
django-subdomains Documentation

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Subdomain helpers for the Django framework, including subdomain-based URL routing and reversing.

CHAPTER 1

Installation

This application is available via the [Python Package Index](#) and can be installed with any Python package manager, such as `pip` or `easy_install` by running:

```
pip install subdomains
```

or:

```
easy_install subdomains
```

It is highly recommended to use package version numbers when using this project as a dependency to ensure API consistency.

To install the latest version from the repository source, clone the repository and then run `make install` in the repository directory.

To set up subdomain URL routing and reversing in a Django project:

1. Add `subdomains.middleware.SubdomainURLRoutingMiddleware` to your `MIDDLEWARE_CLASSES` in your Django settings file. If you are using `django.middleware.common.CommonMiddleware`, the subdomain middleware should come before `CommonMiddleware`.
2. Configure your `SUBDOMAIN_URLCONFS` dictionary in your Django settings file.
3. Ensure that you've set up your `SITE_ID` in your Django settings file, and that the `Site.domain` attribute for that site corresponds to the domain name where users will be accessing your site at.
4. If you want to use the subdomain-based `{% url %}` template tag, add `subdomains` to your `INSTALLED_APPS`.

2.1 Example Configuration

```
# This is the urlconf that will be used for any subdomain that is not
# listed in ``SUBDOMAIN_URLCONFS``, or if the HTTP ``Host`` header does not
# contain the correct domain.
# If you're planning on using wildcard subdomains, this should correspond
# to the urlconf that will be used for the wildcard subdomain. For example,
# 'accountname.mysite.com' will load the ROOT_URLCONF, since it is not
# defined in ``SUBDOMAIN_URLCONFS``.
ROOT_URLCONF = 'myproject.urls.account'

# A dictionary of urlconf module paths, keyed by their subdomain.
SUBDOMAIN_URLCONFS = {
    None: 'myproject.urls.frontend', # no subdomain, e.g. ``example.com``
    'www': 'myproject.urls.frontend',
    'api': 'myproject.urls.api',
}
```


3.1 Using Subdomains in Views

On each request, a `subdomain` attribute will be added to the `request` object. You can use this attribute to effect view logic, like in this example:

```
def user_profile(request):
    try:
        # Retrieve the user account associated with the current subdomain.
        user = User.objects.get(username=request.subdomain)
    except User.DoesNotExist:
        # No user matches the current subdomain, so return a generic 404.
        raise Http404
```

3.2 Resolving Named URLs by Subdomain

Included is a `subdomains.utils.reverse()` function that responds similarly to `django.core.urlresolvers.reverse()`, but accepts optional `subdomain` and `scheme` arguments and does not allow a `urlconf` parameter.

If no `subdomain` argument is provided, the URL will be resolved relative to the `SUBDOMAIN_URLCONFS` [None] or `ROOT_URLCONF`, in order. The protocol scheme is the value of `settings.DEFAULT_URL_SCHEME`, or if unset, `http`:

```
>>> from subdomains.utils import reverse
>>> reverse('home')
'http://example.com/'
>>> reverse('user-profile', kwargs={'username': 'ted'})
'http://example.com/users/ted/'
>>> reverse('home', scheme='https')
'https://example.com/'
```

For subdomains, the URL will be resolved relative to the `SUBDOMAIN_URLCONFS[subdomain]` value if it exists, otherwise falling back to the `ROOT_URLCONF`:

```
>>> from subdomains.utils import reverse
>>> reverse('home', subdomain='api')
'http://api.example.com/'
>>> reverse('home', subdomain='wildcard')
'http://wildcard.example.com/'
>>> reverse('login', subdomain='wildcard')
'http://wildcard.example.com/login/'
```

If a URL cannot be resolved, a `django.core.urlresolvers.NoReverseMatch` will be raised.

