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# **radioco Documentation**

***Release 3.0***

**Iago Veloso Abalo**

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### Overview

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RadioCo is a broadcasting radio recording scheduling system. RadioCo has been intended to provide a solution for a wide range of broadcast projects, from community to public and commercial stations.

Here are a few of the key features:

- designed to work with any web browser
- drag and drop scheduling calendar interface
- live shows can be recorded and published automatically
- complete authentication system (user accounts, groups, permissions)
- ...and much more

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**Note:** This software is not for live streaming

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## **CHAPTER 2**

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### **Release Notes**

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This document refers to version 3.0



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## Table of contents

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### 3.1 Installation Guide

The pages in this section of the documentation are designed to help you get started quickly and show how easy it is to work with RadioCo

The guides follow a logical progression and build on each other, so it's recommended to work through them in the order presented here.

#### 3.1.1 Installing web application

This tutorial is written for Python 2.7 and Ubuntu 12.04 or later.

##### Installing on Ubuntu

The easiest way of installing the app is using Docker engine

Follow the [installation steps](#)

To allow RadioCo to generate correct dates it's necessary to set the timezone variable:

1. Find your timezone in [this list](#)
2. Go to the config folder (radioco/configs/base) and create if not exists a local\_settings.py in the same directory than settings.py
3. Add to the local settings the variable timezone, for example: TIME\_ZONE = "Europe/Madrid"

Open a terminal and introduce the following commands:

```
sudo apt-get install git-core python-dev python-pip
```

Next, download the project and cd into it:

```
git clone https://github.com/iago1460/django-radio
cd django-radio
```

Install the python invoke library:

```
pip install invoke==0.14.0
```

Execute the next command to deploy the app in docker, this step take some time:

```
inv quickstart
```

### Testing

Let's verify your installation

Now that the server's running, visit <http://127.0.0.1:8000/>

**Warning:** Don't use this server in anything resembling a production environment.

### Using RadioCo on production

The Internet is a hostile environment. Before deploying this project, you should take some time to review your settings, with security, performance, and operations in mind. Keep in mind this critical settings.

RadioCo provides a staging environment, safer than the previous one but still insecure, **use at your own risk**.

```
inv docker.build -e staging docker.run -e staging docker.setup -e staging
```

---

**Note:** If you see an error related with postgresql wait a minute and just run the command again

---

Now that the server's running, visit <http://127.0.0.1/>

To create a superuser you still can use management commands:

```
inv docker.manage -e staging -c "createsuperuser"
```

### 3.1.2 Installing recorder program

This tutorial is written for Python 2.7 and Ubuntu 12.04 or later.

#### Installing on Ubuntu

We'll get started by setting up our environment.

```
sudo apt-get install python-dev python-pip python-virtualenv git-core alsa-utils vorbis-tools
```

Next, download the project and create the virtual environment:

```
git clone https://github.com/iagol460/django-radio-recorder.git
cd django-radio-recorder
```

Create and activate a virtual env:

```
virtualenv venv
source venv/bin/activate
```

Install the requirements:

```
pip install -r requirements.txt
```

Using your favorite text editor, configure the `settings.ini` file

Launch the program

```
python main.py
```

### 3.1.3 Communication Setup

In your Admin interface go to **Podcast Configuration**, copy the **Recorder token** and put it into the Recorder Program settings:

```
token:8fdde6d703c05773084ea83e5ec2da62637666a0 #for example
```

Modify the **url** in your Recorder Program settings:

```
url:http://yourdomain:80/api/1/
```

## 3.2 Customize

Technical reference material.

RadioCo has a number of settings to configure its behaviour, please read this section carefully.

### 3.2.1 Application Setup

RadioCo can be adapted to your needs, you have three ways to do it. Editing the Global Settings section in the administration page using your browser or manually overriding the `settings.py` and overriding templates.

#### Global settings

Go to the admin section on your browser and edit the information available.

#### Global Configuration

In this section you can add information related to your site apart of the google analytics id.

#### Calendar Configuration

Settings related to the calendar, things like the first day of the week

#### Podcast Configuration

Settings related with the recorder, change here recording delays and get the Recorder token necessary for the recorder programme to work

## Templates

There is a empty folder called templates inside the radioco folder. You should override templates here, make sure to keep the relative path.

For example, to override the episode detail page copy the episode\_detail.html file from radioco/apps/programmes/templates/programmes/episode\_detail.html to radioco/templates/programmes/episode\_detail.html

## Settings.py

These settings are available in `settings.py`. Your settings should be in a `local_settings.py` file in the same directory as `settings.py`.

**Warning:** Your changes on settings should be in `local_settings.py` to avoid conflicts when update, create that file if it's necessary. Be aware that this file is excluded from Git.

### USERNAME\_RADIOCO\_RECORDER

This specifies who is the user of the recorder program:

```
USERNAME_RADIOCO_RECORDER = 'RadioCo_Recorder'
```

---

**Note:** It's a good idea change this value for security reasons.

---

### PROGRAMME\_LANGUAGES

*New in version 1.1*

Default: A tuple of the following three languages.

This specifies which languages are available for language selection in your programmes:

```
gettext_noop = lambda s: s

PROGRAMME_LANGUAGES = (
    ('es', gettext_noop('Spanish')),
    ('en', gettext_noop('English')),
    ('gl', gettext_noop('Galician')),
)
```

You can see the current list of translated languages by looking in `django/conf/global_settings.py` (or view the [online source](#)).

## Disqus

*New in version 2.0*

Default: Disabled by default.

Add comments to your site with Disqus. [Create your account](#) and get your API key.:

```
DISQUS_ENABLE = True
DISQUS_API_KEY = 'YOUR_API_KEY'
DISQUS_WEBSITE_SHORTNAME = 'YOUR_SHORTNAME'
```

## 3.2.2 Recorder Program Setup

The settings are available in your `settings.ini`.

## 3.3 API

Api documentation.

### 3.3.1 Browsable API

*New in version 3.0*

RadioCo has a Web browsable API, go to <http://127.0.0.1:8000/api/2/> in your browser to explore it.

Optionally these endpoints support filtering and ordering in the majority of the exposed fields.

#### Programmes

Programmes can be filter using after and before parameters as well as Transmissions.

Example query to get all available programmes on New Year's Eve order by name:

```
http://127.0.0.1:8000/api/2/programmes?after=2016-12-31&before=2016-12-31&ordering=name
```

#### Transmissions

Transmissions are always ordered by date, the after and before parameters are required.

Example query:

```
http://127.0.0.1:8000/api/2/transmissions?after=2016-12-19&before=2016-12-26
```

Also is possible to request the dates in a specific timezone:

```
http://127.0.0.1:8000/api/2/transmissions?timezone=Europe%2FMadrid&after=2016-12-19&before=2016-12-26
```

Finally, there is a endpoint to get the current transmission:

```
http://127.0.0.1:8000/api/2/transmissions/now
```

## 3.4 Development & community

RadioCo is an open-source project, and relies on its community of users to keep getting better.

You don't need to be an expert developer to make a valuable contribution - all you need is a little knowledge of the system, and a willingness to follow the contribution guidelines.

Remember that contributions to the documentation are highly prized, and key to the success of the project. Any time and effort you are willing to contribute is greatly appreciated!

### 3.4.1 Branch policy

- **master**: this is the current stable release, the version released on PyPI.
- **develop**: this branch always reflects a state with the latest delivered development changes for the next release.
- **feature branches**: these are used to develop new features.

### 3.4.2 Contributing Translation

For translators we have a [Transifex account](#) where you can translate the .po files and don't need to install git to be able to contribute. All changes there will be automatically sent to the project.

### 3.4.3 Contributing Documentation

Perhaps considered “boring” by hard-core coders, documentation is sometimes even more important than code! This is what brings fresh blood to a project, and serves as a reference for old timers. On top of this, documentation is the one area where less technical people can help most - you just need to write semi-decent English. People need to understand you. We don't care about style or correctness.

Documentation should be:

- written using valid [Sphinx/restructuredText](#) syntax (see below for specifics) and the file extension should be `.rst`
- written in English (we have standardised on British spellings)
- accessible - you should assume the reader to be moderately familiar with Python and Django, but not anything else. Link to documentation of libraries you use, for example, even if they are “obvious” to you

Merging documentation is pretty fast and painless.

