

---

# **django-relatives Documentation**

***Release 1.4.0a1***

**Trey Hunner**

**Jan 13, 2024**



# CONTENTS

<b>1</b>	<b>Uses</b>	<b>3</b>
<b>2</b>	<b>Contents</b>	<b>5</b>
2.1	Usage . . . . .	5
2.2	API Reference . . . . .	10
<b>3</b>	<b>Contributing</b>	<b>13</b>
<b>4</b>	<b>Indices and tables</b>	<b>15</b>
	<b>Python Module Index</b>	<b>17</b>
	<b>Index</b>	<b>19</b>



When using Django's admin site, I often find myself wishing I could easily visit model relations from my change lists and change forms. The django-relatives package is meant to do exactly this.



## USES

The main usages of this Django app are:

- *Linking to foreign keys in change lists*
- *Linking to foreign keys in change forms*
- *Linking to reverse relations on change forms*
- *Linking to foreign keys in inlines*





## CONTENTS

## 2.1 Usage

### 2.1.1 Installation

Install from PyPI:

```
$ pip install django-relatives
```

### 2.1.2 Linking to foreign keys in change lists

The easiest way to automatically turn foreign key columns into hyperlinks in a Django admin change list is to inherit from *RelativesAdmin* in your model admin.

#### Example

```
from django.contrib import admin
from relatives import RelativesAdmin

from .models import Company, Employee

@admin.register(Company)
class CompanyAdmin(admin.ModelAdmin):
    list_display = ["name"]

@admin.register(Employee)
class EmployeeAdmin(RelativesAdmin):
    list_display = ["first_name", "last_name", "company"]
```

## Screenshot

When viewing the change list for the employee model, you'll now see that the company column contents are all linked to the appropriate change form page for each company.

Select employee to change ADD EMPLOYEE +

Action:   0 of 2 selected

<input type="checkbox"/>	FIRST NAME	LAST NAME	COMPANY
<input type="checkbox"/>	Road	Runner	<a href="#">ACME</a>
<input type="checkbox"/>	Elmer	Funn	<a href="#">ACME</a>

2 employees

### 2.1.3 Linking to foreign keys in change forms

The `contents_or_fk_link` template filter can be used to link to foreign keys for readonly admin form fields.

Django Relatives also provides a replacement for the `admin/includes/fieldset.html` template which can be used to automatically link to all readonly foreign key fields in change forms.

To use the custom fieldset template you must add `relatives` to `INSTALLED_APPS` in your settings file:

```
INSTALLED_APPS = (
    ...
    'relatives',
)
```

Next create a `admin/includes/fieldset.html` template file:

```
{% extends "relatives/includes/fieldset.html" %}
```

Also make sure this template file is in a custom template directory or an app listed before your admin app in `INSTALLED_APPS`.

## Example Screenshot

### 2.1.4 Linking to reverse relations on change forms

The `related_objects` template tag makes it easy to link to change lists filtered for reverse relations (objects that have a foreign key to a given object).

Django Relatives also provides a custom `change_form.html` template that may be used to add a “Relations” sidebar to change forms. This sidebar provides links to change list queries for all objects that contain a foreign key to the current object.

To use the custom fieldset template you must add `relatives` to `INSTALLED_APPS` in your settings file:

## Change employee

[History](#)

Employee id:	<input type="text" value="7000"/>
First name:	<input type="text" value="Road"/>
Last name:	<input type="text" value="Runner"/>
Company:	<a href="#">ACME</a>

✖ Delete
Save and add another
Save and continue editing
Save

```
INSTALLED_APPS = (
    ...
    'relatives',
)
```

Now you can customize the change form template for your desired models/apps. The easiest way to link to reverse relations is to override the `change_form_template` in your `ModelAdmin` subclass.

### Example

#### Code

```
from django.contrib import admin

from .models import Company, Employee

admin.site.register(Employee)

@admin.register(Company, CompanyAdmin)
class CompanyAdmin(admin.ModelAdmin):
    change_form_template = "relatives/change_form.html"
```

#### Screenshot

## Change company

[History](#)

Name:	<input type="text" value="ACME"/>
-------	-----------------------------------

✖ Delete
Save and add another
Save and continue editing
Save

**Relations**
  
[Employees](#)

## Linking to reverse relations with custom template

If you don't have access to change the `ModelAdmin` for your model or you are already customizing your model's admin change form, you will need to use a custom admin template instead.

Create a `admin/YOURAPP/YOURMODEL/change_form.html` template file that extends from `relatives/change_form.html`:

```
{% extends "relatives/change_form.html" %}
```

Also make sure this template file is in a custom template directory or an app listed before your admin app in `INSTALLED_APPS`.

### 2.1.5 Edit links in inlines

To link to an inline object, include the `object_link` utility function in your admin inline's `fields` list and `readonly_fields` list.

