
localeurl Documentation

Release 2.0.1

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The localeurl [Django](#) application allows you to specify the language of a page in the URL.

Suppose you have a Django website in multiple languages. Using localeurl, without modifying your URLconfs, you can have URLs like this: `http://www.example.com/nl/company/profile`. Any URLs without a language prefix will be redirected to add the prefix for the default language (or, optionally, the language preferred in the user's browser settings).

Some reasons for using localeurl:

- Search engines will index all languages.
- Every page should have a unique URL. If you feel that different languages means different pages, then each language should get its own unique URL.
- If you don't set the language via the URL, setting the language for the website should be done using a POST request (because it influences subsequent page views, see [Django ticket #3651](#)). You might prefer a simple link for changing the language, and localeurl allows this.

You can install localeurl with [pip](#):

```
pip install django-localeurl
```

or install the [in-development version](#):

```
pip install django-localeurl==dev
```

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1.1 Installation

This section describes how to install the localeurl application in your Django project.

1.1.1 Prerequisites

The localeurl application requires [Django 1.3](#) or higher and [Python 2.6](#) or 2.7.

1.1.2 Setup

Setup consists of installing the middleware and adding 'localeurl' to the installed applications list.

1. Add 'localeurl.middleware.LocaleURLMiddleware' to settings.MIDDLEWARE_CLASSES. It must come *before* 'django.middleware.common.CommonMiddleware' or settings.APPEND_SLASH will not work. Make sure Django's built-in LocaleMiddleware is **not** in your MIDDLEWARE_CLASSES setting; LocaleURLMiddleware replaces it and the two will not work together. It must also come after django.contrib.sessions.middleware.SessionMiddleware if you plan using the session fallback (see LOCALEURL_USE_SESSION below).
2. Add 'localeurl' to settings.INSTALLED_APPS. Because the application needs to replace the standard urlresolvers.reverse function, it is important to place it at the top of the list:

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

3. If you want to use the view, include the localeurl URLconf module in your project:

```
urlpatterns = patterns('',  
    ...  
    (r'^localeurl/', include('localeurl.urls')),  
    ...  
)
```

4. Make sure settings.LANGUAGE_CODE or its root language is in settings.LANGUAGES. For example, if LANGUAGE_CODE == 'en-us' then LANGUAGES must contain either 'en-us' or 'en'. If you have not changed either option you do not have to do anything.

1.1.3 Configuration

The application can be configured by editing the project's `settings.py` file.

LOCALE_INDEPENDENT_PATHS A tuple of regular expressions matching paths that will not be redirected to add the language prefix. For example, a site with a language selection splash page would add `'^/$'` as a locale independent path match.

Example:

```
LOCALE_INDEPENDENT_PATHS = (  
    r'^/$',  
    r'^/games/',  
    r'^/ajax/',  
)
```

LOCALE_INDEPENDENT_MEDIA_URL (default: True) Whether paths starting with `settings.MEDIA_URL` (if it is a path, i.e. not a full URL) are considered to be locale-independent.

LOCALE_INDEPENDENT_STATIC_URL (default: True) Whether paths starting with `settings.STATIC_URL` (if it is a path, i.e. not a full URL) are considered to be locale-independent.

PREFIX_DEFAULT_LOCALE (default: True) Whether to add the prefix for the default language (`settings.LANGUAGE_CODE`). For example, if `LANGUAGE_CODE == 'en'` then the path `/about/` will be passed to the URL resolver unchanged and `/en/about/` will be redirected to `/about/`.

LOCALEURL_USE_ACCEPT_LANGUAGE (default: False) Whether to check the Accept-Language header from the browser as an intermediate fallback in case no locale is specified in the URL. (The default behavior, preserved for backwards compatibility, is to fallback directly to `settings.LANGUAGE_CODE`).