Except for the tiniest of change, we recommend that you test them before submitting.

## Documentation markup

### Sections

We use Python documentation conventions for section marking:

- # with overline, for parts
- \* with overline, for chapters
- =, for sections
- -, for subsections
- ^, for subsubsections
- ", for paragraphs

## Inline markup

- use backticks - ```settings.py``` - for:
  - literals
  - filenames
  - names of fields and other items in the Admin interface:
- use emphasis - **\*Home\*** around:
  - the names of available options in the Admin
  - values in or of fields

## References

Use absolute links to other documentation pages - `:doc:`/how_to/toolbar`` - rather than relative links - `:doc:`/../toolbar``. This makes it easier to run search-and-replaces when items are moved in the structure.

## 3.5 django-radio

### 3.5.1 manage module

### 3.5.2 radioco package

#### Subpackages

##### `radioco.apps` package

#### Subpackages

##### `radioco.apps.api` package

#### Subpackages

##### `radioco.apps.api.tests` package

#### Submodules

##### `radioco.apps.api.tests.test_api` module

```
class radioco.apps.api.tests.test_api.TestSerializers(methodName='runTest')  
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,  
           django.test.testcases.TestCase  
  
    test_episode()  
    test_episode_programme()  
    test_programme()
```

```
test_programme_photo_url()
test_schedule()
test_transmission()
```

**radioco.apps.api.tests.test\_fullcalendar module**

```
class radioco.apps.api.tests.test_fullcalendar.TestFullCalendarApi(methodName='runTest')
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,
            rest_framework.test.APITestCase

    setUp()
    test_move_schedule(*args, **kwargs)
    test_move_schedule_in_tz(*args, **kwargs)
    test_move_schedule_with_schedules(*args, **kwargs)
    test_move_schedule_with_schedules_in_tz(*args, **kwargs)
    test_schedules_post(*args, **kwargs)
    test_schedules_post_in_tz(*args, **kwargs)
```

**radioco.apps.api.tests.test\_programmes module**

```
class radioco.apps.api.tests.test_programmes.TestNotAllowedMethodsProgrammesAPI(methodName='runTest')
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,
            rest_framework.test.APITestCase

    test_episodes_delete()
    test_episodes_post()
    test_episodes_put()
    test_programmes_delete()
    test_programmes_post()
    test_programmes_put()

class radioco.apps.api.tests.test_programmes.TestProgrammesAPI(methodName='runTest')
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,
            rest_framework.test.APITestCase

    setUp()
    test_api()
    test_episodes_get_all()
    test_episodes_get_by_programme()
    test_programmes_after()
    test_programmes_before()
    test_programmes_between()
    test_programmes_get_all()
```

**radioco.apps.api.tests.test\_recorder module**

```
class radioco.apps.api.tests.test_recorder.TestProgrammesAPI (methodName=’runTest’)
    Bases: rest_framework.test.APITestCase

    classmethod setUpTestData ()

        test_recording_schedules (*args, **keywargs)
        test_submit_recorder (*args, **keywargs)
```

**radioco.apps.api.tests.test\_schedules module**

```
class radioco.apps.api.tests.test_schedules.TestRestrictedMethodsScheduleAPI (methodName=’runTest’)
    Bases: radioco.apps.radioco.test_utils.TestDataMixin,
    rest_framework.test.APITestCase

        test_schedules_delete ()
        test_schedules_post ()
        test_schedules_put ()
        test_transmissions_delete ()
        test_transmissions_post ()
        test_transmissions_put ()

class radioco.apps.api.tests.test_schedules.TestSchedulesAPI (methodName=’runTest’)
    Bases: radioco.apps.radioco.test_utils.TestDataMixin,
    rest_framework.test.APITestCase

        test_schedules_get_all ()
        test_schedules_get_by_calendar ()
        test_schedules_get_by_nonexisting_calendar ()
        test_schedules_get_by_nonexisting_programme ()
        test_schedules_get_by_nonexisting_type ()
        test_schedules_get_by_programme ()
        test_schedules_get_by_type ()

class radioco.apps.api.tests.test_schedules.TestTransmissionAPI (methodName=’runTest’)
    Bases: radioco.apps.radioco.test_utils.TestDataMixin,
    rest_framework.test.APITestCase

        test_incorrect_transmission_queries ()
        test_transmission_before (*args, **keywargs)
        test_transmission_list_filter_non_active_calendar (*args, **keywargs)
        test_transmission_now (*args, **keywargs)
        test_transmission_same_day ()
        test_transmissions_between (*args, **keywargs)
        test_transmissions_between_requesting_tz ()
        test_transmissions_filter_calendar_nonexistend ()

radioco.apps.api.tests.test_schedules.mock_now()
```

## Module contents

### Submodules

#### **radioco.apps.api.radiocom\_views module**

```
radioco.apps.api.radiocom_views.programmes_json(request)
radioco.apps.api.radiocom_views.station_json(request)
```

#### **radioco.apps.api.recorder\_views module**

```
radioco.apps.api.recorder_views.check_recorder_program(user)
```

#### **radioco.apps.api.serializers module**

```
class radioco.apps.api.serializers.DateTimeFieldTz(format=<class
    rest_framework.fields.empty>,
    input_formats=None,               de-
    fault_timezone=None,           *args,
    **kwargs)
```

Bases: rest\_framework.fields.DateTimeField

Field to display the datetime in the current timezone

```
    to_representation(date)
```

```
class radioco.apps.api.serializers.EpisodeSerializer(instance=None,      data=<class
    rest_framework.fields.empty>,
    **kwargs)
```

Bases: rest\_framework.serializers.ModelSerializer

```
class Meta
```

```
    fields = ('title', 'programme', 'summary', 'issue_date', 'season', 'number_in_season')
```

```
    model
```

alias of Episode

```
class radioco.apps.api.serializers.ProgrammeSerializer(instance=None,      data=<class
    rest_framework.fields.empty>,
    **kwargs)
```

Bases: rest\_framework.serializers.ModelSerializer

```
class Meta
```

```
    fields = ('id', 'slug', 'name', 'synopsis', 'runtime', 'photo', 'language', 'category')
```

```
    model
```

alias of Programme

```
class radioco.apps.api.serializers.ScheduleSerializer(instance=None,      data=<class
    rest_framework.fields.empty>,
    **kwargs)
```

Bases: rest\_framework.serializers.ModelSerializer

```
class Meta
```

```
    fields = ('id', 'programme', 'calendar', 'start', 'runtime', 'title', 'type', 'source')
```

```

model
    alias of Schedule

ScheduleSerializer.get_title(schedule)
ScheduleSerializer.validate(attrs)

class radioco.apps.api.serializers.TransmissionSerializer(instance=None,
                                                               data=<class
                                                               rest_framework.fields.empty>,
                                                               **kwargs)
Bases: rest_framework.serializers.Serializer

class radioco.apps.api.serializers.TransmissionSerializerLight(instance=None,
                                                                data=<class
                                                                rest_framework.fields.empty>,
                                                                **kwargs)
Bases: rest_framework.serializers.Serializer

validate(attrs)

```

## **radioco.apps.api.urls module**

### **radioco.apps.api.views module**

```

class radioco.apps.api.views.EpisodeFilter(*args, **kwargs)
Bases: rest_framework.filters.FilterSet

class Meta

    fields = ('programme',)

    model
        alias of Episode

EpisodeFilter.base_filters = OrderedDict([(u'programme', <django_filters.filters.CharFilter object at 0x7fba44>)]
EpisodeFilter.declared_filters = OrderedDict([('programme', <django_filters.filters.CharFilter object at 0x7f7d44>)])
class radioco.apps.api.views.EpisodeViewSet(**kwargs)
Bases: rest_framework.viewsets.ReadOnlyModelViewSet

filter_backends = (<class 'rest_framework.filters.DjangoFilterBackend'>, <class 'rest_framework.filters.OrderingFilter'>)
filter_class
    alias of EpisodeFilter

queryset

serializer_class
    alias of EpisodeSerializer

suffix = None

class radioco.apps.api.views.ProgrammeFilter(*args, **kwargs)
Bases: rest_framework.filters.FilterSet

class Meta

    fields = ('name', 'category')

    model
        alias of Programme