3.3 Resolving Named URLs in Templates

The `subdomainurls` template tag library contains a `url` tag that takes an optional `subdomain` argument as its first positional argument, or as named argument. The following are all valid invocations of the tag:

```
{% load subdomainurls %}
{% url 'home' %}
{% url 'home' 'subdomain' %}
{% url 'home' subdomain='subdomain' %}
{% url 'user-profile' username='ted' %}
{% url 'user-profile' subdomain='subdomain' username='ted' %}
```

If request is in the template context when rendering and no subdomain is provided, the URL will be attempt to be resolved by relative to the current subdomain. If no request is available, the URL will be resolved using the same rules as a call to `subdomains.utils.reverse()` without a subdomain argument value. An easy way to ensure this functionality is available is to add `django.core.context_processors.request()` is in your `settings.TEMPLATE_CONTEXT_PROCESSORS` list.

Note: For implementation simplicity, this template tag only supports the Django 1.5 `{% url %}` syntax with variable URL names. For more information, please see the reference documentation for `url()`.

4.1 subdomains.middleware

class `subdomains.middleware.SubdomainMiddleware` (*get_response=None*)

A middleware class that adds a `subdomain` attribute to the current request.

get_domain_for_request (*request*)

Returns the domain that will be used to identify the subdomain part for this request.

process_request (*request*)

Adds a `subdomain` attribute to the `request` parameter.

class `subdomains.middleware.SubdomainURLRoutingMiddleware` (*get_response=None*)

A middleware class that allows for subdomain-based URL routing.

process_request (*request*)

Sets the current request's `urlconf` attribute to the `urlconf` associated with the subdomain, if it is listed in `settings.SUBDOMAIN_URLCONFS`.

process_response (*request, response*)

Forces the HTTP `Vary` header onto requests to avoid having responses cached across subdomains.

4.2 subdomains.templatetags.subdomainurls

`subdomains.templatetags.subdomainurls.url` (*context, view, subdomain=<object object>, *args, **kwargs*)

Resolves a URL in a template, using subdomain-based URL resolution.

If no subdomain is provided and a `request` is in the template context when rendering, the URL will be resolved relative to the current request's subdomain. If no `request` is provided, the URL will be resolved relative to current domain with the `settings.ROOT_URLCONF`.

Usage:

```
{% load subdomainurls %}
{% url 'view-name' subdomain='subdomain' %}
```

Note: This tag uses the variable URL syntax introduced in Django 1.3 as `{% load url from future %}` and was made the standard in Django 1.5. If you are upgrading a legacy application from one of the previous template tag formats, make sure to quote your constant string URL names to avoid `NoReverseMatch` errors during template rendering.

4.3 subdomains.utils

`subdomains.utils.urljoin` (*domain*, *path=None*, *scheme=None*)

Joins a domain, path and scheme part together, returning a full URL.

Parameters

- **domain** – the domain, e.g. `example.com`
- **path** – the path part of the URL, e.g. `/example/`
- **scheme** – the scheme part of the URL, e.g. `http`, defaulting to the value of `settings.DEFAULT_URL_SCHEME`

Returns a full URL

`subdomains.utils.reverse` (*viewname*, *subdomain=None*, *scheme=None*, *args=None*, *kwargs=None*, *current_app=None*)

Reverses a URL from the given parameters, in a similar fashion to `django.core.urlresolvers.reverse()`.

Parameters

- **viewname** – the name of URL
- **subdomain** – the subdomain to use for URL reversing
- **scheme** – the scheme to use when generating the full URL
- **args** – positional arguments used for URL reversing
- **kwargs** – named arguments used for URL reversing
- **current_app** – hint for the currently executing application

`subdomains.utils.insecure_reverse` (*viewname*, *subdomain=None*, ***, *scheme='http'*, *args=None*, *kwargs=None*, *current_app=None*)
`reverse()` bound to insecure (non-HTTPS) URLs scheme

`subdomains.utils.secure_reverse` (*viewname*, *subdomain=None*, ***, *scheme='https'*, *args=None*, *kwargs=None*, *current_app=None*)
`reverse()` bound to secure (HTTPS) URLs scheme

`subdomains.utils.relative_reverse` (*viewname*, *subdomain=None*, ***, *scheme=""*, *args=None*, *kwargs=None*, *current_app=None*)
`reverse()` bound to be relative to the current scheme

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