LOCALEURL_USE_SESSION (default: False)

Whether to check for a user-selected locale in the Django session as a fallback in case no locale is specified in the URL. If `True`, the `change_locale` view will save the chosen locale to the user's session under the `django_language` session key. When used and available, the session locale takes precedence over the Accept-Language header fallback (see `LOCALEURL_USE_ACCEPT_LANGUAGE` above).

A localized URL still takes precedence over a locale in the user's session. Following a localized link such as one generated using the `chlocale` filter won't switch the session's `django_language`; only the `change_locale` view will.

To use this feature, `sessions` must be in use, and `django.contrib.sessions.middleware.SessionMiddleware` must come *before* `localeurl.middleware.LocaleURLMiddleware` in `settings.MIDDLEWARE_CLASSES`.

LOCALE_REDIRECT_PERMANENT (default: True) Whether to use a permanent redirect (301 status code) or temporary redirect (302) when redirecting users from the no-locale version of a URL to the default locale (or the locale specified in their Accept-Language header if `LOCALEURL_USE_ACCEPT_LANGUAGE` is `True`). If Accept-Language is not used, these redirects will never change (as long as the default locale never changes), so 301 (the default) is a fine choice. If you use Accept-Language you may want to consider switching this to `False`, as the redirect will then be dependent on the user's Accept-Language header.

1.2 Usage

The `localeurl` application provides a middleware class that sets `request.LANGUAGE_CODE` based on a prefix on the URL path. It stripping off this language prefix from `request.path_info` so that the `URLconf` modules do not need to change. Existing applications should work transparently with `localeurl` if they follow the usual Django

convention of using `url` tags in templates and (and the `urlresolvers.reverse` function in Python code) to generate internal links.

Paths without locale prefix are redirected to the default locale, either from `request.LANGUAGE_CODE` (set by a previous language discovery middleware such as `django.middleware.locale.LocaleMiddleware`) or from `settings.LANGUAGE_CODE`. So a request for `/about/` would be redirected to `/fr/about/` if French is the default language. (This behavior can be changed using `settings.PREFIX_DEFAULT_LOCALE`.) Determination of the default locale can also take into account the `Accept-Language` browser header (see `settings.LOCALEURL_USE_ACCEPT_LANGUAGE`), or a previously user-selected locale (see `settings.LOCALEURL_USE_SESSION`, and the `change_locale` view below).

1.2.1 Templates

The application adds one template tag and two filters. Add the following at the top of a template to enable them:

```
{% load localeurl_tags %}
```

The `locale_url` tag

The `localeurl` application replaces the `urlresolvers.reverse` function to return locale-specific URLs, so existing templates should not need to be changed. To manipulate the language on rendered URLs you can use the `locale_url` tag. This tag behaves exactly like the standard `url` tag, except you specify a language.

Note: In Django 1.3 and later, using the `locale_url` tag from `localeurl_tags` will result in a deprecation warning about changed url tag syntax. To avoid this warning, `{% load locale_url from localeurl_future %}` in your template after you `{% load localeurl_tags %}`. This also requires that you adopt the [new url tag syntax](#).

Example

You can refer to a specific URL in a specified language like this:

```
<a href="{% locale_url "de" articles.views.display id=article.id %}">Show article in German</a>
```

If you are using Django 1.3+ and you loaded `locale_url` from the `localeurl_future` library, you'd need quotes around the view name:

```
<a href="{% locale_url "de" "articles.views.display" id=article.id %}">Show article in German</a>
```

The `chlocale` filter

To add or change the locale prefix of a path use `chlocale`. It takes one argument: the new locale. If the path is locale-independent any prefix on the path will be stripped. This is also the case if `settings.PREFIX_DEFAULT_LOCALE == False` and the locale argument is the default locale.