```

```
ProgrammeFilter.base_filters = OrderedDict([(u'name', <django_filters.filters.CharFilter object at 0x7fba44528>)]
ProgrammeFilter.declared_filters = OrderedDict()
class radioco.apps.api.views.ProgrammeFilterForm(data=None, files=None,
                                                 auto_id=u'id_%s', prefix=None,
                                                 initial=None, error_class=<class
                                                 'django.forms.utils.ErrorList'>,
                                                 label_suffix=None,
                                                 empty_permitted=False)
Bases: django.forms.forms.Form
base_fields = OrderedDict([('after', <django.forms.fields.DateField object at 0x7fba445284d0>), ('before', <django.forms.fields.DateField object at 0x7fba445284d0>)]
clean()
declared_fields = OrderedDict([('after', <django.forms.fields.DateField object at 0x7fba445284d0>), ('before', <django.forms.fields.DateField object at 0x7fba445284d0>)])
media
class radioco.apps.api.views.ProgrammeViewSet(**kwargs)
Bases: rest_framework.viewsets.ModelViewSet
filter_backends = (<class 'rest_framework.filters.DjangoFilterBackend'>, <class 'rest_framework.filters.OrderingFilter'>)
filter_class
    alias of ProgrammeFilter
list(request, *args, **kwargs)
lookup_field = 'slug'
permission_classes = (<class 'rest_framework.permissions.DjangoModelPermissionsOrAnonReadOnly'>,)
queryset
serializer_class
    alias of ProgrammeSerializer
suffix = None
class radioco.apps.api.views.ScheduleFilter(*args, **kwargs)
Bases: rest_framework.filters.FilterSet
class Meta

    fields = ('programme', 'calendar', 'type')
    model
        alias of Schedule
ScheduleFilter.base_filters = OrderedDict([(u'programme', <django_filters.filters.CharFilter object at 0x7fba44528>)]
ScheduleFilter.declared_filters = OrderedDict([('programme', <django_filters.filters.CharFilter object at 0x7fba44528>)])
class radioco.apps.api.views.ScheduleViewSet(**kwargs)
Bases: rest_framework.viewsets.ModelViewSet
filter_backends = (<class 'rest_framework.filters.DjangoFilterBackend'>, <class 'rest_framework.filters.OrderingFilter'>)
filter_class
    alias of ScheduleFilter
permission_classes = (<class 'rest_framework.permissions.DjangoModelPermissionsOrAnonReadOnly'>,)
queryset
```

```

serializer_class
    alias of ScheduleSerializer

suffix = None

class radioco.apps.api.views.TransmissionForm(data=None, files=None,
                                                auto_id=u'id_%s', prefix=None,
                                                initial=None, error_class=<class
                                                'django.forms.utils.ErrorList'>, la-
                                                bel_suffix=None, empty_permitted=False)
Bases: django.forms.forms.Form

base_fields = OrderedDict([('after', <django.forms.fields.DateField object at 0x7fba444d3150>), ('before', <django.forms.fields.DateField object at 0x7fba444d3150>)]
clean()
clean_timezone()
declared_fields = OrderedDict([('after', <django.forms.fields.DateField object at 0x7fba444d3150>), ('before', <django.forms.fields.DateField object at 0x7fba444d3150>)]
media
x = 'Zulu'

class radioco.apps.api.views.TransmissionOperationViewSet (**kwargs)
Bases: radioco.apps.api.viewsets.UpdateOnlyModelViewSet

perform_update(serializer)
permission_classes = (<class 'rest_framework.permissions.DjangoModelPermissionsOrAnonReadOnly'>,)
queryset
serializer_class
    alias of TransmissionSerializerLight
suffix = None
update(request, *args, **kwargs)

class radioco.apps.api.views.TransmissionViewSet (**kwargs)
Bases: rest_framework.viewsets.ReadOnlyModelViewSet

filter_backends = (<class 'rest_framework.filters.DjangoFilterBackend'>,)
filter_class
    alias of ScheduleFilter
list(request, *args, **kwargs)
now(request)
queryset
serializer_class
    alias of TransmissionSerializer
suffix = None

radioco.apps.api.viewsets module
class radioco.apps.api.viewsets.UpdateOnlyModelViewSet (**kwargs)
Bases: rest_framework.mixins.UpdateModelMixin, rest_framework.viewsets.GenericViewSet

A viewset that provides a update action.

```

## Module contents

### radioco.apps.global\_settings package

#### Subpackages

##### radioco.apps.global\_settings.migrations package

#### Submodules

##### radioco.apps.global\_settings.migrations.0001\_initial module

```
class radioco.apps.global_settings.migrations.0001_initial.Migration(name,
                                                                    app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = []
    operations = [<CreateModel fields=[(u'id', <django.db.models.fields.AutoField>), (u'scroll_time', <django.db.models.fields.DateTimeField>), (u'last_update', <django.db.models.DateTimeField>)]>]
```

##### radioco.apps.global\_settings.migrations.0002\_remove\_calendarconfiguration\_display\_next\_weeks module

```
class radioco.apps.global_settings.migrations.0002_remove_calendarconfiguration_display_next_weeks.Migration(name,
                                                                                                         app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'global_settings', u'0001_initial')]
    operations = [<RemoveField name=u'display_next_weeks', model_name=u'calendarconfiguration'>]
```

##### radioco.apps.global\_settings.migrations.0003\_siteconfiguration\_footer module

```
class radioco.apps.global_settings.migrations.0003_siteconfiguration_footer.Migration(name,
                                                                                           app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'global_settings', u'0002_remove_calendarconfiguration_display_next_weeks')]
    operations = [<AddField field=<django.db.models.fields.TextField>, preserve_default=True, name=u'footer', model_name=u'calendarconfiguration'>]
```

##### radioco.apps.global\_settings.migrations.0004\_auto\_20150606\_1335 module

```
class radioco.apps.global_settings.migrations.0004_auto_20150606_1335.Migration(name,
                                                                                     app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'global_settings', u'0003_siteconfiguration_footer')]
    operations = [<AddField field=<django.db.models.fields.TextField>, preserve_default=True, name=u'address', model_name=u'calendarconfiguration'>]
```

##### radioco.apps.global\_settings.migrations.0005\_auto\_20150606\_1415 module

```
class radioco.apps.global_settings.migrations.0005_auto_20150606_1415.Migration(name,
                                                                                     app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'global_settings', u'0004_auto_20150606_1335')]
    operations = [<RenameField new_name=u'about_footer', model_name=u'siteconfiguration', old_name=u'footer', >]
```

**radioco.apps.global\_settings.migrations.0006\_auto\_20160116\_1509 module**

```
class radioco.apps.global_settings.migrations.0006_auto_20160116_1509.Migration(name,
                                                                           app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'global_settings', u'0005_auto_20150606_1415')]
    operations = [AlterField(field=<django.db.models.fields.CharField>, name=u'google_analytics_id', model_name=u'site')]
```

**radioco.apps.global\_settings.migrations.0007\_dev\_calendarconfiguration\_tweaks module****radioco.apps.global\_settings.migrations.0008\_dev\_radiocomconfiguration module****Module contents****radioco.apps.global\_settings.templatetags package****Submodules****radioco.apps.global\_settings.templatetags.global\_settings\_extras module**

```
radioco.apps.global_settings.templatetags.global_settings_extras.get_global_model(model_path)
```

**Module contents****Submodules****radioco.apps.global\_settings.admin module**

```
class radioco.apps.global_settings.admin.PodcastConfigurationAdmin(model, admin_site)
    Bases: radioco.apps.global_settings.admin.SingletonModelAdmin
    media
    readonly_fields = ['recorder_token']
class radioco.apps.global_settings.admin.SingletonModelAdmin(model, admin_site)
    Bases: django.contrib.admin.options.ModelAdmin
    change_form_template = 'global_settings/admin_change_form.html'
    change_view(request, object_id, form_url='', extra_context=None)
    get_urls()
    has_add_permission(request)
    has_delete_permission(request, obj=None)
    media
    object_history_template = 'global_settings/admin_object_history.html'
    response_change(request, obj)
```

