*)
Return a simplified response; the template should be rendered without any context. Use a SimpleTemplateResponse as a RequestContext should not be used.

CHAPTER 6

Upgrading

6.1 0.7: Management command instead of django-extensions cron job

In this version, we have deprecated support for the django-extensions cron job. Hence, it will become necessary to update the crontab; whereas before messages where submitted with the *runjobs hourly* cron job, this has now become *submit_newsletter*.

6.2 0.6: Upgrading from South to Django Migrations

Based on https://docs.djangoproject.com/en/1.9/topics/migrations/#upgrading-from-south, the procedure should be:

1. Remove `'south'` from `INSTALLED_APPS`.
2. Run `python manage.py migrate --fake-initial`.

If you are upgrading from below 0.5, you need to upgrade to 0.5 first to perform required South migrations before moving to 0.6.

6.3 0.5: Message templates in files

As of 0.5 message templates are living in the filesystem like normal files instead of resorting in the EmailTemplate in the database. In most cases, South should take care of writing your existing templates to disk and deleting the database models.

6.4 0.4: South migrations

Since 5f79f40, the app makes use of South for schema migrations. As of this version, using South with django-newsletter is the official recommendation and installing it is easy.

When upgrading from a pre-South version of newsletter to a current release (in a project for which South has been enabled), you might have to fake the initial migration as the DB tables already exist. This can be done by running the following command:

```
./manage.py migrate newsletter 0001 --fake
```

- Changes (GitHub)
- Contributors (GitHub)

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