Examples

To change the language of a URL to Dutch:

```
Please click <a href="{{ help_url|chlocale:'nl' }}">here</a> for Dutch help.
```

This filter can be used to allow users to go to a different language version of the same page. If you have this in your settings file:

```
_ = lambda s: s
LANGUAGES = (
    ('en', _(u'English')),
    ('nl', _(u'Nederlands')),
    ('de', _(u'Deutsch')),
    ('fr', _(u'Français')),
)
TEMPLATE_CONTEXT_PROCESSORS = (
    'django.core.context_processors.request',
    'django.core.context_processors.i18n',
    ...
)
```

... then you can add a language selection menu in templates like this:

```
{% for lang in LANGUAGES %}
    {% ifequal lang.0 LANGUAGE_CODE %}
        <li class="selected">{{ lang.1 }}</li>
    {% else %}
        <li><a href="{{ request.path|chlocale:lang.0 }}">{{ lang.1 }}</a></li>
    {% endifequal %}
{% endfor %}
```

The `rmlocale` filter

You can use the `rmlocale` filter to remove the locale prefix from a path. It takes no arguments.

Example

To remove the language prefix for a URL:

The language-independent URL for this page is <tt>{{ request.path|rmlocale }}</tt>.

1.2.2 Views

The application supplies a view to change the locale.

The `change_locale` view

Instead of the language selection menu shown in the `chlocale` example above, you can use the `localeurl_change_locale` view to switch to a different language. It is designed to mimic the Django `set_language` [redirect view](#).

When `settings.LOCALEURL_USE_SESSION` is set to `True` (default is `False`), It also records the user-selected locale to the current Django session. The last selected locale will then be used as the default locale when redirecting from paths missing a locale prefix.

Example

This form shows a drop-down box to change the page language:

```
{% load i18n %}

<form id="locale_switcher" method="POST" action="{% url localeurl_change_locale %}">
    <select name="locale" onchange="$('#locale_switcher').submit()">
        {% for lang in LANGUAGES %}
            <option value="{% lang.0 %}" {% ifequal lang.0 LANGUAGE_CODE %}selected="selected"{% endfor %}
        {% endfor %}
    </select>
    <noscript>
        <input type="submit" value="Set" />
    </noscript>
</form>
```

1.2.3 Sitemaps

Localeurl supplies a `LocaleurlSitemap` class for more convenient creation of sitemaps that include URLs in all available languages, based on [this snippet](#).

To use, just inherit your sitemap classes from `localeurl.sitemaps.LocaleurlSitemap` instead of `django.contrib.sitemaps.Sitemap`, and instantiate one for each language in your sitemaps dictionary.

Example

The following show how might create a multilingual sitemap:

```
from localeurl.sitemaps import LocaleurlSitemap

# example Sitemap
class AdvertisementsSitemap(LocaleurlSitemap):
    def items(self):
        return Advertisement.active_objects.all()

# create each section in all languages
sitemaps = {
    'advertisements-sk': sitemaps.AdvertisementsSitemap('sk'),
    'advertisements-cs': sitemaps.AdvertisementsSitemap('cs'),
}

# add sitemap into urls
urlpatterns = patterns('',
    url(r'^sitemap.xml$', 'django.contrib.sitemaps.views.sitemap', {'sitemaps': sitemaps}),
)
```

1.3 History

1.3.1 Changelog

Release 2.0.1: (2013-09-19)

- Change canonical documentation links from <http://pythonhosted.org/django-localeurl/> to <http://django-localeurl.readthedocs.org>

Release 2.0: (2013-09-19)

- BACKWARDS-INCOMPATIBLE: Drop support for Django 1.0 - 1.2; Python 2.4 and 2.5.
- Deprecate `localeurl_future` tag library, always use new url tag syntax.
- Try importing `patterns`, `url` first from `django.conf.urls`; use `django.conf.urls.defaults` only as Django 1.3 fallback. Fixes #36.
- Don't try to parse referrer if not present. Fixes #33. Thanks Simon Luijk.
- Add support for a session-stored locale fallback. Thanks Sylvain Fourmanoit for report and draft patch, and Alex Marandon for adding tests. Fixes #23.
- Make language-code matching case-insensitive, per RFC. Thanks torgeilo for the report. Fixes #32.
- Fix issue with non-ASCII characters in URLs. Thanks Chris Adams.