**radioco.apps.global\_settings.models module**

```
class radioco.apps.global_settings.models.CalendarConfiguration(id, slot_duration,
                                                               first_day,
                                                               min_time,
                                                               max_time)
Bases: radioco.apps.global_settings.models.SingletonModel

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception CalendarConfiguration.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

    CalendarConfiguration.get_first_day_display(*moreargs, **morekwargs)

    CalendarConfiguration.objects = <radioco.apps.global_settings.models.SingletonModelManager object>

class radioco.apps.global_settings.models.PodcastConfiguration(id, url_source,
                                                               start_delay,
                                                               end_delay,
                                                               next_events)
Bases: radioco.apps.global_settings.models.SingletonModel

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception PodcastConfiguration.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

    PodcastConfiguration.objects = <radioco.apps.global_settings.models.SingletonModelManager object>

    PodcastConfiguration.recorder_token

class radioco.apps.global_settings.models.RadiocomConfiguration(id, station_name,
                                                               icon_url,
                                                               big_icon_url,
                                                               history,
                                                               latitude,
                                                               longitude,
                                                               news_rss,
                                                               station_photos,
                                                               stream_url)
Bases: radioco.apps.global_settings.models.SingletonModel

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception RadiocomConfiguration.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

    RadiocomConfiguration.objects = <radioco.apps.global_settings.models.SingletonModelManager object>

class radioco.apps.global_settings.models.SingletonModel(*args, **kwargs)
Bases: django.db.models.base.Model

class Meta

    abstract = False

    SingletonModel.delete(*args, **kwargs)
    classmethod SingletonModel.get_global()
    SingletonModel.save(*args, **kwargs)
```

```
class radioco.apps.global_settings.models.SingletonModelManager
    Bases: django.db.models.manager.Manager

    get (*args, **kwargs)

class radioco.apps.global_settings.models.SiteConfiguration(id,           site_name,
                                                               about_footer,
                                                               more_about_us,
                                                               google_analytics_id,
                                                               address,          twit-
                                                               ter_address,      face-
                                                               book_address)
    Bases: radioco.apps.global_settings.models.SingletonModel

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception SiteConfiguration.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

SiteConfiguration.objects = <radioco.apps.global_settings.models.SingletonModelManager object>
```

## Module contents

### radioco.apps.programmes package

#### Subpackages

#### radioco.apps.programmes.migrations package

#### Submodules

##### radioco.apps.programmes.migrations.0001\_initial module

```
class radioco.apps.programmes.migrations.0001_initial.Migration(name, app_label)
    Bases: django.db.migrations.migration.Migration

    dependencies = [(u'auth', u'__first__')]

    operations = [<CreateModel fields=[(u'id', <django.db.models.fields.AutoField>), (u'title', <django.db.models.fields.C...
```

##### radioco.apps.programmes.migrations.0002\_change\_language\_choices module

```
class radioco.apps.programmes.migrations.0002_change_language_choices.Migration(name,
                                                                                   app_label)
    Bases: django.db.migrations.migration.Migration

    dependencies = [(u'programmes', u'0001_initial')]

    operations = [<RunPython <function lowercase_language at 0x7fba42f3e5f0>>, <AlterField field=<django.db.models.f...
```

**radioco.apps.programmes.migrations.0003\_change\_textfield\_to\_richtextfield module**

```
class radioco.apps.programmes.migrations.0003_change_textfield_to_richtextfield.Migration(name,
app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'programmes', u'0002_change_language_choices')]
    operations = [AlterField(field=<ckeditor.fields.RichTextField>, preserve_default=True, name=u'summary', model_name=u'programme')]
```

**radioco.apps.programmes.migrations.0004\_change\_photo\_url module**

```
class radioco.apps.programmes.migrations.0004_change_photo_url.Migration(name,
app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'programmes', u'0003_change_textfield_to_richtextfield')]
    operations = [RunPython(<function change_photo_url at 0x7fba42f3eed8>)]
radioco.apps.programmes.migrations.0004_change_photo_url.change_photo_url(apps,
schema_editor)
```

**radioco.apps.programmes.migrations.0005\_auto\_20150531\_1734 module**

```
class radioco.apps.programmes.migrations.0005_auto_20150531_1734.Migration(name,
app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'programmes', u'0004_change_photo_url')]
    operations = [AlterField(field=<django.db.models.related.OneToOneField>, preserve_default=True, name=u'episode')]
```

**radioco.apps.programmes.migrations.0006\_auto\_20160104\_2029 module**

```
class radioco.apps.programmes.migrations.0006_auto_20160104_2029.Migration(name,
app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'programmes', u'0005_auto_20150531_1734')]
    operations = [AlterField(field=<django.db.models.files.ImageField>, name=u'photo', model_name=u'programme')]
```

**radioco.apps.programmes.migrations.0007\_change\_default\_image module**

```
class radioco.apps.programmes.migrations.0007_change_default_image.Migration(name,
app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'programmes', u'0006_auto_20160104_2029'), (u'users', u'0003_auto_20160104_2029')]
    operations = [RunPython(<function change_programmes at 0x7fba42f3ef50>), RunPython(<function change_users at 0x7fba42f3ef50>)]
radioco.apps.programmes.migrations.0007_change_default_image.change_programmes(apps,
schema_editor)
radioco.apps.programmes.migrations.0007_change_default_image.change_users(apps,
schema_editor)
```

**radioco.apps.programmes.migrations.0008\_auto\_20160116\_1509 module**

```
class radioco.apps.programmes.migrations.0008_auto_20160116_1509.Migration(name,
app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u'programmes', u'0007_change_default_image')]
```

```
operations = [<AlterField field=<django.db.models.fields.CharField>, name=u'language', model_name=u'programme>]
```

**radioco.apps.programmes.migrations.0009\_dev\_auto\_20160820\_1634 module**

**Module contents****Submodules****radioco.apps.programmes.admin module**

```
class radioco.apps.programmes.admin.NonStaffEpisodeAdmin(model, admin_site)
    Bases: django.contrib.admin.options.ModelAdmin

    fields = ['programme', 'title', 'summary', 'issue_date', 'season', 'number_in_season']

    form
        alias of NonStaffEpisodeAdminForm

    formfield_for_foreignkey(db_field, request=None, **kwargs)
    get_queryset(request)
    get_READONLY_FIELDS(request, obj=None)
    inlines = [<class 'radioco.apps.programmes.admin.NonStaffParticipantInline', <class 'radioco.apps.programmes.adm
    list_display = ('__unicode__', 'season', 'number_in_season', 'issue_date', 'programme')
    list_filter = ['issue_date', <class 'radioco.apps.programmes.admin.OwnEpisodeProgrammeListFilter', <class 'rad
    list_select_related = True

    media

    ordering = ['-season', '-number_in_season']
    save_formset(request, form, formset, change)
    save_model(request, obj, form, change)
    search_fields = ['programme__name']

class radioco.apps.programmes.admin.NonStaffEpisodeAdminForm(*args, **kwargs)
    Bases: django.forms.ModelForm

    class Meta

        fields = '__all__'

        model
            alias of Episode

    NonStaffEpisodeAdminForm.base_fields = OrderedDict([('title', <django.forms.fields.CharField object at 0x7fbf800000>),
    NonStaffEpisodeAdminForm.clean_programme()
    NonStaffEpisodeAdminForm.declared_fields = OrderedDict()
    NonStaffEpisodeAdminForm.media

class radioco.apps.programmes.admin.NonStaffParticipantInline(parent_model, admin_site)
    Bases: django.contrib.admin.options.StackedInline
```

```
extra = 0

form
    alias of NonStaffParticipantInlineForm

formset
    alias of NonStaffParticipantInlineFormset

get_formset (request, obj=None, **kwargs)
get_queryset (request)
media
model
    alias of Participant

class radioco.apps.programmes.admin.NonStaffParticipantInlineForm (*args,
                                         **kwargs)
Bases: django.forms.models.ModelForm

base_fields = OrderedDict()
clean ()
declared_fields = OrderedDict()
media

class radioco.apps.programmes.admin.NonStaffParticipantInlineFormset (data=None,
                                                               files=None,
                                                               in-
                                                               stance=None,
                                                               save_as_new=False,
                                                               pre-
                                                               fix=None,
                                                               query-
                                                               set=None,
                                                               **kwargs)
Bases: django.forms.models.BaseInlineFormSet

class radioco.apps.programmes.admin.NonStaffProgrammeAdmin (model, admin_site)
Bases: django.contrib.admin.options.ModelAdmin

fieldsets = ((None, {‘fields’: (‘name’, ‘slug’, ‘synopsis’, ‘category’, ‘current_season’, ‘photo’, ‘language’, ‘_runtime’)})
get_form (request, obj=None, **kwargs)
get_queryset (request)
inlines = [<class ‘radioco.apps.programmes.admin.NonStaffRoleInline’>]
list_display = (‘name’, ‘_runtime’, ‘current_season’, ‘category’, ‘start_date’, ‘end_date’)
list_filter = [‘_runtime’, ‘category’]
media
save_formset (request, form, formset, change)
search_fields = [‘name’]

class radioco.apps.programmes.admin.NonStaffRoleInline (parent_model, admin_site)
Bases: django.contrib.admin.options.StackedInline

extra = 0
```

```

form
    alias of NonStaffRoleInlineForm

formset
    alias of NonStaffRoleInlineFormset

get_formset (request, obj=None, **kwargs)
get_queryset (request)
list_select_related = True

media

model
    alias of Role

class radioco.apps.programmes.admin.NonStaffRoleInlineForm (*args, **kwargs)
    Bases: django.forms.models.ModelForm

        base_fields = OrderedDict()

        clean ()
            Check unique together: person, role, programme

        declared_fields = OrderedDict()

        media

class radioco.apps.programmes.admin.NonStaffRoleInlineFormset (data=None,
    files=None, instance=None, save_as_new=False,
    prefix=None, queryset=None, **kwargs)
    Bases: django.forms.models.BaseInlineFormSet

class radioco.apps.programmes.admin.OwnEpisodeIssueDateListFilter (request,
    params, model, model_admin)
    Bases: django.contrib.admin.filters.SimpleListFilter

        lookups (request, model_admin)
        parameter_name = ‘date’
        queryset (request, queryset)
        title = <django.utils.functional.__proxy__ object>

class radioco.apps.programmes.admin.OwnEpisodeProgrammeListFilter (request,
    params, model, model_admin)
    Bases: django.contrib.admin.filters.SimpleListFilter

    Check people in programmes besides episodes, better performance

        lookups (request, model_admin)
        parameter_name = ‘programme’
        queryset (request, queryset)
        title = <django.utils.functional.__proxy__ object>