#### Example

##### Code

```
from django.contrib import admin
from relatives.utils import object_link

from .models import Company, Employee

admin.site.register(Employee)

class EmployeeInline(admin.TabularInline):
    model = Employee
    fields = [object_link, "first_name", "last_name"]
    readonly_fields = fields
    extra = 0
    max_num = 0
    can_delete = False

@admin.register(Company)
class CompanyAdmin(admin.ModelAdmin):
    inlines = [EmployeeInline]
```

## Screenshot

**Change company** History

**Name:**

Employees		
	First name	Last name
8000	Elmer	Fudd
7000	Road	Runner

✖ Delete Save and add another Save and continue editing Save

## 2.1.6 Customizing inline edit links

To customize the link text for your inline links, use the `object_edit_link` utility function instead, specifying the edit text and blank text (both are optional).

### Example

#### Code

```
from django.contrib import admin
from relatives.utils import object_edit_link

from .models import Company, Employee

admin.site.register(Employee)

class EmployeeInline(admin.TabularInline):
    model = Employee
    edit_link = object_edit_link("Edit")
    fields = [edit_link, "employee_id", "first_name", "last_name"]
    readonly_fields = [edit_link]

@admin.register(Company)
class CompanyAdmin(admin.ModelAdmin):
    inlines = [EmployeeInline]
```

## Screenshot

**Change company** History

Name:

Employees				
	Employee id	First name	Last name	Delete?
8000				
Edit	<input type="text" value="8000"/>	<input type="text" value="Elmer"/>	<input type="text" value="Fudd"/>	<input type="checkbox"/>
7000				
Edit	<input type="text" value="7000"/>	<input type="text" value="Road"/>	<input type="text" value="Runner"/>	<input type="checkbox"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<a href="#">+ Add another Employee</a>				

[✖ Delete](#) [Save and add another](#) [Save and continue editing](#) [Save](#)

## 2.1.7 Customizing settings

Since relatives uses cache, you can update the settings module to change the defaults if you'd like:

```
RELATIVES_CACHE_KEY = 'relatives_cache'
RELATIVES_CACHE_TIME = int(60*60*24)
```

## 2.2 API Reference

### 2.2.1 RelativesAdmin

**class** relatives.RelativesAdmin(*model*, *admin\_site*)

ModelAdmin that links to related fields.

This automatically applies a variation of the `object_link` utility to all `list_display` fields.

**class** relatives.RelativesMixin

ModelAdmin mixin that makes list display foreign keys linked.

This is used by `RelativesAdmin`. This can be used along with Django's default `ModelAdmin` instead of inheriting from `RelativesAdmin`.

## 2.2.2 Utility Functions

`relatives.utils.get_admin_url(obj)`

Return admin URL for given object (raise `NoReverseMatch` on error)

`relatives.utils.object_edit_link(edit_text=None, blank_text=None)`

Return function that takes an object and returns admin link to object

Arguments:

- `edit_text` is displayed in link text
- `blank_text` is displayed in unlinked text (when no admin link)

`edit_text` defaults to the object's unicode representation and `blank_text` defaults to the object's unicode representation if `edit_text` is `None` and an empty string otherwise

`relatives.utils.object_link(obj)`

Return admin link to given object or blank text if no link

Equivalent to `object_edit_link()(obj)`

## 2.2.3 Template Tags

`relatives.templatetags.relatives.contents_or_fk_link(field)`

Return field contents or link to related object if foreign key field

Example Usage:

```
{% load relatives %}
{{ field|contents_or_fk_link }}
```

`relatives.templatetags.relatives.related_objects(obj)`

Return list of objects related to the given model instance

Example Usage:

```
{% load relatives %}
{% related_objects obj as related_objects %}
{% for related_obj in related_objects %}
    <a href="{% related_obj.url %}">{% related_obj.plural_name %}</a>
{% endfor %}
```





## CONTRIBUTING

Visit the project [on Github](#) to view the source, submit issues and pull requests.



## INDICES AND TABLES

- `genindex`
- `search`



## PYTHON MODULE INDEX

### r

`relatives`, [10](#)  
`relatives.templatetags.relatives`, [11](#)  
`relatives.utils`, [11](#)



## INDEX

### C

`contents_or_fk_link()` (*in module `relatives.templatetags.relatives`*), 11

### G

`get_admin_url()` (*in module `relatives.utils`*), 11

### M

module

`relatives`, 10

`relatives.templatetags.relatives`, 11

`relatives.utils`, 11

### O

`object_edit_link()` (*in module `relatives.utils`*), 11

`object_link()` (*in module `relatives.utils`*), 11

### R

`related_objects()` (*in module `relatives.templatetags.relatives`*), 11

`relatives`

    module, 10

`relatives.templatetags.relatives`

    module, 11

`relatives.utils`

    module, 11

`RelativesAdmin` (*class in `relatives`*), 10

`RelativesMixin` (*class in `relatives`*), 10