Release 1.5: (2011-08-24)

- Added `LOCALE_REDIRECT_PERMANENT` setting; defaults to `True`, if set to `False` 302 redirects are used rather than 301. Thanks oyvindeh.
- `LOCALE_INDEPENDENT_PATHS` can now be plain string regular expressions, they don't have to be compiled regex objects. Fixes #9.
- Added import of `localeurl.models` to `localeurl.middleware`, to ensure that `reverse` is monkeypatched before any requests are served. Fixes #5. Thanks Antti Kaihola for the report, Andrey Shipilov and jefurii for fix confirmation.
- Added `iri_to_uri` encoding of non-ASCII redirect URLs. Fixes #13.
- Sorted language codes longest-first to avoid matching e.g. 'pt' before 'pt-br'. Fixes #15. Thanks Roman Barczyński for report and draft patch.
- Added `LOCALE_INDEPENDENT_STATIC_URL` setting to mirror `LOCALE_INDEPENDENT_MEDIA_URL`. This setting defaults to `True`, so if you want URLs under `STATIC_URL` to be locale-dependent, you will need to set it to `False`.
- Fixed middleware redirection when there is a script prefix. Fixes #10. Thanks iro for report and draft patch.
- Added `localeurl_future` template tag library to provide `locale_url` tag that wraps the new Django `url` tag to allow using the new syntax and avoid deprecation warnings under Django 1.3. Fixes #17. Thanks Fabian Büchler for the report.
- Accounted for `reverse()` receiving `kwargs=None`. Fixes #18. Thanks Alexander Clausen for report and tests, Joel Ryan for draft patch.
- Prevented `change_locale` view from stripping query params from `next`. Fixes #7. Thanks Sverre Johansen.

Release 1.4: (2010-03-19)

- Moved localeurl settings from `localeurl/__init__.py` to `localeurl/settings.py`.
- Added `LocaleurlSitemap` for easier creation of multilingual sitemaps.
- Added `LOCALEURL_USE_ACCEPT_LANGUAGE` setting to check HTTP Accept-Language header before resorting to `settings.LANGUAGE_CODE` when locale is not specified in URL.
- Switched to 301 permanent redirects for no-locale URL redirect.
- Moved to [BitBucket](#) for source code hosting.
- Added the `change_locale` view, contributed by Panos Laganakos.

Release 1.3: (2009-04-06)

- Changed chlocale tag to strip prefix of locale-independent paths.
- Moved the monkey-patching of urlresolvers.reverse to models.py.
- Removed REDIRECT_LOCALE_INDEPENDENT_PATHS settings option; this is now the default.

Release 1.2: (2009-01-19):

- Moved the documentation into the source tree. (Based on [a blog post](#) by Andi Albrecht.)
- Released version 1.2.

Release 1.1: (2008-11-20):

- Added the PREFIX_DEFAULT_LOCALE settings option contributed by Jonas Christian.
- Added REDIRECT_LOCALE_INDEPENDENT_PATHS settings option.

Release 1.0: (2008-09-10):

- Added Django 1.0 or higher as a prerequisite.
- Moved to Google Code.

1.3.2 Credits

localeurl was developed by [Joost Cassee](#) based on the work by Atli Þorbjörnsson. Contributions by Jonas Christian. Includes code from the [django-localize](#) project by [Artiom Diomin](#). Currently maintained by [Carl Meyer](#).

It was partly taken from and partly inspired by discussions on the [django-users](#) and [django-multilingual](#) mailinglists:

- Atli Þorbjörnsson: [Locale from URL Middleware](#)
- Panos Laganakos: [creating a multilingual middleware](#)
- Piotr Majewski: [multilingual middleware NEW FEATURE!](#)

See also [this blog post on internationalisation](#) by Yann Malet that references Atli's code.

The announcement of localeurl on these lists can be found here:

- [Announcement on django-users](#)
- [Announcement on django-multilingual](#)