```

```
class radioco.apps.programmes.admin.PodcastInline(parent_model, admin_site)
    Bases: django.contrib.admin.options.StackedInline

    extra = 0

    inline_classes = ('grp-collapse grp-open',)

    media

    model
        alias of Podcast

radioco.apps.programmes.feeds module
class radioco.apps.programmes.feeds.ProgrammeFeed
    Bases: django.contrib.syndication.views.Feed

    description (programme)
    feed_extra_kwargs (programme)
    get_object (request, slug)
    item_description (podcast)
    item_enclosure_length (podcast)
    item_enclosure_mime_type (podcast)
    item_enclosure_url (podcast)
    item_extra_kwargs (podcast)
    item_keywords (podcast)
    item_pubdate (podcast)
    item_title (podcast)
    items (programme)
    link (programme)
    title (programme)
class radioco.apps.programmes.feeds.RssProgrammeFeed
    Bases: radioco.apps.programmes.feeds.ProgrammeFeed

    description (programme)
    feed_type
        alias of iTunesFeed
    item_guid (episode)

class radioco.apps.programmes.feeds.iTunesFeed (title, link, description, language=None,
                                                author_email=None, author_name=None,
                                                author_link=None, subtitle=None,
                                                categories=None, feed_url=None,
                                                feed_copyright=None, feed_guid=None,
                                                ttl=None, **kwargs)
    Bases: django.utils.feedgenerator.Rss201rev2Feed

    add_item_elements (handler, item)
    add_root_elements (handler)
    rss_attributes ()
```

**radioco.apps.programmes.models module**

```

class radioco.apps.programmes.models.Episode (id, title, programme, summary, issue_date, season, number_in_season)
    Bases: django.db.models.base.Model

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception Episode.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

Episode.get_absolute_url()

Episode.objects = <radioco.apps.programmes.models.EpisodeManager object>

Episode.participant_set

Episode.people

Episode.podcast

Episode.programme

Episode.runtime

class radioco.apps.programmes.models.EpisodeManager
    Bases: django.db.models.manager.Manager

    create_episode (date, programme, last_episode=None, episode=None)
    static last (programme)
    static unfinished (programme, after=None)

class radioco.apps.programmes.models.Participant (id, person, episode, role, description)
    Bases: django.db.models.base.Model

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception Participant.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

Participant.episode

Participant.get_role_display (*moreargs, **morekwargs)

Participant.objects = <django.db.models.manager.Manager object>

Participant.person

class radioco.apps.programmes.models.Podcast (episode, url, mime_type, length, duration)
    Bases: django.db.models.base.Model

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception Podcast.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

Podcast.episode

Podcast.get_absolute_url()

Podcast.objects = <django.db.models.manager.Manager object>

```

```
class radioco.apps.programmes.models.Programme(id, name, synopsis, photo, language,
                                               current_season, category, slug, _runtime,
                                               start_date, end_date)
Bases: django.db.models.base.Model

CATEGORY_CHOICES = (('Arts', <django.utils.functional.__proxy__ object at 0x7fba4a486410>), ('Business', <django.utils.functional.__proxy__ object at 0x7fba4a486410>))

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception Programme.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

Programme.announcers
Programme.end_dt
Programme.episode_set
Programme.get_absolute_url()
Programme.get_category_display(*moreargs, **morekwargs)
Programme.get_language_display(*moreargs, **morekwargs)
Programme.objects = <django.db.models.manager.Manager object>
Programme.rearrange_episodes(after, calendar)
    Update the issue_date of episodes from a given date

Programme.role_set
Programme.runtime
Programme.save(*args, **kwargs)
Programme.schedule_set
Programme.start_dt

class radioco.apps.programmes.models.Role(id, person, programme, role, description,
                                           date_joined)
Bases: django.db.models.base.Model

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception Role.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

Role.get_next_by_date_joined(*moreargs, **morekwargs)
Role.get_previous_by_date_joined(*moreargs, **morekwargs)
Role.get_role_display(*moreargs, **morekwargs)
Role.objects = <django.db.models.manager.Manager object>
Role.person
Role.programme

radioco.apps.programmes.models.update_schedule_if_dt_has_changed(sender,
                                                               instance,
                                                               **kwargs)

radioco.apps.programmes.models.update_schedule_performance(programme)
```

**radioco.apps.programmes.tests module**

```
class radioco.apps.programmes.tests.EpisodeManagerTests (methodName='runTest')
    Bases: django.test.testcases.TestCase
        radioco.apps.radioco.test_utils.TestDataMixin,
    setUp()
    test_create_episodetest_issue_datetest_lasttest_last_nonetest_number_in_seasontest_peopletest_programmetest_seasontest_unfinishedtest_unfinished_nonesetUp()
    test_absoulte_urltest_model_managertest_runtimetest_strsetUp()
    test_fieldsetsetUp()
    test_absolute_urltest_runtimetest_runtime_is_zerotest_runtime_not_gettest_runtime_not_settest_save_programmetest_slugtest_str()
```

**radioco.apps.programmes.urls module**

## radioco.apps.programmes.utils module

### radioco.apps.programmes.views module

```
radioco.apps.programmes.views.episode_detail (request, slug, season_number,  
                                                episode_number)  
radioco.apps.programmes.views.programme_detail (request, slug)
```

## Module contents

### radioco.apps.radioco package

#### Subpackages

#### radioco.apps.radioco.management package

#### Subpackages

#### radioco.apps.radioco.management.commands package

#### Submodules

##### radioco.apps.radioco.management.commands.create\_example\_data module

```
class radioco.apps.radioco.management.commands.create_example_data.Command (stdout=None,  
                           stderr=None,  
                           no_color=False)  
  
Bases: django.core.management.base.BaseCommand  
  
handle (*args, **options)
```

## Module contents

### Module contents

### radioco.apps.radioco.tests package

#### Submodules

##### radioco.apps.radioco.tests.tests module

```
class radioco.apps.radioco.tests.tests.RadioIntegrationTests (methodName='runTest')  
    Bases: radioco.apps.radioco.test_utils.TestDataMixin,  
           django.test.testcases.TestCase  
  
    test_index()  
class radioco.apps.radioco.tests.tests_UtilsTest (methodName='runTest')  
    Bases: django.test.testcases.TestCase
```

**test\_dictionary\_key()**

Making sure that is safe to use a dt tz aware object in a different timezone to access a dictionary

**test\_example\_data()**

Running example data function, If nothing crash we are happy

**Module contents****Submodules****radioco.apps.radioco.context\_processors module**

`radioco.apps.radioco.context_processors.settings(request)`

**radioco.apps.radioco.test\_utils module**

`class radioco.apps.radioco.test_utils.TestDataMixin`

Bases: `object`

**classmethod setUpTestData()**

`radioco.apps.radioco.test_utils.create_test_data()`

`radioco.apps.radioco.test_utils.spain_tz()`

**radioco.apps.radioco.tz\_utils module**

`class radioco.apps.radioco.tz_utils.GMT(seconds)`

Bases: `dateutil.tz.tz.tzoffset`

GMT implementation, it has a fixed offset

**localize(dt, is\_dst=False)**

Convert naive time to local time

**normalize(dt, is\_dst=False)**

Correct the timezone information on the given datetime

`radioco.apps.radioco.tz_utils.fix_recurrence_date(start_dt, dt)`

Fix for django-recurrence 1.3 rdates and exdates needs a datetime, we are combining the date with the time from start\_date.

