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# **django-any-urlfield Documentation**

*Release 2.4*

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The `any_urldfield` module provides an improved URL selector that supports both URLs to internal models and external URLs.

This addresses a common challenge in CMS interfaces; where providing a `URLField` makes it hard to enter internal URLs, while providing a `ModelChoiceField` makes it too inflexible.

URL:  External URL  Page

URL:  External URL  Page

Relevant public classes:

- Model fields:
- `AnyUrldField`: allow users to choose either a model or external link as URL value
- Form widget rendering:
- `HorizontalRadioFieldRenderer`
- `SimpleRawIdWidget`



## Installation

First install the module, preferably in a virtual environment. It can be installed from PyPI:

```
pip install django-any-urlfield
```

Or the current folder can be installed:

```
pip install .
```

## Configuration

Add the module to the installed apps:

```
INSTALLED_APPS += (  
    'any_urlfield',  
)
```

## Usage

In a Django model, the field can be included:

```
from django.db import models  
from django.utils.translation import gettext_lazy as _  
from any_urlfield.models import AnyUrlField  
  
class MyModel(models.Model):  
    title = models.CharField(_("title"), max_length=200)  
    url = AnyUrlField(_("URL"))
```

By default, the `AnyUrlField` only supports linking to external pages. To add support for your own models (e.g. an `Article` model), include the following code in `models.py`:

```
from any_urlfield.models import AnyUrlField
AnyUrlField.register_model(Article)
```

Now, the `AnyUrlField` offers users a dropdown field to directly select an article.

For more configuration options of the `register_model()` function, see the documentation of the `AnyUrlField` class.

## API documentation

Contents:

### any\_urlfield.forms

#### The AnyUrlField class

**class** `any_urlfield.forms.AnyUrlField` (*url\_type\_registry*, *max\_length=None*, *\*args*, *\*\*kwargs*)  
Form field that combines a Page ID and external page URL.

The form field is used automatically when the `AnyUrlField` is used in the model.

**widget**

alias of `AnyUrlWidget`

#### The AnyUrlWidget class

**class** `any_urlfield.forms.AnyUrlWidget` (*url\_type\_registry*, *attrs=None*)  
The URL widget, rendering the URL selector.

#### The SimpleRawIdWidget class

**class** `any_urlfield.forms.SimpleRawIdWidget` (*model*, *limit\_choices\_to=None*, *admin\_site=None*, *attrs=None*, *using=None*)

A wrapper class to create raw ID widgets.

It produces a same layout as the `raw_id_fields = (field',)` code does in the admin interface. This class wraps the functionality of the Django admin application into a usable format that is both compatible with Django 1.3 and 1.4.

The basic invocation only requires the model:

```
widget = SimpleRawIdWidget(MyModel)
```

### any\_urlfield.models

#### The AnyUrlField class

**class** `any_urlfield.models.AnyUrlField` (*\*args*, *\*\*kwargs*)  
A `CharField` that can either refer to a CMS page ID, or external URL.



URL:  External URL  Page

  

URL:  External URL  Page

By default, the `AnyUrlField` only supports linking to external pages. To add support for your own models (e.g. an `Article` model), include the following code in `models.py`:

```
from any_urlfield.models import AnyUrlField
AnyUrlField.register_model(Article)
```

Now, the `AnyUrlField` offers users a dropdown field to directly select an article. By default, it uses a `django.forms.ModelFormChoiceField` field with a `django.forms.Select` widget to render the field. This can be customized using the `form_field` and `widget` parameters:

```
from any_urlfield.models import AnyUrlField
from any_urlfield.forms import SimpleRawIdWidget

AnyUrlField.register_model(Article, widget=SimpleRawIdWidget(Article))
```

Now, the `Article` model will be displayed as raw input field with a browse button.

**classmethod `register_model`** (*ModelClass*, *form\_field=None*, *widget=None*, *title=None*, *prefix=None*)  
 Register a model to use in the URL field.

This function needs to be called once for every model that should be selectable in the URL field.

#### Parameters

- **ModelClass** – The model to register.
- **form\_field** – The form field class used to render the field. This can be a lambda for lazy evaluation.
- **widget** – The widget class, can be used instead of the form field.
- **title** – The title of the model, by default it uses the models `verbose_name`.
- **prefix** – A custom prefix for the model in the serialized database format. By default it uses “`appname.modelname`”.

### The `AnyUrlValue` class

**class** `any_urlfield.models.AnyUrlValue` (*type\_prefix*, *type\_value*, *url\_type\_registry=None*)  
 Custom value object for the `AnyUrlField`. This value holds both the internal page ID, and external URL. It can be used to parse the database contents:

```
value = AnyUrlValue.from_db_value(url)
article = value.get_object()
print unicode(value)
```

A conversion to `unicode` or `str` causes the URL to be generated. This allows the field value to be used in string concatenations, or template variable evaluations:

```
{{ mymodel.url }}
```

**exists()**

Check whether the references model still exists.