Return: A datetime in the default timezone with the offset required to work in the recurrence

`radioco.apps.radioco.tz_utils.fix_recurrence_dst(dt)`

Fix for django-recurrence 1.3 Function to fix a datetime tz aware with an incorrect offset

Returns: A datetime in the same timezone but with the offset fixed

`radioco.apps.radioco.tz_utils.get_active_timezone()`

Same method as `timezone.get_current_timezone` but returning utc if nothing was set

`radioco.apps.radioco.tz_utils.recurrence_after(recurrence, after_dt, start_dt)`

Fix for django-recurrence 1.3 Avoid outputting a impossible dt

`radioco.apps.radioco.tz_utils.recurrence_before(recurrence, before_dt, start_dt)`

Fix for django-recurrence 1.3 Avoid outputting a non impossible dt

`radioco.apps.radioco.tz_utils.transform_datetime_tz(dt, tz=None)`

Transform a datetime in other timezone to the current one

`radioco.apps.radioco.tz_utils.transform_dt_to_default_tz(dt)`

Transform a datetime in other timezone to the current one

**radioco.apps.radioco.utils module**

```
class radioco.apps.radioco.utils.DeletePermissionMixin
    Bases: object

    dispatch (request, *args, **kwargs)

    model = None

class radioco.apps.radioco.utils.GetObjectMixin
    Bases: django.views.generic.detail.SingleObjectMixin

    dispatch (*args, **kwargs)

    object = None

radioco.apps.radioco.utils.check_delete_permission (user, model)
radioco.apps.radioco.utils.create_example_data ()
radioco.apps.radioco.utils.field_has_changed (_object, field)

class radioco.apps.radioco.utils.memorize (func)
    Bases: dict

    A simple cache system, use as decorator
```

**radioco.apps.radioco.views module**

```
radioco.apps.radioco.views.index (request)
radioco.apps.radioco.views.user_logout (request)
```

**Module contents**

**radioco.apps.schedules package**

**Subpackages**

**radioco.apps.schedules.migrations package**

**Submodules**

**radioco.apps.schedules.migrations.0001\_initial module**

```
class radioco.apps.schedules.migrations.0001_initial.Migration (name, app_label)
    Bases: django.db.migrations.migration.Migration

    dependencies = [(u'programmes', u'0001_initial')]

    operations = [<CreateModel fields=[(u'id', <django.db.models.fields.AutoField>), (u'day', <django.db.models.fields.In
```

**radioco.apps.schedules.migrations.0002\_dev\_schedules module**

**Module contents**

**radioco.apps.schedules.tests package**

## Submodules

### `radioco.apps.schedules.tests.test_recurrences module`

```
class radioco.apps.schedules.tests.test_recurrences.EmptyRecurrenceTests (methodName='runTest')
    Bases:                                     radioco.apps.radioco.test_utils.TestDataMixin,
    django.test.testcases.TestCase

    Tests to check django-recurrence behaviour when there are no recurrences

    setUp()
    test_after()
    test_after_inclusive()
    test_before()
    test_before_inclusive()
    test_no_values()

class radioco.apps.schedules.tests.test_recurrences.RecurrenceTests (methodName='runTest')
    Bases:                                     radioco.apps.radioco.test_utils.TestDataMixin,
    django.test.testcases.TestCase

    Tests to check django-recurrence behaviour

    setUp()
    test_after()
    test_after_inclusive()
    test_before_dt()
    test_before_inclusive()
    test_impossible_recurrence_after()
        Testing error calling after and function wrapper to solve it (recurrence_after)

    test_impossible_recurrence_before()
        Testing error calling before and function wrapper to solve it (recurrence_before)

    test_last_date_is_equals_before_limit()
    test_start_date_is_before_start_limit()
    test_when_date_doesnt_exist_on_february()
```

### `radioco.apps.schedules.tests.test_schedules module`

```
class radioco.apps.schedules.tests.test_schedules.CalendarAdminTests (methodName='runTest')
    Bases:                                     radioco.apps.radioco.test_utils.TestDataMixin,
    django.test.testcases.TestCase

    setUp()
    test_clone_calendar()

class radioco.apps.schedules.tests.test_schedules.CalendarManagerTests (methodName='runTest')
    Bases:                                     radioco.apps.radioco.test_utils.TestDataMixin,
    django.test.testcases.TestCase

    setUp()
    test_current()
```

```
test_current_no_date()

class radioco.apps.schedules.tests.test_schedules.CalendarModelTests (methodName='runTest')
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,
            django.test.testcases.TestCase

    test_str()

class radioco.apps.schedules.tests.test_schedules.CalendarValidationTests (methodName='runTest')
    Bases: django.test.testcases.TestCase

    setUp()

    test_only_one_calendar_active()

class radioco.apps.schedules.tests.test_schedules.ScheduleBetweenTests (methodName='runTest')
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,
            django.test.testcases.TestCase

    setUp()

    test_between_includes_started_episode()
    test_dates_between_includes_started_episode()

class radioco.apps.schedules.tests.test_schedules.ScheduleModelTests (methodName='runTest')
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,
            django.test.testcases.TestCase

    setUp()

    test_date_after()
    test_date_after_exclude()
    test_date_before()
    test_dates_between()
    test_dates_between_complex_ruleset()
    test_dates_between_earlier_end_by_programme()
    test_dates_between_later_start_by_programme()
    test_end_gt_calendar()
    test_recurrence_rules()
    test_runtime()
    test_runtime_not_set()
    test_save_rearrange_episodes (*args, **keywargs)
    test_start()
    test_start_lt_calendar()
    test_unicode()

class radioco.apps.schedules.tests.test_schedules.ScheduleUtilsTests (methodName='runTest')
    Bases:                                                 radioco.apps.radioco.test_utils.TestDataMixin,
            django.test.testcases.TestCase

    setUp()

    test_available_dates_after()
```

```

test_available_dates_none()
test_rearrange_episodes()
test_rearrange_episodes_new_schedule(*args, **keywargs)
test_rearrange_only_non_emited_episodes(*args, **keywargs)

class radioco.apps.schedules.tests.test_schedules.ScheduleValidationTests (methodName='runTest')
    Bases:                                     radioco.apps.radioco.test_utils.TestDataMixin,
    django.test.testcases.TestCase

    test_fields()

class radioco.apps.schedules.tests.test_schedules.TransmissionModelTests (methodName='runTest')
    Bases:                                     radioco.apps.radioco.test_utils.TestDataMixin,
    django.test.testcases.TestCase

    setUp()
    test_at()
    test_between()
    test_between_by_queryset()
    test_end()
    test_episode_url()
    test_name()
    test_programme_url()
    test_slug()
    test_start()

    radioco.apps.schedules.tests.test_schedules.mock_now (dt=datetime.datetime(2014, 1,
        1, 13, 30, tzinfo=<UTC>))

radioco.apps.schedules.tests.test_timezone module
class radioco.apps.schedules.tests.test_timezone.ScheduleModelTests (methodName='runTest')
    Bases:                                     radioco.apps.radioco.test_utils.TestDataMixin,
    django.test.testcases.TestCase

    setUp()
    test_CEST_transition()
    test_CET_transition()
    test_cleaned_internal_recurrence_dates()
    test_transform_dt_to_default_tz()
    radioco.apps.schedules.tests.test_timezone.test_CET_transitions(self)

```

## Module contents

### Submodules

**radioco.apps.schedules.admin module**

```
class radioco.apps.schedules.admin.CalendarAdmin(model, admin_site)
    Bases: django.contrib.admin.options.ModelAdmin

    actions = ['clone_calendar', 'set_active']

    clone_calendar(request, queryset)

    list_display = ('name', 'is_active')

    list_filter = ['is_active']

    media

    ordering = ['name']

    search_fields = ['name']

    set_active(request, queryset)

class radioco.apps.schedules.admin.ScheduleAdmin(model, admin_site)
    Bases: django.contrib.admin.options.ModelAdmin

    change_list_template = 'admin/schedules/calendar.html'

    changelist_view(request, extra_context=None)

    fieldsets = ((None, {'fields': ('programme', 'type', 'start_dt', 'recurrences')}), (<django.utils.functional.__proxy__ object at 0x7fba4386f4d0>,))

    has_add_permission(request)

    media

    readonly_fields = ('effective_start_dt', 'effective_end_dt', 'source', 'from_collection')
```

**radioco.apps.schedules.forms module**

```
class radioco.apps.schedules.forms.DeleteScheduleForm(has_recurrences, *args,
                                                       **kwargs)
    Bases: django.forms.forms.Form

    DELETE_ALL = 'all'

    DELETE_ONLY_THIS = 'only_this'

    DELETE_THIS_AND_FOLLOWING = 'this_and_following'

    base_fields = OrderedDict([('transmission_dt', <django.forms.fields.DateTimeField object at 0x7fba4386f4d0>), ('sch...'])

    declared_fields = OrderedDict([('transmission_dt', <django.forms.fields.DateTimeField object at 0x7fba4386f4d0>) ...])

    media
```

**radioco.apps.schedules.models module**

```
class radioco.apps.schedules.models.Calendar(id, name, is_active)
    Bases: django.db.models.base.Model

    exception DoesNotExist
        Bases: django.core.exceptions.ObjectDoesNotExist

    exception Calendar.MultipleObjectsReturned
        Bases: django.core.exceptions.MultipleObjectsReturned

    classmethod Calendar.get_active()

    Calendar.objects = <django.db.models.manager.Manager object>
```

```

Calendar.rearrange_episodes()
Calendar.save(*args, **kwargs)
Calendar.schedule_set
class radioco.apps.schedules.models.CalendarManager
    Bases: django.db.models.manager.Manager

current()

class radioco.apps.schedules.models.ExcludedDates(*args, **kwargs)
    Bases: django.db.models.base.Model

    Helper to improve performance

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception ExcludedDates.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

ExcludedDates.date

ExcludedDates.get_new_excluded_datetime(new_dt)
    Returns: A new dt to be excluded in that date

ExcludedDates.get_next_by_datetime(*moreargs, **morekwargs)
ExcludedDates.get_previous_by_datetime(*moreargs, **morekwargs)
ExcludedDates.objects = <django.db.models.manager.Manager object>

ExcludedDates.schedule

class radioco.apps.schedules.models.Schedule(id, programme, type, calendar, recurrences,
                                                start_dt, effective_start_dt, effective_end_dt,
                                                from_collection, source)
    Bases: django.db.models.base.Model

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception Schedule.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

Schedule.calendar

Schedule.child_schedules

Schedule.date_after(after)

Schedule.date_before(before)

Schedule.dates_between(after, before)
    Return a sorted list of dates between after and before

Schedule.exclude_date(dt)

Schedule.excludeddates_set

Schedule.from_collection

Schedule.get_next_by_start_dt(*moreargs, **morekwargs)
Schedule.get_previous_by_start_dt(*moreargs, **morekwargs)

static Schedule.get_schedule_which_excluded_dt(programme, dt)

```

```
Schedule.get_type_display(*moreargs, **morekwargs)
Schedule.has_recurrences()
Schedule.include_date(dt)
Schedule.objects = <django.db.models.manager.Manager object>
Schedule.programme
Schedule.recurrences
    A placeholder class that provides a way to set the attribute on the model.
Schedule.runtime
Schedule.save(*args, **kwargs)
Schedule.schedule_set
Schedule.source

class radioco.apps.schedules.models.Transmission(schedule, date, episode=None)
Bases: object
Temporal object generated according to recurrence rules or schedule information It contains concrete dates
classmethod at(at)
classmethod between(after, before, schedules=None)
    Return a tuple of Schedule and Transmissions sorted by date
end
episode_url
name
programme
programme_url
slug

radioco.apps.schedules.models.calculate_effective_schedule_end_dt(schedule)
    Calculation of the last end date to improve performance
radioco.apps.schedules.models.calculate_effective_schedule_start_dt(schedule)
    Calculation of the first start date to improve performance
```

## radioco.apps.schedules.urls module

### radioco.apps.schedules.utils module

```
radioco.apps.schedules.utils.next_dates(calendar, programme, after)
Returns: A generator with the next dates of a given programme
```

### radioco.apps.schedules.views module

```
class radioco.apps.schedules.views.DeleteScheduleView(**kwargs)
Bases: radioco.apps.radioco.utils.GetObjectMixin, radioco.apps.radioco.utils.DeletePermissions
django.views.generic.edit.FormView
form_class
    alias of DeleteScheduleForm
```

---

```

form_valid(form)
get(request, *args, **kwargs)
get_context_data(**kwargs)
get_form_kwargs()
get_initial()
model
    alias of Schedule
schedule_id = None
template_name = ‘admin/schedules/delete_modal.html’
transmission_dt = None
radioco.apps.schedules.views.schedule_list(request)

```

## Module contents

### `radioco.apps.users` package

#### Subpackages

#### `radioco.apps.users.migrations` package

#### Submodules

##### `radioco.apps.users.migrations.0001_initial` module

```

class radioco.apps.users.migrations.0001_initial.Migration(name, app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u‘auth’, u‘__first__’)]
    operations = [<CreateModel fields=[(u‘id’, <django.db.models.fields.AutoField>), (u‘bio’, <django.db.models.fields.Text
```

##### `radioco.apps.users.migrations.0002_change_textfield_to_richtextfield` module

```

class radioco.apps.users.migrations.0002_change_textfield_to_richtextfield.Migration(name,
    app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u‘users’, u‘0001_initial’)]
    operations = [<AlterField field=<ckeditor.fields.RichTextField>, preserve_default=True, name=u‘bio’, model_name=u‘
```

##### `radioco.apps.users.migrations.0003_auto_20160104_2029` module

```

class radioco.apps.users.migrations.0003_auto_20160104_2029.Migration(name,
    app_label)
    Bases: django.db.migrations.migration.Migration
    dependencies = [(u‘users’, u‘0002_change_textfield_to_richtextfield’)]
    operations = [<AlterField field=<django.db.models.fields.files.ImageField>, name=u‘avatar’, model_name=u‘userprof
```

## radioco.apps.users.migrations.0004\_dev\_ckeditor\_upload\_field module

### Module contents

#### Submodules

##### radioco.apps.users.admin module

```
class radioco.apps.users.admin.NonStaffUserProfileForm(*args, **kwargs)
    Bases: django.forms.models.ModelForm

    base_fields = OrderedDict([('username', <django.forms.fields.CharField object at 0x7fba4a3929d0>), ('first_name', <
        clean_username()

    declared_fields = OrderedDict([('username', <django.forms.fields.CharField object at 0x7fba4a3929d0>), ('first_na

    media

    save(force_insert=False, force_update=False, commit=True)

class radioco.apps.users.admin.SingletonProfileAdmin(model, admin_site)
    Bases: django.contrib.admin.options.ModelAdmin

    change_view(request, object_id, extra_context=None)

    fields = ['username', 'first_name', 'last_name', 'email', 'bio', 'avatar', 'display_personal_page']

    form
        alias of NonStaffUserProfileForm

    get_urls()

    has_add_permission(request)

    has_delete_permission(request, obj=None)

    media

    response_change(request, obj)

    save_model(request, obj, form, change)

class radioco.apps.users.admin.UserProfileAdmin(model, admin_site)
    Bases: django.contrib.auth.admin.UserAdmin

    inlines = (<class 'radioco.apps.users.admin.UserProfileInline'>,

    list_filter = ('is_staff', 'is_superuser', 'is_active', 'groups', 'userprofile__display_personal_page')

    media

class radioco.apps.users.admin.UserProfileInline(parent_model, admin_site)
    Bases: django.contrib.admin.options.StackedInline

    can_delete = False

    exclude = ('slug',)

    extra = 1

    inline_classes = ('grp-collapse grp-open',)

    media

    model
        alias of UserProfile
```