**classmethod from\_db\_value** (*url, url\_type\_registry=None*)

Convert a serialized database value to this object.

The value can be something like:

- an external URL: `http://...`, `https://...`
- a custom prefix: `customid://214`, `customid://some/value`
- a default “app.model” prefix: `appname.model://31`

**classmethod from\_model** (*model, url\_type\_registry=None*)

Convert a model value to this object.

**get\_model()**

Return the model that this value points to.

**get\_object()**

Return the database object that the value points to.

**to\_db\_value()**

Convert the value into a serialized format which can be stored in the database. For example: `http://www.external.url/` or `pageid://22`.

**type\_prefix**

Return the URL type prefix. For external URLs this is always “http”.

## Changelog

### Changes in git

- Dropped Django 1.4, 1.5, 1.6 support

### Version 2.4.1 (2017-05-05)

- Fixed packaging bugs that prevented including the HTML templates for Django 1.11.

### Version 2.4 (2017-05-01)

- Added Django 1.11 support.
- Dropped Python 2.6 support.
- Fix for empty value.

### Version 2.3 (2017-02-03)

- For Django 1.8 and up, the `URLValidator` now allows more URL schemes by default, specifically `mailto:` and `tel:` URLs.

### Version 2.2.1 (2016-02-26)

- Fixed Django 1.10 deprecation warnings.

### Version 2.2 (2015-12-30)

- Added Django 1.9 support
- Fixed saving blank/null values.

### Version 2.1.1 (2015-04-15)

- Fix Django 1.7/1.8 model saving issues.
- Added `AnyUrlValue.from_model()` to directly wrap a model into an `AnyUrlValue`.

### Version 2.1 (2015-04-10)

- Added Django 1.8 support
- Fix importing json fixture data.

### Released as 2.1a1: (2014-09-15)

- Added caching support for URL values.

### Version 2.0.4 (2014-12-30)

- Fixed Python 3.3 issues

### Version 2.0.3 (2014-10-30)

- Fixed `__eq__()` for comparing against other object types.

### Version 2.0.2 (2014-10-30)

- Added pickle support.
- Fixed Django 1.7 support.

### Version 2.0.1 (2014-09-15)

- Fix performance issue with form fields.

## Version 2.0 (2014-08-15)

### Released as 2.0b1 (2014-06-05)

- Improved Python 3 support.
- Delay initialisation of `ModelChoiceField` objects.
- Fix `exists()` value for empty URLs

### Released as 2.0a1 (2014-04-04)

- Added Python 3 support
- Allow passing callables to the `form_field` parameter of `AnyUrlField.register_model`

## Version 1.0.12 (2014-02-24)

- Implement `AnyUrlField.__deepcopy__()` to workaround Django < 1.7 issue, where `__deepcopy__()` is missing for `MultiValueField` classes.

## Version 1.0.11 (2014-02-20)

- Improve external URL support (https, ftps, smb, etc..)
- Fix unnecessary query at registration of custom models.

## Version 1.0.10 (2013-12-12)

- Fix using `AnyUrlField` with `blank=True`.
- Fix `_has_changed` is no longer used in `django >= 1.6.0`

## Version 1.0.9 (2013-10-15)

- Fixed exporting the value in the `dumpdata` command.

## Version 1.0.8 (2013-09-20)

- Use `long()` for ID's, not `int()`.
- Improve `ObjectDoesNotExist` check in `AnyUrlValue.__unicode__()`, to support model translations.

## Version 1.0.7 (2013-05-28)

- Fix using this widget with Django 1.6 alpha 1

### Version 1.0.5 (2013-05-07)

- Fix errors during south migration
- Fix errors when deleting rows in an inline formset which uses an `AnyUrldField`.

### Version 1.0.4 (2013-05-02)

- Fix https URL support

### Version 1.0.3 (2013-04-24)

- Fix change detection, to support formsets and admin inlines.
- Fix widget alignment within a `TabularInline`.

### Version 1.0.2 (2013-01-24)

- Fix `setup.py` code to generate translation files for the `sdist`.
- Remove `HorizonatalRadioFieldRenderer` from the public API.

### Version 1.0.1 (2012-12-27)

- Use jQuery live events to support using the `AnyUrldField` in Django inlines.

### Version 1.0.0 (2012-12-27)

First PyPI release.

The module design has been stable for quite some time, so it's time to release this module to the public.



## CHAPTER 2

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### Indices and tables

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