**radioco.apps.users.models module**

```
class radioco.apps.users.models.UserProfile(id, user, bio, avatar, display_personal_page,
                                             slug)
    Bases: django.db.models.base.Model

exception DoesNotExist
    Bases: django.core.exceptions.ObjectDoesNotExist

exception UserProfile.MultipleObjectsReturned
    Bases: django.core.exceptions.MultipleObjectsReturned

UserProfile.get_absolute_url()
UserProfile.objects = <django.db.models.manager.Manager object>
UserProfile.save(*args, **kwargs)

UserProfile.user
radioco.apps.users.models.save_slug(sender, instance=None, **kwargs)
```

**radioco.apps.users.tests module**

```
class radioco.apps.users.tests.UserProfileMethodTests(methodName='runTest')
    Bases: django.test.testcases.TestCase

    test_get_announcers_and_profile()

    test_save()
```

**radioco.apps.users.urls module****radioco.apps.users.views module**

```
class radioco.apps.users.views.UsersView(**kwargs)
    Bases: django.views.generic.list.ListView

    get_queryset()
    model
        alias of UserProfile
radioco.apps.users.views.userprofile_detail(request, slug)
```

**Module contents****Module contents****radioco.configs package****Subpackages****radioco.configs.base package****Submodules****radioco.configs.base.manage module**

**radioco.configs.base.settings module**

`radioco.configs.base.settings.gettext_noop(s)`

**radioco.configs.base.urls module**

**Module contents**

**radioco.configs.development package**

**Submodules**

**radioco.configs.development.manage module**

**radioco.configs.development.settings module**

`radioco.configs.development.settings.show_toolbar(request)`

**Module contents**

**radioco.configs.heroku package**

**Submodules**

**radioco.configs.heroku.manage module**

**radioco.configs.heroku.settings module**

**radioco.configs.heroku.wsgi module**

**Module contents**

**Module contents**

## Module contents

### 3.5.3 tasks package

#### Submodules

**tasks.docker module**

**tasks.docs module**

**tasks.heroku module**

**tasks.locale module**

**tasks.radioco module**

**tasks.utils module**

## Module contents

## 3.6 Release notes & upgrade information

Some versions of RadioCo present more complex upgrade paths than others, and some **require** you to take action. It is strongly recommended to read the release notes carefully when upgrading.

It goes without saying that you should **backup your database** before embarking on any process that makes changes to your database.

### 3.6.1 1.1 release notes

#### What's new in 1.1

- Numerous updates to the documentation
- Updates to facilitate the starting-up (radioco\_recorder\_user and a empty schedule\_board are self-created)
- Added custom languages to programmes (by default, all django languages)

#### How this affects you

If you're starting with a new installation, you don't need to worry about this. Don't even bother reading this section; it's for upgraders.

Activate your virtualenv and do the following in your project main directory:

```
pip install django-radio==1.1
python manage.py migrate
```

### 3.6.2 1.1.1 release notes

#### What's new in 1.1.1

- Added CKEditor to programme's synopsis, episode's summary and user's biography
- Added default settings to the project
- Added customisable footer

#### How this affects you

If you're starting with a new installation, you don't need to worry about this. Don't even bother reading this section; it's for upgraders.

Activate your virtualenv and do the following in your project main directory:

```
pip install django-radio==1.1.1
python manage.py collectstatic
python manage.py migrate
```

In your settings.py import default settings:

```
from radio.settings_base import *
```

### 3.6.3 1.2 release notes

#### What's new in 1.2

- Fixed project urls when RadioCo is deployed in a subdirectory
- Fixed default url of photos when STATIC\_URL is not “/static/”
- Fixed errors 404 when users don't have a personal webpage.

#### How this affects you

If you're starting with a new installation, you don't need to worry about this. Don't even bother reading this section; it's for upgraders.

Activate your virtualenv and do the following in your project main directory:

```
pip install django-radio==1.2
python manage.py migrate
```

### 3.6.4 2.1 release notes

#### What's new in 2.1

- New layout! The whole site has been redesigned
- Added image versions, RadioCo will adapt your images to fit in the new template
- Added comments support.
- Added analytics support.

## How this affects you

If you're starting with a new installation, you don't need to worry about this. Don't even bother reading this section; it's for upgraders.

You need to replace your current source with the content of <https://github.com/iago1460/django-radio>. To setup your settings please read the configuration section.

You should be able to keep your current database but make sure to create a backup before start.

```
pip install -r radio/configs/common/requirements.txt
python manage.py collectstatic
python manage.py migrate
```

## 3.6.5 3.0 release notes

### What's new in 3.0

In this version RadioCo has almost been rewritten completely, internally the major improvements are:

- Use of time-zone-aware datetime objects ([more info](#))
- Added good amount of tests
- Changed calendar to use API methods
- Using bower to download js and css dependencies
- Renamed internal folders and models
  - django-radio/radio → django-radio/radioco
  - django-radio/radio/configs/common → django-radio/radioco/configs/base
  - ScheduleBoard model has been renamed to Calendar
  - dashboard app has been merged into schedules

Special mention to [@stefan-walluhn](#) - Radio Corax who helped in this release, specifically adding Bower, Rest Framework API, tests and complex recurrence rules.

And the visible features are:

- Added download button to episodes ([#38](#) Credit to [@AlexCortinas](#))
- Removed unnecessary Scroll configuration setting ([#13](#) Credit to [@AlexCortinas](#))
- Improvements in title representation of episodes when not set ([#17](#) Credit to [@txenoo](#))
- Removed warnings when compiling ([#32](#) Thanks to [@txenoo](#))
- Added Radiocom endpoints (Thanks to [@pablogrela](#))
- Added upload feature to CKEditor ([#22](#))
- Added new calendar setting slotDuration
- Added a suite of helper tasks using `invoke` (Easy deploy to docker)
- Added public API to access to programmes, episodes, schedules and transmissions ([#2](#))
- The schedule manager has received important updates ([#20](#), [#4](#))

Now managing schedules should be a lot more simple. From the manager is possible to create and edit programmes in addition to schedules.

The forced weekly recurrence has been removed in favor of complex recurrence rules, having a unique calendar should be enough.

The Calendar model doesn't have date constraints anymore and only one can be active at the same time. If you want to restrict a programme you should do it filling the start and end date fields inside itself.

## How this affects you

If you're starting with a new installation, you don't need to worry about this. Don't even bother reading this section; it's for upgraders.

Please **make sure of having a copy of your database** before even started to look to the next steps.

If you have custom code or templates I recommend putting them in a safe place, special mention to local\_settings.py files, you are going to need to move them to the correct folder.

Since this migration introduces timezone support, it's necessary to set the timezone variable:

1. Find your timezone in [this list](#)
2. Go to the config folder and create if not exists a local\_settings.py in the same directory than settings.py
3. Add to the local settings the variable timezone, for example: TIME\_ZONE = "Europe/Madrid"

**Warning:** Using an incorrect timezone will cause incorrect dates, you should set/override that setting in your local\_settings.py.

**Warning:** If you have a database backend [different to PostgreSQL](#) you must convert your data from local time to UTC. Fortunately for you a migration was written to fix episode issue\_dates, other dates will suffer alterations.

**Warning:** We strongly recommend to use PostgreSQL as backend. Other database engines **will not be supported** in the future.

You have to install [bower](#) before running the following commands in the project root folder:

```
bower install  
pip install -r radioco/configs/base/requirements.txt  
python manage.py collectstatic  
python manage.py migrate
```

After the migration process you will find that there is a new calendar set to active that contains all your schedules and your other calendars have been renamed with the prefix "Legacy - ". Feel free of delete these, they are not required anymore.

---

**Note:** Warning messages could appear during the migration process, it's usually safe to ignore them.

---

## 3.7 Indices and tables

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- modindex

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